

Overview

HP Insight Management WBEM Providers for Windows® are based on industry standard technology that enables management of servers in an enterprise environment. The Insight Providers:

Are built on top of Windows Management Instrumentation (WMI). This enables access to standard ProLiant instrumentation using the rich set of scripting and tools built to take advantage of the WMI technology

Leverage and extend standards defined by the Distributed Management Task Force (DMTF). The data provided by the Insight Providers follows the format defined by the DMTF and SMI-S standards and is extended only where there is significant value-add for customers.

Extend the Common Information Model (CIM) to make HP ProLiant-specific management data and events available to system administrators, enabling administrative tasks to be automated.

Leverage the rich set of base-level instrumentation provided by the system management controllers and drivers shipped with HP PSPs. Deliver in-depth hardware management, inventory data, system state, and event notifications.

What's New

- Support for additional HP ProLiant servers
- Support for Microsoft Windows Server 2008

Standard Features

NOTE: For a brief, printer friendly data sheet that describes this product and informs you of the essential capabilities and specifications, please visit : <http://ccesalewspr02.cce.hp.com/docfiles/concentra/604671239/4AA1-7663ENW.pdf>

Key Features

- HP Insight Management WBEM Providers are based on a set of management and Internet standard technologies developed to unify the management of distributed computing environments
 - The Distributed Management Task Force (DMTF) has developed the core set of standards that make up WBEM:
 - Common Information Model (CIM) schema for describing management data elements and their association
 - Management Profiles describe in a standard format the data surfaced for a given management domain. These profiles describe the CIM elements that are surfaced and the associated semantics used to manage a class of device
- HP Insight Management WBEM Providers
 - Server Providers
 - Processor information and indications
 - Memory information and indications
 - PCI devices and system slot info
 - Sensor info and indications, including redundancy, fans, temperature sensors, power supplies, ASR, and unit ID visual indicator
 - Computer system info, including physical location, IML, system ROM, and aggregate system status
 - Network Providers
 - Network controller info and indications
 - Storage Providers
 - Storage controller info and indications
- Indications (Alerts) are logged to Windows® system event log
- All instrumentation is available via WMI

Availability and Usage

- The HP Insight Management WBEM Providers are distributed as a part of the SmartStart CD (starting with v8.0) that ship with every ProLiant server. Additional information is available at: www.hp.com/go/HPwbem
- Updates to the HP Insight Management WBEM Providers can be downloaded from the HP Web site at: www.hp.com/servers/psp
- HPSIM can be used to access data and events from the Insight Providers, including:
 - Server property pages, which include overall ProLiant server management data.
 - WMI indications (events) from the WMI providers.
 - Refer to "Integration with HP Systems Insight Manager" section of this document (page 10) for information on configuring HP SIM for use with HP Insight Management WBEM Providers.
- You can also build custom WMI tools to access data and events for the HP Systems Insight Management WBEM Providers. The Microsoft MSDN website provides information on building WMI clients such as Visual Basic scripts or C++ and C# applications. For more details, see the following WMI references on the MSDN website:
 - How to use WMI (http://msdn.microsoft.com/library/en-us/wmisdk/wmi/using_wmi.asp)
 - Scripting Access to WMI (http://msdn.microsoft.com/library/en-us/wmisdk/wmi/scripting_access_to_wmi.asp)
 - More Information on WMI (http://msdn.microsoft.com/library/en-us/wmisdk/wmi/further_information.asp)

Standard Features

Benefits

- Heightened security
- Reduced complexity of setup and configuration
- Guaranteed event delivery
- Common view of the system for the client for both in-band and out-of-band management
- Delivers standards-based management across vendor platforms
- Facilitates the development of platform-neutral, reusable infrastructure, tools and applications
- Reduce TCO
 - Reduce the number of management applications required
 - Reduces the overall load on the server
- Can co-exist with SNMP agents

Technical Specifications

Supported Operating Systems

HP Insight Management WBEM Providers are formally supported for use on the following operating platforms:

- Microsoft® Windows Server™ 2003, Web Edition
 - Supported with Service Pack 1 and Service Pack 2
- Microsoft® Windows Server™ 2003, Standard Edition
 - Included with Service Pack 1 and Service Pack 2
- Microsoft® Windows Server™ 2003, Enterprise Edition
 - Included with Service Pack 1 and Service Pack 2
- Microsoft® Windows Server™ 2003, x64 Standard Edition
- Microsoft® Windows Server™ 2003, x64 Enterprise Edition
- Microsoft® Windows Server™ 2003, R2 Web Edition
- Microsoft® Windows Server™ 2003, R2 Standard Edition
- Microsoft® Windows Server™ 2003, R2 Enterprise Edition
- Microsoft® Windows Server™ 2003, R2 x64 Standard Edition
- Microsoft® Windows Server™ 2003, R2 x64 Enterprise
- Microsoft Windows Web Server 2008
- Microsoft Windows Server 2008 Standard 32-Bit
- Microsoft Windows Server 2008 Enterprise Edition 32-Bit
- Microsoft Windows Server 2008 Standard
- Microsoft Windows Server 2008 Enterprise

NOTE: The HP Insight Management WBEM Providers is currently supported on Windows platforms only.

