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release notes

hp proliant essentials performance management pack 2.0.2 release notes

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abstract

This document describes installation, tips, and troubleshooting in version 2.0.2 of the ProLiant Essentials Performance Management Pack (PMP).

The PMP is a software solution that detects, analyzes, and explains hardware bottlenecks on HP ProLiant servers. PMP provides the tools you need to receive proactive notification of building bottleneck conditions and to debug existing performance issues. With the PMP software you can monitor performance on one or more servers. The performance information is analyzed to determine if there is a building or existing performance bottleneck issue. You can interactively display this information, log the information to a database for later analysis or reporting, and set up proactive notification using the HP Insight Manager 7 notification mechanism.

PMP is installed on the same server as the Insight Manager console. Monitored servers must have the management agents installed that are for Insight Manager 7 use. Windows NT servers must have WMI service installed. No software is required on the client machine used to view the information other than a browser.

what's new

PMP features the ProLiant Performance Analyzer (PPA) 2.0.2 and contains all the functionality offered in PPA 1.0.1 in addition to features that provide more automation, more performance and utilization data, and easier setup and install.

New operating system support—New support for Windows® 2000 Data Center, Windows Server 2003, Standard Edition, Windows Server 2003, Enterprise Edition, Windows Server 2003, Datacenter Edition, and Windows Server 2003, Web Edition

Subsystem component status—Hardware configuration issues no longer propagate busy (yellow) status up to the server level in the server tree frame.

Data collection through Insight Management Agents—Special permissions and network setup of the monitored servers are no longer required for PMP to collect data. Instead, the Management Agents are used.

Network interface card (NIC) analysis—PMP now reports on performance issues with HP NICs.

Fibre Channel host bus adapter analysis—PMP now reports on performance issues with HP Fibre Channel host bus adapters.

SCSI adapter analysis—PMP now reports on performance issues with HP simple SCSI adapters.

Analysis of more ProLiant servers and options—A larger set of servers and options are now supported.

Static analysis—PMP analyzes the hardware configuration of a server looking for potential problems before they can become performance issues.

Data Reporting—PMP 2.0.2 supplies a summary report that shows the percentage of time the server was in a bottleneck state and the overall performance utilization for a system categorized by its subsystems. PMP also supports the extraction of sequences of data into comma-separated value (CSV) files for import into desktop analysis or reporting tools.

Simplified installation and setup—PMP is installed automatically when installing Insight Manager 7 SP2. No additional CDs or configuration steps are required. Insight Manager 7 and PMP run on the same server and share the same instance of the database server for logged information.

Insight Manager integration—System performance states are now displayed on the Insight Manager 7 home page. Users of Insight Manager 7 and PMP can set up rules that cause notification through any of the methods currently supported by Insight Manager 7 when a performance issue is detected.

before you begin

Confirm that you have fulfilled the hardware and software requirements for the installation environment. These requirements are described in detail in the *HP ProLiant Essentials Performance Management Pack Support Matrix*.

installation

This section provides basic installation information.

- The PPA_DB_V2 database files are placed in the default SQL server folder.
- PMP and Insight Manager 7 must be uninstalled separately from Add Remove Programs. Select **Start, Control Panel, Add Remove Programs**.
- The Windows Management Instrumentation (WMI) software is required on Windows® NT® 4.0 systems.

browsing locally to performance management pack

From the desktop, select **Start, Programs, Performance Management Pack**.

This program group includes:

- Data Extractor
- Log Deletion
- PMP Documentation
- PMP Uninstall
- Report Generator

playback tool

This section provides basic information about the Performance Management Pack Playback Tool. This tool is installed separately.

- If Web agents are not installed on a system where Playback is installed, run the Web server setup program, located in the \Program files\HP\ProLiant Performance Analyzer\Tools\Playback\elm directory.
- All browsers must be closed before running the Playback tool.
- Dismiss the Secure message pop-up while playing Playback xml files and then refresh the browser.
- In the date range page of the Playback tool, click **Apply** once.

tips

This section provides some helpful tips for using PMP.

