

Managing the HP-UX 11i Environment

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Software Architect

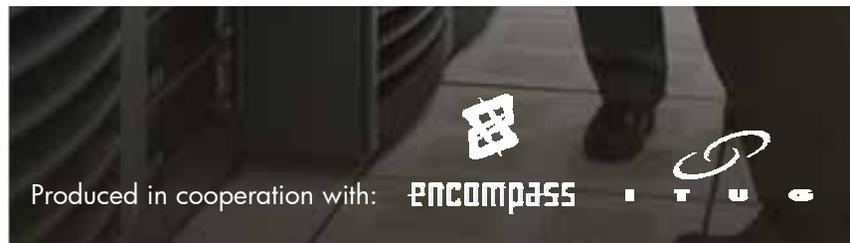
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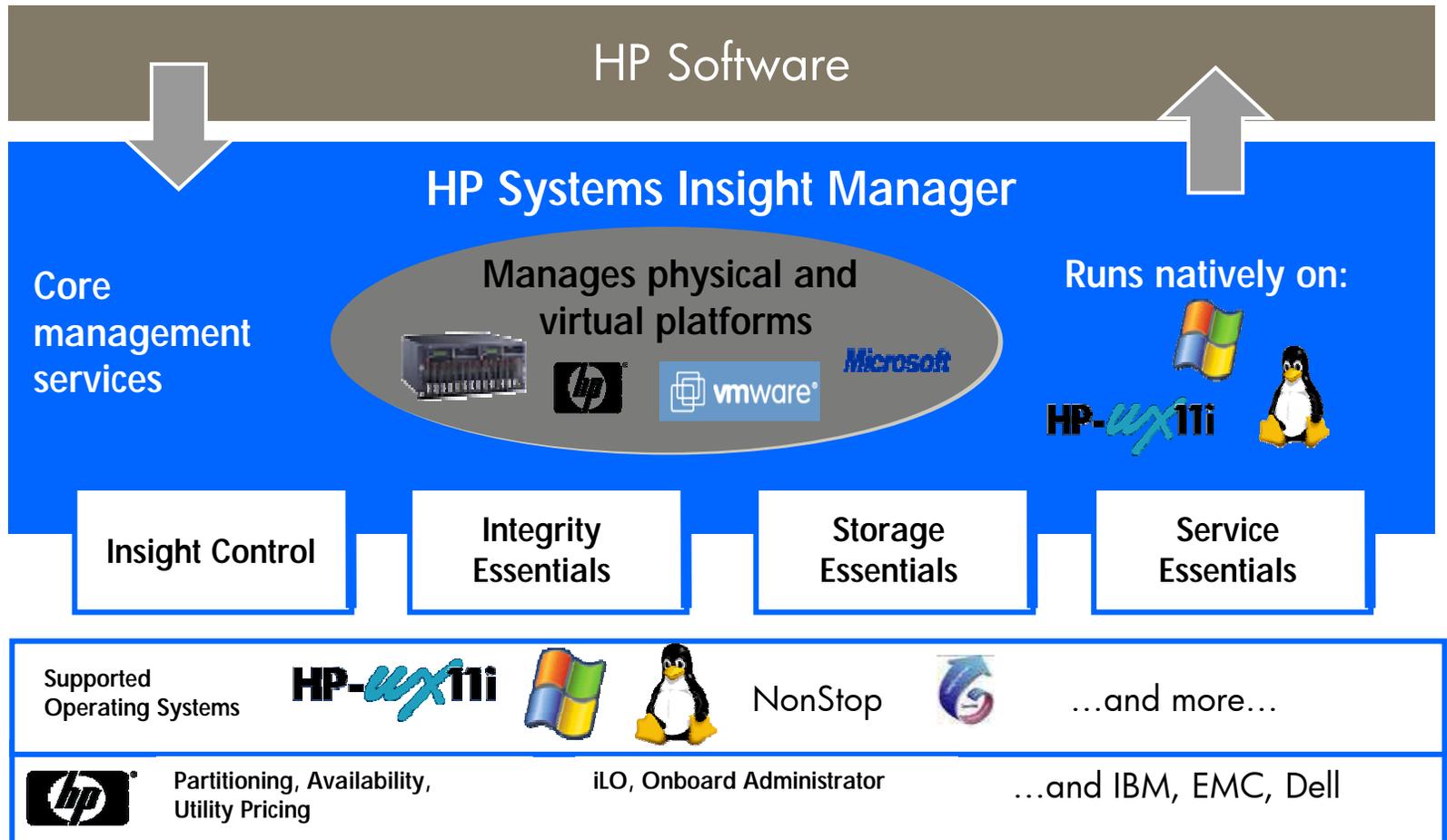
Agenda

