

HP Systems Insight Manager 5.0 Release Notes



* 5 9 9 1 - 4 5 0 0 *

Part number: 5991-4500
published December 2005
Edition: 4.0



© Copyright 2003-2005 Hewlett-Packard Development Company, L.P.

Legal Notices

The information in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental, or consequential damages in connection with the furnishing, performance, or use of this material.

Warranty

A copy of the specific warranty terms applicable to your Hewlett-Packard product and replacement parts can be obtained from your local Sales and Service Office.

U.S. Government License

Proprietary computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

©Copyright 1983-2005 Hewlett-Packard Development Company, L.P. All rights reserved. Reproduction, adaptation, or translation of this document without prior written permission is prohibited, except as allowed under copyright laws.

Trademark Notices

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

HP-UX Release 10.20 and later and HP-UX Release 11.00 and later (in both 32 and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Intel® and Itanium® are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux® is a U.S. registered trademark of Linus Torvalds.

Java™ is a US trademark of Sun Microsystems, Inc.

® Microsoft®, Windows®, and Windows NT® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

Red Hat® is a registered trademark of Red Hat, Inc. in the United States and other countries.

SuSE® is a registered trademark of SuSE Linux AG.

Publication History

The manual publication date and part number indicate its current edition. The publication date will change when a new edition is released. The manual part number will change when extensive changes are made.

To ensure that you receive the latest edition, you should subscribe to the appropriate product support service. See your HP sales representative for details.

Please direct comments regarding this guide to:

Hewlett-Packard Company
HP-UX Learning Products
3404 East Harmony Road
Fort Collins, Colorado 80528-9599

Or, use this web form to send us feedback:

<http://docs.hp.com/assistance/feedback.html>

Typographic Conventions

We use the following typographical conventions.

audit(5)	HP-UX manpage. <i>audit</i> is the name and <i>5</i> is the section in the <i>HP-UX Reference</i> . On the web and on the Instant Information DVD, it may be a hot link to the manpage itself. From the HP-UX command line, you can enter "man audit" or "man 5 audit" to view the manpage. See man(1).
Book Title	Title of a book. On the web and on the Instant Information DVD, it may be a hot link to the book itself.
Command	Command name or qualified command phrase.

ComputerOut	Text displayed by the computer.
Emphasis	Text that is emphasized.
Emphasis	Text that is strongly emphasized.
KeyCap	Name of a keyboard key. Note that Return and Enter both refer to the same key.
Term	Defined use of an important word or phrase.
UserInput	Commands and other text that you type.
Variable	Name of a variable that you may replace in a command or function or information in a display that represents several possible values.
[]	Contents are optional in formats and command descriptions. If the contents are a list separated by , you must choose one of the items.
{ }	Contents are required in formats and command descriptions. If the contents are a list separated by , you must choose one of the items.
...	Preceding element may be repeated an arbitrary number of times.
	Separates items in a list of choices.

Table of Contents

1 Overview

2 Features and Change Notification

Features.....	5
Change Notification.....	8

3 Requirements

System Requirements.....	10
CMS Requirements.....	10
HP-UX Central Management Server.....	10
HP-UX Patches.....	11
Linux Central Management Server.....	11
Windows Central Management Server.....	12
Managed System Requirements and Recommendations.....	13

4 Documentation

1 Overview

HP Systems Insight Manager (HP SIM) combines the strengths of Insight Manager 7, HP Tootools, and HP Servicecontrol Manager to deliver a single tool for managing HP ProLiant, Integrity, and HP 9000 systems running Microsoft® Windows®, Linux, and HP-UX. The core HP SIM software delivers the essential capabilities required to manage all HP server platforms.

HP SIM can be extended to provide system management with plug-ins for HP clients, storage, power, and printer products. Plug-in applications for rapid deployment, performance management, partition management, and workload management enable you to pick the value-added software required to deliver complete lifecycle management for your hardware assets.