- When upgrading from 2.0 or 2.0.1 to 2.0.2, the current monitoring session for each server may stop. You must restart the monitoring session for all of the servers under the new 2.0.2 version.
- Any changes to the monitored server hardware and software configuration must be completed before monitoring the server. These configuration changes would include disabling a NIC, changing an IP address, and updating agents. If changes must be made, click **Stop Selected** on the **Administration** page, then go to the Insight Manager 7 **Settings** page and add the IP address of the modified server to the inclusion range input box, and then rediscover the server. After discovery is complete, restart the monitoring session.
- Servers running Windows NT 4.0 require Internet Explorer 5.5 SP2 or higher.
- Only HP SCSI and fiber adapters will be listed in PPA. SCSI and fiber adapters will not be listed under the storage subsystem if no drives are attached to the adapter and the PCI bus status icon will be blue. SCSI and fiber adapter components are always listed under the PCI subsystem but are only listed under the storage subsystem when a disk drive is attached.
- Microsoft Windows 2000 logical disks that are mounted instead of being assigned a drive letter will not be included in the PPA inventory tab under Windows logical drives.
- The SCSI Utilization Percentage metric may display above 100 percent when sequential writes are issued for logical drives configured using RAID 5 or ADG.
- The NIC utilization metric may exceed 100 percent in some circumstances.
- The PMP session may reset in some instances.
- The Smart Array 5302 controller with fiber module is not supported in this release of PPA.
- To access the current list of discovered servers from IM7, click **Update Server List** to populate the fields on the **Licensing and Administration** page.

discovering devices in Insight Manager 7

Licensing and Administration can only access servers that have been discovered by Insight Manager 7 SP2. The following steps can be used to update the list of discovered servers:

1. On IM7 Console, click **Settings** tab.
2. Insert the IP address/IP address ranges in the **IP Address Ranges** field (for example 172.25.56.1-172.25.56.254).
3. Click **Execute Discovery Now** button to display the status of the discovery in the **Status** section. Once discovery is complete, it momentarily displays 100% completed in the **Last Run** field, then displays the current date and time it completed the discovery.
4. Verify that all the tasks have completed. Click **Devices** tab then click the **Tasks** link on the left side of the screen. Check for the following tasks:
 - a. Initial Cluster Identification
 - b. Initial Data Collection
 - c. Initial DMI Status Polling
 - d. Initial Software Version Status Polling
5. Make sure the Last Run field displays the date and time that the polling tasks have been executed.

If you make any changes to a server after it has been discovered by Insight Manager 7, perform the following:

1. Click **Devices** tab then click the **Tasks** link on the left side of the screen.
2. Run all the Status Polling Tasks and wait until all tasks are complete.

Once Insight Management 7 has discovered the server, click the PMP **Update Server List** button on the **Licensing** or **Administration** pages to refresh the server list and include the newly discovered servers. PMP displays up to 10 servers on a page at a time. Use the **next** and **previous** buttons at the bottom of the list to navigate through the list of servers.

When updating the server list be aware of the following:

- **Licensing** page—If the number of licensed and discovered servers is less than the number of licensed servers (total licenses minus available licenses), then there are servers that have been previously licensed but are not currently discovered by Insight Manager 7.
- **Administration** page—If the number of licensed and discovered servers is less than the number of licensed servers, then there are servers that have been previously licensed but are not currently discovered by IM7.

troubleshooting

This section provides basic information about troubleshooting common issues.