- Single System Management: SMH
- Multi-System Management: HP SIM
- New Features: HP SIM 5.2
- Integrity Essentials



Unified Infrastructure Management

Operation and management of servers and storage across multiple platforms from a single interface



HP-UX 11i Systems Management Overview

Configuration Management

Workload Management

Monitoring

Software Deployment

Enterprise Mgmt

HP Software Suite of Products

Distributed Systems Administration Utilities

Ignite-UX

Multi-System

Virtual Server Environment Mgmt.

Software Distributor-UX

HP Systems Insight Manager (SIM)

HP System Management Homepage (SMH)

Single System

- HP-UX Bastille

GlancePlus Pak

- Update-UX
- Software Package Builder
- Software Assistant
- Dynamic Root Disk



HP System Management Homepage



Single System Management System Management Homepage (SMH)

- Common HP solution for managing a single "system" (physical server, virtual server, complex, etc.)
- Homepage shows color-coded status of system components with drill-down for more details
- HP-UX 11i SMH drill-down details through WBEM-based component property pages and GUIs
- Tools page provides access to HP-UX 11i OS management
- Browser-based GUI consistent with SMH on Windows/Linux and OpenVMS (working toward common contents/terminology)
- Easy drill-down from HP SIM to SMH to troubleshoot; both use same WBEM instrumentation
- Linux/Windows/OpenVMS also utilize SNMP instrumentation



HP-UX 11i System Management Homepage Status and Drill-Down

- SMH homepage has status of server (System Summary is the same as SIM's Health Status) and status of system components

- Click on link to see details of that status (e.g., cooling sub-system and individual fans, or overall physical memory and individual DIMMs)

- When available, links lead to GUIs for active management

The screenshot shows the HP-UX System Management Homepage for a server named 'valrhona'. The page displays a 'System Status Summary' with various components and their health status. A legend indicates that green checkmarks represent 'Normal' status, while red X's, yellow triangles, and blue circles represent other levels of severity or status.

The 'System' component is highlighted with a yellow box, and its 'System Summary' is further detailed in a drill-down view. This view shows 'Physical Memory' with a status of 'OK' and a green checkmark. Below this, a table lists the physical memory modules:

Status	Location	Size	Module Type	Memory Type	Serial Number	Part Number
OK	Slot: 0a	1 GB	DDR	DDR	61da070	A6969AX-HY1CHT08
OK	Slot: 0b	1 GB	DDR	DDR	61da071	A6969AX-HY1CHT08
OK	Slot: 1a	1 GB	DDR	DDR	61da06b	A6969AX-HY1CHT08
OK	Slot: 1b	1 GB	DDR	DDR	61da00e	A6969AX-HY1CHT08

The table also includes a 'Printable View of Table' link and a 'Display: 50 Rows' dropdown menu. A blue text overlay on the right side of the screenshot reads: 'Same WBEM instrumentation supports these pages/status and the HP SIM pages, status, and inventory information (consistency!)'.



HP-UX 11i System Management Homepage Log Viewers

- SMH log, as well as integration with logs for SAM/webapps, ParMgr, and system logs
- Syslog viewing provided via DSAU (Distributed Systems Administration Utilities)
- WBEM indication event viewing (and indication subscription mgt) via SMH GUI and evweb CLI
- Indications include blade location information
- HP SIM for multi-system event views

The screenshot displays the HP System Management Homepage (SMH) interface. The top navigation bar includes 'Home', 'Settings', 'Tasks', 'Tools', 'Logs', and 'Help'. The main content area is titled 'Logs' and contains several log viewer widgets: 'Event Viewer Log Viewer', 'Partition Manager Log', 'SAM Log Viewer', 'System Log Viewer', and 'System Management Homepage Error Log System Management Homepage Log'. A date and time stamp indicates 'Saturday, May 03, 2008 10:39:49 AM'.