2 Features and Change Notification

Features

HP Systems Insight Manager provides the following features:

- **Easy and rapid installation.**
Installs on your server platform of choice running HP-UX, Windows, or Linux, or on a Windows desktop or workstation.
- **First Time Wizard.**
Provides you with step-by-step, online guidance for performing the initial configuration of HP SIM. The wizard helps you configure HP SIM settings on the central management server (CMS).
- **Automatic discovery and identification.**
Automatically discovers and identifies systems attached to the network. Use discovery filters to prevent discovery of unwanted system types. Discovery filters enable you to limit discovery to specific network segments or IP address ranges.
- **Fault management and event handling**
Provides proactive notification of actual or impending component failure alerts. Automatic Event Handling enables you to configure actions to notify appropriate users of failures through e-mail, pager, or Short Message Service (SMS) gateway, and enables automatic execution of scripts or event forwarding to enterprise platforms, such as HP OpenView Network Node Manager or HP OpenView Operations.



NOTE Pager support is only for Windows-based CMS.

- **Consistent multi-system management**
Initiates a task on multiple systems or nodes from a single command on the CMS. This functionality eliminates the need for tedious, one-at-a-time operations on each system.
- **Secure remote management**
Leverages operating system security for user authentication and Secure Sockets Layer (SSL) and Secure Shell (SSH) to encrypt management communications.
- **Role-based security**
Enables effective delegation of management responsibilities by giving system administrators granular control over which users can perform which management operations on which systems.
- **Tool definitions**
Defines tools using simple XML documents that enable you to integrate off-the-shelf or custom tools. These tools can be command line tools, Web-based applications, or scripts. Access to these integrated tools is governed by role-based security.
- **Data collection and inventory reports**
Performs comprehensive system data collection and enables you to quickly produce detailed inventory reports for managed systems. Reports can be generated in HTML, XML, or CSV format.
- **Snapshot comparisons**
Enables you to compare configuration snapshots of up to four different servers or configuration snapshots of a single server over time. This functionally assists IT staff in pinpointing configuration issues that can contribute to system instability. Snapshot comparisons can also be used to save a picture of standard configuration for comparisons to other systems.
- **HP Version Control**
Automatically downloads the latest BIOS, driver, and agent updates for HP ProLiant servers running Windows and Linux, identifies systems running out-of-date system software, and enables system software updates across groups of servers. For HP-UX systems, Software Distributor is integrated into HP SIM.

- Two user interfaces
Provides a Web browser graphical user interface (GUI) and command line interface (CLI) to help incorporate HP SIM into your existing management processes.
- Edit system properties on managed systems
The **Edit System Properties** link on the **System Page** enables users with full-configuration-rights to re-configure system properties for a single system. To set system properties for multiple systems, select **Options→System Properties→Set System Properties**. This affects the system properties as reported by HP SIM, but does not change the properties on the target systems.
- Suspend and resume monitoring of systems
Enables you to set the timer for suspending monitoring. This enables a system to be excluded from status polling, identification, data collection, and the automatic event handling features of HP SIM. The **Suspend/Resume Monitoring** link under the **Tools & Links** tab of the **System Page** enables you to set the timer for suspending or resuming system monitoring. To suspend or resume system monitoring for multiple systems, select **Options→System Properties→Suspend or Resume Monitoring**. The available suspend lengths include the predetermined increments of five minutes, 15 minutes, one hour and one day. The suspend feature can be turned on indefinitely.
- Install OpenSSH tool
Runs from the CMS and installs the OpenSSH service onto target Windows systems and then runs the `mxagentconfig` command to complete the configuration.



NOTE This is only available on Windows CMS.

- Initial ProLiant Support Pack Install optionally installs OpenSSH
HP SIM enables you to install OpenSSH through the Initial ProLiant Support Pack Install process by selecting **Install and initialize OpenSSH (Secure Shell)** on the **Initial ProLiant Support Pack Install** page.