- If the **PF** column status icon for a monitored server displays a blue icon and always redirects to the **Unknown Performance Status** page:
 - Be sure that there is an open network connection between the server and the middle-tier. (Servers can be pinged in both directions.)
 - Go to the **Administration** page and verify that the server mode is set to monitoring.
 - Reduce the sampling frequency to the minimum value and return to the Insight Manager 7 main page. Wait for a few minutes to see if the status changes for the server.
 - Use the **Administration** page to stop and restart the monitored server.
- Sometimes the icon on the Insight Manager 7 **PF** column is not synchronized with the main page status icon. On the next Insight Manager 7 refresh, everything will be resynchronized.
- This version of the PPA tool is not designed to support servers in a clustered environment.
- PPA (both Engine and Playback tool) plots the last 25 samples in a graph. However, among the 25, only the last N samples are used for analysis, where N is the number of samples the user chooses to analyze. The “# of samples” used for analysis can be found in the top frame of the PPA main page under the heading “# of samples.”
- In some configurations, PPA service may terminate unexpectedly. To correct this, restart the PPA service. This service can be restarted in the Services tool, which is accessed from the Administrator Tools in Windows 2000 and from the Control Panel in Microsoft Windows NT.
- When accessing IM7 for the first time on a Windows Server 2003 machine, a message will display Content from web site listed below is being blocked by Internet Explorer security configuration. In order to continue, add the site to trusted zone, but it will lower the security settings for all content of the IM7 pages.

- Windows Server 2003 required 6.30 management agents or later.
- Configure SNMP Service for Windows Server 2003.
 1. From **Service**, right-click on **SNMP service** then click on **Properties**.
 2. Click the **Traps** tab, and be sure that `public` is entered as the **Community Name**.
 3. Click the **Security** tab, and be sure that **Accept SNMP packets from any hosts** is selected and add the following Community Names:

Community	Rights
Public	Read only
Private	Read create

- For Window 2000 and Windows NT 4.0, physical and logical disk monitoring needs to be enable in order for storage subsystem to gather correct information. To enable physical and logical disk monitoring run the following command:

```
DISKPERF -Y [<\\COMPUTERNAME>]
```

-Y sets the system to start all disk performance counters when the system is restarted

<\\COMPUTERNAME> is the name of the server you want to see or set the disk performance counter use.

NOTE: Windows Server 2003 has DISKPERF enabled by default.

- Using PMP on a console server running Microsoft Windows NT 4.0 may cause the Foundation Agent (`cpqmgghost.exe`) and Performance Management Pack (`PPA.exe`) services to terminate with a Dr. Watson error after 12 or more hours of operation.

A permanent solution to this issue will be available shortly on the ProLiant Performance Management Pack Website at www.hp.com/servers/proliantessentials/PMP.

As a temporary workaround, HP recommends turning off or removing the Management Agents on the console server where PMP is installed.

To turn the Management Agents off, use **Services** in the Control Panel to stop the following services and set the **Startup Type** of each to **Manual** so that they will not restart when the server is rebooted:

- Compaq Foundation Agents
- Compaq NIC Agents
- Compaq Server Agents
- Compaq Storage Agents
- Compaq Web Agent

To remove the Management Agents, use **Add/Remove Programs** in the Control Panel and remove Compaq Management Agents. After this is complete, reboot the system.

Note: If the Windows NT 4.0 console server has Management Agents stopped or removed, you cannot license or monitor the console server. This does not affect any other discovered servers. The console server will continue to perform the licensing and monitoring functions on all discovered servers (including Windows NT 4.0 servers) that meet the requirements.

uninstalling performance management pack

There are two methods available to uninstall Performance Management Pack:

Uninstalling with the PMP uninstaller:

1. Close all PMP browsers before uninstalling.
2. Select **PMP Uninstall** in the Performance Management Pack program group.
3. Reboot the server.
4. Delete the folder where PMP was installed. The default location is C:\ProgramFiles\HP\ProLiant Performance Analyzer.

Uninstalling through the **Control Panel**:

1. Close all PMP browsers before uninstalling.
2. From the Control Panel, select **Add or Remove Programs** and remove the PMP before removing Insight Manager 7.
3. Reboot the server.
4. Delete the folder where PMP was installed. The default location is C:\ProgramFiles\HP\ProLiant Performance Analyzer.

for more information

To learn more about PMP, refer to the following documentation:

- HP ProLiant Essentials Performance Management Pack User Guide
- HP ProLiant Essentials Performance Management Pack Support Matrix

You can also visit the HP website at

www.hp.com/servers/proliantessentials/PMP

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