A secondary window shows the 'List Events' page, which provides a detailed view of system events. The page includes a search bar and a table of events with columns for 'Event ID', 'Severity', 'Event ID', 'Event Category', 'Time of Occurrence', and 'Summary'. The table lists several events, including a critical event (ID 100602) related to a processor and a warning event (ID 100601) related to a parity error. The 'Details of the event' section provides further information about the selected event, such as the event time, severity, and event ID.

Event ID	Severity	Event ID	Event Category	Time of Occurrence	Summary
1	Critical	100602	Processor	2007-01-10 22:16:40	The monitor found a processor that was deactivated earlier as a result of Dynamic...
2	Warning	100641	Processor	2007-01-10 22:46:37	On , a SERIOUS event was generated indicating an abnormally high failure rate for...
3	Warning	100601	Processor	2007-01-10 23:43:48	A parity error has been detected in either the instruction or Data Memory Cache (...
4	Warning	7	System Hardware	2007-01-10 23:53:30	The Diagnostic mode is switched from EMS to SFM. SysfAutMgmt will now monitor th...
5	Warning	7	System Hardware	2007-01-10 23:53:30	The Diagnostic mode is switched from EMS to SFM. SysfAutMgmt will now monitor th...
6	Warning	7	System Hardware	2007-01-10 23:56:29	The Diagnostic mode is switched from EMS to SFM. SysfAutMgmt will now monitor th...
7	Warning	7	System Hardware	2007-01-10 23:56:29	The Diagnostic mode is switched from EMS to SFM. SysfAutMgmt will now monitor th...

The 'Details of the event' section shows the following information:

- Event Time: Wed Jan 10 22:43:47 2007
- Severity: Information
- Preceder: CMC_IndicationPrecederA
- Event #: 100601
- Unpinned PDK malloc pool base: 0xe000000100000000 size=96304K
- NOTICE: cachefs_link(): File system was registered at index 5.

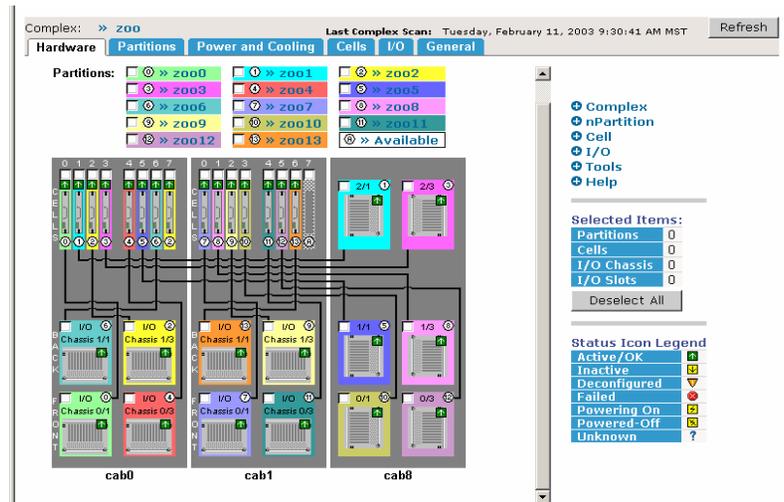
The bottom of the page shows a 'Printable View of Table' and an 'Executed Command' section with the following command:

```
/opt/dsau/bin/clog -D -1 /var/opt/dsau/layouts/syslog_layout /var/adm/syslog/syslog.log
```



Element Management integrated with SMH and HP SIM

- **Partition management**
 - Partition Manager
 - Runs natively on HP-UX 11i and Windows. Manages hard partitions with all OSs.
 - Integrity Virtual Machines Manager
- **HP-UX management**
 - Kernel configuration
 - Peripherals & Devices
 - File Systems & LVM
 - Users & Groups
 - Security Attributes & Auditing
 - Network configuration (11iv3)
 - Printer and Plotters (11iv3)
- **Serviceguard management**
 - Serviceguard Manager (HP-UX 11i, Linux)