NOTE This is only available on Windows CMS.

- Support for HP-UX Serviceguard clusters
HP SIM recognizes HP-UX Serviceguard clusters and displays them in the UI. HP Serviceguard Manager is opened by clicking a Serviceguard cluster in a search list, and provides information on the clusters.
- WBEM Indications for HP-UX, Linux, and SMI-S devices
HP SIM enables you to subscribe and unsubscribe to WBEM indications through the GUI. You can also subscribe or unsubscribe to WBEM indications from the CLI. For HP-UX, this feature is only available on 11i v2 September 2004.
- HP Instant Support Enterprise Edition (ISEE)
HP Instant Support Enterprise Edition (ISEE) is a proactive remote monitoring and diagnostic tool to help manage your systems and devices, a feature of HP support. ISEE gives you simple, unified approach to monitoring your entire datacenter. Instead of using separate technologies for each of your platforms, you can monitor and manage a diverse IT environment with a single solution. ISEE helps you proactively manage and support HP-UX, Microsoft Windows, Linux, OpenVMS, Tru64 UNIX, NonStop and Sun Solaris servers, connected peripherals, and storage and network devices. It reduces cost and complexity by supporting both mission critical and non-mission critical systems and devices. ISEE provides continuous hardware event monitoring and automated notification to identify and prevent potential critical problems. Through remote diagnostic scripts and vital system configuration information collected about your systems, ISEE enables fast restoration of your systems. Install ISEE on your systems to help mitigate risk and prevent potential critical problems.
- HP System Management Homepage
The System Management Homepage is a Web-based application that provides a consolidated interface for single system management. By aggregating the data from HP Web-based agents and management utilities, the System Management Homepage provides a common, easy-to-use interface for displaying

hardware fault and status monitoring, performance data, system thresholds, diagnostics, and software version control for an individual server.

- Performance Management Pack (PMP) access

A software solution that detects, analyzes, and explains hardware bottlenecks on HP ProLiant servers and Modular Shared Array (MSA) shared storage. PMP tools available in HP SIM consist of Online Analysis, Offline Analysis, CSV File Generator Report, System Summary Report, Static Analysis Report, Configuration, Licensing, and Manual Log Purge. PMP is automatically installed with HP SIM and operates in integration with HP SIM. No software installation on the monitored servers is required, other than the Insight Management Agents. PMP 4.0 includes:

- Support for HP SIM 5.0 (this version of PMP does not support HP SIM 4.x)
- Support for Oracle database (locally or remote)
- Support for select HP Integrity servers

New in PMP v4.0.1:

- Support for Red Hat Linux 4.0
- Support for HP ProLiant BL25p servers
- Provides an option to remove or retain old PMP database files during the installation process

Refer to <http://h18013.www1.hp.com/products/servers/proliantessentials/valuepack/pmp/index.html> for more information.

- HP ProLiant Essentials Vulnerability and Patch Management Pack (VPM) access

VPM identifies and provides advice to resolve security vulnerabilities and delivers advanced patch management through automated acquisition, optimized deployment, and continuous enforcement of security patches. VPM must be manually installed from the Management CD and requires one license for each target system being managed. Five fully functional non-expiring licenses, for use on servers or desktops, are provided with VPM for evaluation purposes. For more information about installation and setup, refer to the *HP ProLiant Essentials Vulnerability and Patch Management Pack Quick Setup Poster* and the *HP ProLiant Essentials Vulnerability and Patch Management Pack User Guide*, both on the Management CD. For more information on VPM, go to HP ProLiant Essentials Vulnerability and Patch Management Pack at <http://www.hp.com/servers/proliantessentials/vpm>.

- HP ProLiant Essentials Virtualization Management Software (VS)

Virtual machine management capabilities integrated into HP SIM extends its capabilities to deliver unified management of an IT infrastructure consisting of both physical and virtual server resources, simplifying and consolidating the provisioning, management and migration of all server resources from one central interface.