Supported HP Servers

HP ProLiant BL Servers	HP ProLiant ML Servers	HP ProLiant DL Servers
HP ProLiant BL20p G3	HP ProLiant ML310 G2	HP ProLiant DL320 G3
HP ProLiant BL20p G4 *	HP ProLiant ML310 G3	HP ProLiant DL320 G4
HP ProLiant BL25p	HP ProLiant ML310 G4	HP ProLiant DL320 G5
HP ProLiant BL25 G2 *	HP ProLiant ML310 G5	HP ProLiant DL320 G5p
HP ProLiant BL30p *	HP ProLiant ML350 G4	HP ProLiant DL320s
HP ProLiant BL35p *	HP ProLiant ML350G4p(SCSI)	HP ProLiant DL360 G3
HP ProLiant BL40p *	HP ProLiant ML350G5	HP ProLiant DL360 G4
HP ProLiant BL45p	HP ProLiant ML370 G3	HP ProLiant DL360 G4p (SCSI)
HP ProLiant BL45p G2 *	HP ProLiant, ML370G4	HP ProLiant DL360 G5
HP ProLiant BL260c G5	HP ProLiant ML370, G5	HP ProLiant DL365
HP ProLiant BL2x220c G5	HP ProLiant ML570 G3	HP ProLiant DL365 G5
HP ProLiant BL460c	HP ProLiant ML570 G4	HP ProLiant DL380 G3
HP ProLiant BL465c		HP ProLiant DL380 G4
HP ProLiant BL465 G5		HP ProLiant DL380 G5
HP ProLiant BL480c		HP ProLiant DL385
HP ProLiant BL680c		HP ProLiant DL385 G2
HP ProLiant BL685c		HP ProLiant DL385 G5
HP ProLiant BL685c G5		HP ProLiant DL560
		HP ProLiant DL580 G2
		HP ProLiant DL580 G3
		HP ProLiant DL580 G4
		HP ProLiant DL580 G5
		HP ProLiant DL585
		HP ProLiant DL585 G2
		HP ProLiant DL585 G5
		HP ProLiant DL785 G5

* Some p-Class blades are supported, p-Class enclosure data is not supported via WMI

Technical Specifications

Supported HP Management Processors

- HP Remote Insight Lights-Out Edition II Board
- HP Integrated Lights-Out (iLO)
- HP Integrated Lights-Out 2 (iLO 2)

Supported HP Storage Options

- **Storage Options:**
 - Smart Array 5xxx Series Controller
 - Smart Array 6xxx Series Controller
 - Smart Array E200/200i Controller
 - Smart Array E500 Controller
 - Smart Array P400/400i Controller
 - Smart Array P600 Controller
 - Smart Array P800 Controller
 - HP 4 Internal Port SAS HBA
 - HP 4 Internal/4 External SAS PCI-Express HBA
 - HP 8 Internal Port SAS/SATA RAID HBA
 - HP Single Channel U320 PCI-E HBA
- **Attached through PCI Smart Array:**
 - HP StorageWorks Modular Smart Array MSA 20
 - HP StorageWorks Modular Smart Array MSA 30
 - HP StorageWorks Modular Smart Array MSA 50
 - HP StorageWorks Modular Smart Array MSA 60
 - HP StorageWorks Modular Smart Array MSA 70
 - HP StorageWorks Modular Smart Array MSA 500
 - HP StorageWorks Modular Smart Array MSA 500 G2
 - HP StorageWorks 4200 Series
 - HP StorageWorks 4300 Series
 - HP StorageWorks 4400 Series
- **Attached through PCI SCSI:**
 - HP StorageWorks Modular Smart Array MSA 20
 - HP StorageWorks Modular Smart Array MSA 30
 - HP StorageWorks 4200 Series
 - HP StorageWorks 4300 Series
 - HP StorageWorks 4400 Series
- **Attached through Fibre Channel:**
 - HP StorageWorks Modular Smart Array MSA 30
 - HP StorageWorks 4200 Series
 - HP StorageWorks 4300 Series
 - HP StorageWorks 4400 Series

Supported HP Network Options

NC110T	NC371i
NC150T	NC373i
NC310F	NC373T
NC320i	NC380T
NC320T	NC510C
NC324i	NC510F
NC325i	NC512m
NC325m	NC3163
NC326i	NC1020
NC326m	NC6170
NC360m	NC7170
NC360T	NC7760
NC364m	NC7761
NC364T	NC7771

Technical Specifications

NC370F	NC7780
NC370i	NC7781
NC370T	NC7782

NOTE: Some of the options listed above may be discontinued.

**Recommended Versions
HP Management Tools** To obtain the maximum benefit and optimized operations from HP Insight Management WBEM Providers, the following versions of HP management tools are recommended.

HP Software Component		Windows Platform	Linux Platform
HP ProLiant Servers	HP System Insight Manager (HP SIM)	v5.2	
	HP System Management Home Page (HP SMH)	v2.1	
	HP ProLiant Support Pack	v8.1	

**Environment-friendly
Products and Approach** **End-of-life Management
and Recycling** Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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