HP-UX 11i System Management Homepage

Recent Enhancements

- Management Processor link
- Additional blade enclosure information
- Checkbox disables session timeout
- Network and I/O status information
- Network property page
- Additional system config information (boot, printers, crash dump)
- Property pages with filtered event views
- Memory page shows empty slots

The screenshot displays the HP-UX 11i System Management Homepage. The top navigation bar includes 'Home', 'Settings', 'Tasks', 'Tools', 'Logs', and 'Help'. The user is identified as 'root' with a session that never expires. The main content area is titled 'System Status Summary' and features several status boxes: 'System' (green border), 'Network' (yellow border), 'Operating System', 'Software', 'Storage' (green border), and 'System Configuration'. A 'Physical Memory' section shows 'Status: OK'. Below this is a 'List Events' section with a filter bar and a table of events. The table has columns for 'Event Category', 'Severity', 'Event', 'Event Category', 'Action Time', and 'Summary'. One event is listed: 'Memory' with a severity of 'Warning' and a summary of 'The Page Deallocation Table (PDT) is % full. PDT Entries Used'. The bottom right corner of the screenshot contains the copyright notice: '©2003-2008 Hewlett-Packard Development Company, L.P.'

HP Systems Insight Manager



Multi-System Management HP Systems Insight Manager (HP SIM)

HP's strategic platform for multi-system infrastructure management across Windows, Linux, HP-UX 11i.

- Consolidates management of servers, clients, printers, and storage
- Capabilities for discovery, inventory and event mgt, role-based access and logging, and multi-system tasks.
- Monitors the health of servers, with click-thru launch of appropriate tools for more detailed views.
- Launches specific tools for configuration management (with role-based access and logging)
- Browser-based GUI or Command Line Interface
- Integrates with ProLiant, Integrity, and Storage Essentials as well as HP Software products
- Bundled with HP-UX 11i OE/AR, ProLiant Management CD, and downloadable from web.

OS	Alert	SW	WPA	System Name	System Type	System Address	Product Name	OS Name
✓	(i)	(i)		class1	Server	16.129.17.104	9000000	HP-UX
✓	(i)	(i)		class2	Server	16.129.17.90	9000000	HP-UX
✓	(i)	(i)		class3	Server	15.1.63.232	9000000	HP-UX
✓	(i)	(i)		class01	Server	15.75.207.210	9000000	HP-UX
✓	(i)	(i)		class02	Server	15.75.207.100	9000000	HP-UX
✓	(i)	(i)		class03	Server	15.75.207.102	9000000	HP-UX
✓	(i)	(i)		class04	Server	15.75.207.103	9000000	HP-UX
✓	(i)	(i)		class08	Server	15.75.207.107	9000000	HP-UX
✓	(i)	(i)		class09	Server	15.75.207.108	9000000	HP-UX
✓	(i)	(i)		class11	Server	15.75.207.110	9000000	HP-UX
✓	(i)	(i)		class12	Server	15.75.207.111	9000000	HP-UX
✓	(i)	(i)		class13	Server	15.75.207.112	9000000	HP-UX
✓	(i)	(i)		class15	Server	15.75.207.114	9000000	HP-UX
✓	(i)	(i)		class16	Server	15.75.207.115	9000000	HP-UX
✓	(i)	(i)		class17	Server	15.75.207.116	9000000	HP-UX
✓	(i)	(i)		class18	Server	15.75.207.117	9000000	HP-UX

HP-ux11i



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



HP SIM Features

➤ **Discovery and Inventory**

- Monitoring
- Fault Management
- Role-based Authorization
- Customizable Distributed Task Facility



HP SIM - Discovery

HP Systems Insight Manager

User: root
[Home](#) | [Sign Out](#)

System Status
Legend... Customize...
Updated: Thu, 9/15/2005, 10:29:58 AM PDT
61 4 17 304 Uncleared Event Status

Search
Advanced Search...

Systems and Events
System Overview
All Systems
All Events
Systems
Private
Shared
Systems by Type
Systems by Status
Systems by Operating System
Clusters by Type
Clusters by Status
System Functions
Events
Private
Shared
Events by Severity

Discovery
Indicate the systems you want HP Systems Insight Manager to manage.

Automatic Manual Hosts Files

Configure and run automatic system discovery. Be sure to configure the settings prior to executing automatic discovery for the most accurate information.