The virtual machine management capabilities in HP SIM are provided by integrating the HP ProLiant Essentials Virtual Machine Management Pack (VMM) and the HP ProLiant Essentials Server Migration Pack (SMP). Both these components are installed together as one component, but licensed separately.

- HP ProLiant Essentials Virtual Machine Management Pack

VMM provides central management and control for virtual machines of type Microsoft's Virtual Server and VMware's GSX or ESX. Using VMM, all virtual machines and Virtual Machine (VM) hosts can be managed from the HP Systems Insight Manager (HP SIM) console. The **Virtual Machine Management Pack** displays a tree view of the VM hosts and VM guests in the left pane of the HP SIM console. After selecting a system in the left pane tree, information for the system selected is displayed in the right pane. You then have options to deploy, register, unregister, and upgrade. VMM is now integrated into HP SIM, Refer to <http://www.hp.com/servers/proliantessentials/vmm> for documentation and more information on VMM.

- HP ProLiant Essentials Server Migration Pack

SMP extends the functionality of the VMM to provide integrated Physical-to-Virtual (P2V) and Virtual-to-Virtual (V2V) migrations. The SMP enables you to simplify the server consolidation process, thereby freeing you to focus on other priorities. SMP now offers a new SMP license type that allows unlimited migrations for one year after the first migration is initiated. To purchase additional licenses, refer to <http://www.hp.com/servers/proliantessentials/smp>.

- **HP BladeSystem Integrated Manager in HP Systems Insight Manager**
HP SIM delivers a blade environment designed to consolidate access to blade deployment, configuration, and monitoring tools. Picture views are available of racks and enclosures. HP BladeSystem Integrated Manager is automatically installed with HP SIM, no license key is required. To access HP BladeSystem Integrated Manager, select **Tools**→**Integrated Consoles**→**HP BladeSystem**. Refer to <http://h18004.www1.hp.com/products/servers/management/bsme/index.html> for more information.
- **HP Configure or Repair Agents**
The Configure or Repair Agents feature is an HP SIM feature that enables you to repair credentials for SNMP settings, System Management Homepage or Management HTTP Server trust relationships on Windows, Linux, and HP-UX systems supported by HP SIM. For more information, refer to the Configure or Repair Agents Online Help at <http://h18000.www1.hp.com/products/servers/management/hpsim/infolibrary.html>.
- **HP ProLiant Essentials Rapid Deployment Pack (RDP) - Windows Edition**
RDP is a multiserver deployment tool that enables IT administrators to easily deploy large volumes of servers in an unattended, automated fashion. RDP is installed separately from HP SIM and requires a license for each server being managed. RDP is installed from its own CD. Refer to <http://www.hp.com/servers/rdp> for information about network environment setup, prerequisites for the deployment server, and installation instructions. When installed, you must register your product registration number to receive a license file. A license is required for each server being managed by RDP.
- **Data collection and inventory reports for Superdomes and other complexes**
Data collection and reporting has been added for Superdome systems and other cellular complexes. The type of data that can be collected includes information on chassis, cabinets, cells, memory, and hard partitions (nPars). The type of data actually collected depends on which filters are selected.
- **HP Storage Essentials**
HP is changing the economics of management in the data center. HP Storage Essentials is the first open, standards-based suite of storage products designed to integrate into HP's unified server-storage management platform, HP SIM. For more information on HP Storage Essentials, go to <http://h18006.www1.hp.com/products/storage/software/esuite/index.html>.
- **Manage SSH Keys**
The **SSH Keys** feature enables you to view and manage the public SSH keys, stored in the `known_hosts` file, from the central management server. SSH keys enable the central management server and a managed system to authenticate a secure connection.

