

### 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.
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### What's New

- Please refer to "What's New for HP Management Insight WBEM 2.x.0.0 at <http://h18004.www1.hp.com/products/servers/management/wbem/documentation.html>

### Standard Features

#### Key Features

HP ProLiant 100 series, 300 series and above

- 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 (indications on 300 series and above only)
    - Memory information and indications (indications on 300 series and above only)
    - PCI devices and system slot information
    - Sensor information and indications, including redundancy, fans, temperature sensors, power supplies, ASR, and unit ID visual indicator (redundancy not supported on 100 series)
    - Computer system info, including physical location, IML, system ROM, and aggregate system status
    - Integrated Management Log (not supported on 100 series)
  - Network Providers
    - Network controller info and indications
  - Storage Providers
    - Storage controller info and indications
- Indications (Alerts) are logged to Windows® system event log
- Provide performance monitoring capabilities by providing information on CPU usage and Disk free space.
- All instrumentation is available via WMI

#### Additional Information for HP ProLiant 100 series

- Health Monitoring is more limited for ProLiant 100 series than for the ProLiant 300 series servers and above. Health monitoring is limited to disk, fans, network, power supplies and temperature. (ProLiant 300 series and above have additional capabilities in the areas of memory, processors, fan redundancy, hardware logs, power metering, NMI logging as well as monitoring pre-failure thresholds.)
- Alerting for ProLiant 100 series provides basic alert notification and drive pre-failures on Smart Arrays only. (ProLiant 300 Series and above have additional protection of critical server components by providing pre-failure alert notifications on memory, processors, and storage.)

### Standard Features

#### Availability and Usage

HP ProLiant 300 series servers and above

- 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](http://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](http://www.hp.com/servers/psp)

HP ProLiant 100 series

- The HP Insight Management WBEM Providers for ProLiant 100 series servers are distributed as a part of the Easy Set-up CD that ships with each ProLiant 100 series G6 server starting with version 2.2. They are also available as part of an ISO image web download from each server's web pages.
- Additional information is available at: [www.hp.com/go/HPwbem](http://www.hp.com/go/HPwbem) and [www.hp.com/servers/easysetup](http://www.hp.com/servers/easysetup)

All HP ProLiant servers:

- 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](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](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](http://msdn.microsoft.com/library/en-us/wmisdk/wmi/further_information.asp))

#### 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

**Support Matrix** For information on Supported Operating Systems, Supported HP Servers, Supported HP Management Processors, Supported HP Storage Options etc please refer to:  
<http://h20000.www2.hp.com/bc/docs/support/SupportManual/c01390396/c01390396.pdf>  
**NOTE:** Some of the options listed above may be discontinued.

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**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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