For all automatic discoveries:
Configure general settings
Manage templates
Configure global protocol settings

Name	Last Run	Schedule
System Automatic Discovery	9/14/05 - 1:41 PM	Periodic - Next Run: 9/17/05 - 11:00 AM

New... Edit... Disable Delete... Run Now

- Use automatic discovery to populate the HP SIM database with systems (servers, iLOs, OAs, storage devices, etc.)

- Devices are identified and inventoried.

- Filters can be used to control what discovery finds.



HP SIM User Interface

System needs attention!
Unleared Event Status

4098 14 7 192

3

Optional Full Screen Status Display

HP Systems Insight Manager

System Status

Updated: Wed, 11/14/2007, 2:01 PM PST

9 3 0 13125 Unleared Event Status

Search

Advanced Search...

Event Collections

System Overview

All Systems

All Events

Systems

- Private
 - Xiao Collection
 - Li Collection
 - Zhang Collection
- Shared
 - Systems by Type
 - All Systems
 - All Servers
 - All VSE Resources
 - HP BladeSystem
 - Storage Systems
 - All Racks
 - All Enclosures
 - All Clients
 - All Networking Devices
 - All Printers
 - All Management Processes
 - Systems by Status

Tools Deploy Configure Diagnostics

Li Collection

System(s) Events

View as: table

Select "Li Collection" itself

Summary: 3 Critical 0 Major 6 Minor 15 Normal 0 Disabled 0 Unknown Total: 24

	HS	MP	ES	System Name	System Type	System Address	Product Name	OS Name
<input type="checkbox"/>	✓	✓	✓	bl1610 in Encl. Enclosure1	Server	16.91.125.106	ProLiant BL30p G1	Linux - Red Hat Enterp...
<input type="checkbox"/>	✓	✓	✓	blade28	Server	16.91.125.78	ia64	HP-UX
<input type="checkbox"/>	✓	✓	✓	blade29	Server	16.91.125.79	ia64 hp server BL60p	HP-UX
<input type="checkbox"/>	✓	✓	✓	blade41 in Encl. Mercedes	Server	16.91.126.112	ia64 hp server BL860c	HP-UX
<input type="checkbox"/>	✓	✓	✓	blade42 in Encl. Mercedes	Server	16.91.126.113	ia64 hp server BL860c	HP-UX
<input type="checkbox"/>	✓	✓	✓	blade43 in Encl. Mercedes	Server	16.91.126.114	ia64 hp server BL860c	HP-UX
<input type="checkbox"/>	✓	✓	✓	blade49 in Encl. Mercedes	Server	16.91.126.120	ia64 hp server BL870c	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux01	Server	16.91.125.1	9000/800	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux02	Server	16.91.125.2	9000/800/A500-7X	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux03	Server	16.91.125.3	9000/800/A500-7X	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux04	Server	16.91.125.4	9000/800/A500-7X	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux05	Server	16.91.125.5	ia64 hp server rx1620	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux06	Server	16.91.125.6	ia64 hp server rx1620	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux07	Server	16.91.125.7	ia64	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux08	Server	16.91.125.8	ia64	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux10	Server	16.91.125.10	9000/800	HP-UX
<input type="checkbox"/>	✓	✓	✓	cupux11	Server	16.91.125.11	9000/800/m3410	HP-UX

Save As Collection... Delete Print

Combo collections integrate system and event criteria

Table View of a Collection

Tree View of a Collection

Advanced Search

Easy access to your collections

Associations for VM, nPars, vPars, MPs, Clusters

All nPartition Servers

View as: tree

Select "All nPartition Servers" itself

- new_test_name (Complex)
- rex-s_test (Complex)
- zoo (Complex)
 - zoo2 (Server)
 - zoo3 (Server)
 - zoo5 (Server)
 - zoo6 (Server)
 - zoo25 (Server)
 - zoo26 (Server)
 - zoo8 (Server)
 - zoo9 (Server)
 - zoo19 (Server)
 - zoo21 (Server)

Delete Print

Save Selection As...