Change Notification

The latest version of HP Systems Insight Manager adds support for the following:

- Automatically discover network storage systems from controllers down to the LUN
- View a consolidated list of all server and storage events from a single event viewer, and configure and take automated actions
- Create detailed server and storage configuration reports from a central database
- Flexible role based security enables you to decide which administrators have access to server and storage details
- Enables you to launch server and storage element managers from a single system viewer
- Lists and folders are now called collections
- Table view pages now include a page numbering feature showing what page you are viewing out of the total number of pages available
- New **System Page Identity** tab available for servers, clusters, complexes, partitions, storage arrays, storage hosts, storage switches, and tape libraries which include specific information for each
- System groups are now created from the **Authorizations** tab on the **Users and Authorizations** page

- Ability to create user groups that match operating system user groups to give these users access to HP Systems Insight Manager without creating each individual user
- Eight system sub-types are now available instead of just one when setting system properties
- Improved access to Discovery options which includes a **Discovery** page with tabs for **Automatic**, **Manual**, and **Hosts Files** configuration
- New command line interface (CLI) commands, including mxreport, mxcert, mxglobalprotocolsettings, mxglobalsettings, mxcollection, and mxgethostname
- New Secure Shell (SSH) bypass feature to bypass users for SSH
- Ability to set system properties for multiple systems at the same time
- New SSH fields included on the **System Protocol Settings page**, including setting the SSH username and password
- New tree view available for system and cluster collections
- Ability to create, edit, and delete Discovery tasks
- Ability to enable or disable a Discovery task
- Ability to create new custom tools including copying a file, removing a tool, and creating command line, Web launch, and X window tools
- New event type criterion for running an advanced search
- Ability to update desired protocols from the **System Protocol Settings** page from the **System Page Tools/Links** tab
- New Warning status for systems and events
- License Manager now includes a time sensitive demo key
- Supports the use of an Oracle database (locally or remotely) for Windows, HP-UX, and Linux.
- New skipped status for tasks

3 Requirements

System Requirements

This section identifies the hardware and software requirements and recommendations for HP Systems Insight Manager. These requirements are broken into sections by system type for the CMS, managed system, and network client.

CMS Requirements

This section contains the requirements for the CMS. These requirements are sorted by operating system. Review the section of requirements that applies to your CMS. Refer to:

- ["HP-UX Central Management Server"](#)
- ["Linux Central Management Server"](#)
- ["Windows Central Management Server"](#)

HP-UX Central Management Server

- **Operating System**
 - HP-UX 11i v1
 - HP-UX 11i v2 (September 2004 or later)

Note: The required patches must be installed for each of these operating systems. Refer to ["HP-UX Patches"](#) for more information.
- **Hardware**
 - Any HP system (PA-RISC 2.0 or Integrity) server with minimum 2 GB RAM
 - Any HP system with Oracle installed minimum 4 GB RAM
- **Software**
 - OpenSSH - distributed with OS
 - HP WBEM Services for HP-UX is installed and active for HP-UX 11i or greater
 - (Optional) Oracle 9i release 2
 - Java Out of Box installed (shipped as optional selectable software as part of OS)
- **Free Disk Space**
 - 20 MB for CMS (/)
 - 600 MB for the CMS and DTF agent (/opt)
 - 500 MB minimum recommended for data (/var/opt)
- **Swap Space**
 - 3 GB minimum total swap space for PA-RISC systems
 - 4 GB minimum total swap space for Intel® Itanium®-based systems
- **Networking**
 - Properly configured and working DNS or WINS for host name resolution



NOTE If running OpenView NNM or OpenView Operations on the same system, the SNMP trap listening port must be changed in those products to function properly. Refer to the OpenView product documentation

at HP Systems Insight Manager and HP OpenView white paper at
<http://h18000.www1.hp.com/products/servers/management/hpsim/infolibrary.html>

NOTE Legacy Novell system with only an IPX network enabled will not be manageable by an HP-UX or Linux CMS. An IP-based network must be available.

NOTE If you are using Network Information Services (NIS), check for ping localhost of HP-UX, if no response, create/edit the file `/etc/nsswitch.conf` and add the following entry in the file "hosts: files dns nis". If nis server is not in the network do not add the "nis" entry in `/etc/nsswitch.conf`.

HP-UX Patches

There are required patches that must be installed to run HP Systems Insight Manager. All patches should be installed before running HP Systems Insight Manager.

Note: To determine the Java version installed, execute:

```
/opt/mx/j2re/bin/java -version
```

Note: For more information about patches, go to <http://www.hp.com/go/java>, and select **Patches** from the **Site information**. This site determines the recommended patches for the Java application. Follow the instructions given. To download all of the patches, go to the ITRC download center (login required). For more information on individual patches, click the patch name.

Downloading and installing HP-UX patches

To download patches:

1. Browse to the patch database:
<http://www2.itrc.hp.com/service/patch/mainPage.do>
2. Click the **HP-UX** link.
3. Select the appropriate hardware and operating system. For example, 800 and 11.11.
4. Select **Search by Patch IDs**, enter the patch IDs, and click **search**.
5. Select the patches, and click **add to selected patch list** at the bottom of the page to add dependent patches.
6. Click **download selected**, and follow the directions on the screen. The *gzip* package is the recommended format.

To install patches:

1. Create a `/var/tmp/patches` directory, and copy the downloaded patches into that directory.
2. Execute:

```
gunzip patch_file
tar -xvf patch_file
```
3. Load the patches into `/var/tmp/patches/depot`:

```
./create_depot_hp-ux_11
```
4. Install the patches:

```
swinstall -x autoreboot=true -s /var/tmp/patches/depot \ *
```

Note: Only the applicable patch file sets are loaded. Continue with the installation after you reboot.

Linux Central Management Server

- **Operating System**
 - Red Hat Enterprise Linux 3 AS and ES U4 and U5 for x86
 - Red Hat Enterprise Linux 4 AS and ES U1 for x86

- SUSE Linux Enterprise Server 8/United Linux 1.0 for x86 with Service Pack 3
- SUSE Linux Enterprise Server 9 for x86 with Service Pack 1 or 2
- **Hardware**
 - Any HP IA-32 system with:
 - Minimum: 1.5-GHz processor and 768 MB RAM
 - Recommended: 2.4-GHz processor and 1 GB RAM
 - Any HP system with Oracle 9i installed minimum 4 GB RAM
- **Software**
 - OpenSSH
 - ProLiant Support Pack for Linux 7.00 or later
 - (Optional) Oracle 9i release 2
 - For Red Hat Enterprise Linux 3.0 AS/ES update 4 and 5
 - PostgreSQL 7.4.1
 - For Red Hat Enterprise Linux 4
 - PostgreSQL 7.4.7-2
 - For SUSE Enterprise server 8, Service Pack 3
 - PostgreSQL 7.4.0
 - For SUSE Enterprise server 9
 - PostgreSQL 7.4.2-36.3



NOTE PostgreSQL 8.0.x is not supported on HP SIM 5.0 on Japanese installations.

- **Free Disk Space**
 - 2 MB for CMS (/)
 - 400 MB for the CMS and DTF agent (/opt)
 - 500 MB minimum recommended for data (/var/opt)
- **Swap Space**
 - 3 GB minimum total swap space for Itanium-based systems
- **Networking**
 - Static or dynamic host name resolution



NOTE On Linux check for the entry 127.0.0.1 localhost, the local system IP address and system name in the /etc/hosts file, if not present add the entries manually.

- SNMP (optional)

Windows Central Management Server

- **Operating System**
 - Microsoft® Windows 2000 Server with Service Pack 4 for x86
 - Microsoft® Windows 2000 Advanced Server with Service Pack 4 for x86
 - Microsoft® Windows 2003 Server with Service Pack 1 for x86
 - Microsoft® Windows 2003 Standard or Enterprise Edition for x86 with Service Pack 1 (running on x86 or x64/AMD64 platforms)
 - Microsoft® Windows XP Professional with Service Pack 2 for x86

Note: The required Windows Service Packs must be installed for each of these operating systems.

Note: The Windows server must have at least one partition formatted for the NT File System (NTFS) on which the HP SIM server software is to be installed. NTFS provides the ability to restrict file access based on user accounts and groups. Without NTFS, the Central Management Server (CMS) cannot be adequately secured against unauthorized access, and potentially sensitive operations and data could be made available to unauthorized users.

- **Hardware**

- Any HP ProLiant IA-32 system with:
 - Minimum: 1.5-GHz processor with 768 MB RAM
 - Recommended: 2.4-GHz processor with 1 GB RAM

Note: HP Netserver platforms can be used for the CMS as long as the Instant Toptools software is not installed and all other requirements are met.

- **Software**

- MSDE 2000 with Service Pack 3a (bundled with HP Systems Insight Manager), or you can use one of the following:
 - Microsoft SQL Server 2000, Standard Edition with Service Pack 3 or Service Pack 4 (for Standard Server operating system)
 - Microsoft SQL Server 2000, Enterprise Edition with Service Pack 3 or Service Pack 4 (for "Advanced Server" operating system)
 - Oracle 9i release 2

Note: Windows XP Professional does not support a local installation of SQL Server 2000, only MSDE 2000. SQL Server 2000/Oracle 9i can be used as a remote database for a CMS on Windows XP Professional.

- ProLiant Support Pack for Windows 6.30 or later
- Microsoft Internet Explorer 6.0

- **Free Disk Space**

- 500 MB recommended

- **Networking**

- Static or dynamic host name resolution
- TCP/IP
- SNMP

Managed System Requirements and Recommendations

This section contains requirements and recommendations for managed systems.

- **Required Operating Systems**

- HP Tru64
- HP NSK
- HP OpenVMS
- HP-UX 11i
- HP-UX 11i v2 (September 2004 or later)
- IBM OS/2
- Microsoft Windows 2003 Standard for IA-32
- Microsoft Windows 2003 Standard with Service Pack 1 for IA-32
- Microsoft Windows 2003 Enterprise for IA-32
- Microsoft Windows 2003 Enterprise Service Pack 1 for IA-32
- Microsoft Windows 2003 Enterprise for Itanium-based systems

- Microsoft Windows 2003 Enterprise with Service Pack 1 for Itanium-based systems
- Microsoft Windows 2003 Extended Systems for x64 and AMD64
- Microsoft Windows 2003 Web Edition for IA-32
- Microsoft Windows 2003 Data Center
- Microsoft Windows 2003 Small-Medium Business for IA-32
- Microsoft Windows Professional for IA-32
- Microsoft Windows Data Center for IA-32
- Microsoft Windows 2000 Server with Service Pack 4 for IA-32
- Microsoft Windows 2000 Advanced Server with Service Pack 4 for IA-32
- Microsoft Windows 2000 Server for IA-32
- Microsoft Windows 2000 Advanced Server for IA-32
- Microsoft Windows 2000 with Service Pack 1 or later for IA-32
- Microsoft Windows XP with Service Pack 2
- Microsoft Windows XP with Service Pack 1
- Microsoft Windows XP
- Microsoft Windows 98
- Microsoft Windows 98 Millinium Edition
- Microsoft Windows Virtual Server
- Novell Netware 6.5
- Novell Netware 6.0
- Novell Netware 5.1
- SCO Open Unix 8
- SCO Unixware 7
- SCO OpenServer 5
- Red Hat Linux 9
- Red Hat Linux 8
- Red Hat Linux 7.3 Workstation
- Red Hat Linux 7.2
- Red Hat Enterprise Linux 4 for x86
- Red Hat Enterprise Linux 4 for AMD64 and EM64T
- Red Hat Enterprise Linux 4.0 for IA-32 and Itanium-based systems
- Red Hat Enterprise Linux 3 AS for Itanium-based systems
- Red Hat Enterprise Linux 2.1 for Itanium-based systems
- Red Hat Enterprise Linux 2.1 for x86
- SUN Solaris 9 Intel Platform
- SUN Solaris 8 Intel Platform
- SUSE Linux Enterprise Server 9 for Itanium-based systems
- SUSE Linux Enterprise Server 9 for x86
- SUSE Linux Enterprise Server 9 for AMD64 and Intel EM64T
- SUSE Linux Enterprise Server 8 for Itanium-base systems
- SUSE Linux Enterprise Server 8
- SUSE Linux Enterprise Server 8/United Linux 1.0
- SUSE Linux 7.2

- SUSE Linux 7.0
- VMWare ESX
- VMWare GSX

Note: Operating systems with only IPX enabled will not be identified by an HP-UX or Linux CMS.

Note: Microsoft Windows 2002 and 2003 International Server - French, German, Spanish, and Japanese (latest service pack available for each language).

- **Required Hardware**

- For HP-UX:
 - Any HP PA-RISC system
 - Any HP Itanium-based system
- For Linux:
 - Any HP IA-32 system
 - Any HP Itanium-based system
- For Windows:
 - Any HP IA-32 system

- **Recommended Software**

Note: This software is not required, but if you want improved management capabilities, HP recommends that you install these components.

- For HP-UX:
 - SSH
 - WBEM
- For Linux:
 - SSH
 - ProLiant Support Pack for Linux 7.0 or later
 - SNMP (recommended as an alternative to WBEM)
 - WBEM (for Integrity systems only)
- For Windows:
 - OpenSSH 3.7.1
 - ProLiant Support Pack 6.30 or later
 - WBEM/WMI
 - SNMP (recommended as an alternative to WBEM)

- **Required Networking**

- Static or dynamic host name resolution
- SNMP

- **Managed Storage System Requirements and Recommendations**

To view the latest information regarding HP SIM support for a particular storage system including Fibre Channel disk arrays, switches, tape libraries, or hosts (with Fibre Channel host bus adapters). Refer to the HP SIM SMI-S Provider web page at:

<http://www.hp.com/go/hpsim/providers>.

This webpage also offers information on obtaining and installing SMI-S providers.

- **Required Web Browsers**

- For HP-UX:
 - Mozilla 1.7.3 or later
To download, refer to <http://software.hp.com>.
- For Linux:
 - Mozilla 1.7.3 or later
- For Windows:
 - Microsoft Internet Explorer 6 with Service Pack 1 or later
Refer to the following note about the required security options.

Note: For all Windows Internet explorer browsers, you must have the following browser security options enabled for HP SIM to work properly:

- SSL 3.0 or TLS 1.0
- **Recommended Software**

Note: This software is not required, but if you want improved HP SIM capabilities, HP recommends that you install these components, which can be purchased or downloaded from many software suppliers.

 - SSH Client
 - X Window Server

4 Documentation

All HP Systems Insight Manager documentation is available on the Web and bundled with the software.

- HP Systems Insight Manager Installation and User Guide

This document provides information about installing and getting started using HP Systems Insight Manager. This guide includes an introduction to basic concepts, definitions, and functionality associated with HP Systems Insight Manager. Refer to the HP Systems Insight Manager Installation and User Guide at <http://h18013.www1.hp.com/products/servers/management/hpsim/infolibrary.html>.

- HP Systems Insight Manager Help System

The help system provides a complete set of documentation for using, maintaining, and troubleshooting HP Systems Insight Manager. To view a PDF of the help system, refer to the HP Systems Insight Manager Technical Reference Guide at <http://h18013.www1.hp.com/products/servers/management/hpsim/infolibrary.html>.

Additional information including general product information, white papers, and support information is available at <http://www.hp.com/go/hpsim/>.