Enclosure Views

- More detailed and life like Enclosure views
- Shows health status
- Includes environment details
- Lists firmware revisions

BLADERUNNER (Rack)

Select All Blades All Interconnect Switches All Enclosures

BLADERUNNER

ENCLOSURE3

Front View  Rear View 

Enclosure Name	ENCLOSURE3
Serial Number	EBD1MJS16M
UUID	07EBD1MJS16M
Firmware Revision	Not Available
Power Zone	Not Available
Unit ID (LED)	Not Available
Temperature C/F	Not Available
RackTool	RackName Change Tool
Health Status	

Enclosure1

Front View  Rear View 

Enclosure Name	Enclosure1
Serial Number	TS0NMJS32M
UUID	07T03NMJS32M
Firmware Revision	Not Available
Power Zone	Not Available
Unit ID (LED)	Not Available
Temperature C/F	Not Available
RackTool	RackName Change Tool
Health Status	

Enclosure2

Front View  Rear View 

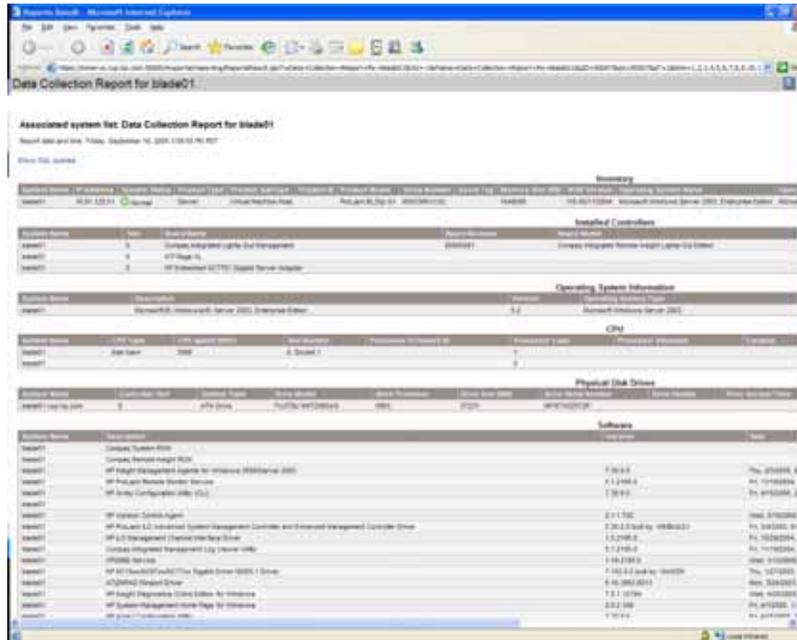
Enclosure Name	Enclosure2
Serial Number	TV5MMJS35H
UUID	07TV5MMJS35H
Firmware Revision	2.20
Power Zone	3
Unit ID (LED)	Off
Temperature C/F	38 / 100.4
RackTool	RackName Change Tool
Health Status	

Enclosure3

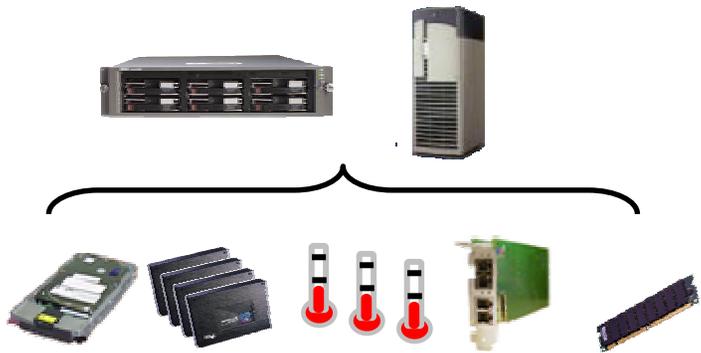
Front View  Rear View 

Enclosure Name	Enclosure3
Serial Number	D322JTK5H024
UUID	D322JTK5H024
Firmware Revision	9.04
Power Zone	3
Unit ID (LED)	Off
RackTool	RackName Change Tool
Health Status	
Lead Balanced Cable	Not Present
Power Redundancy	Power Enclosure Redundant Power Supply Not Redundant Load Share Cable Present

HP SIM - Inventory



- Discovery and data collection of systems on the network
- Flexible search simplifies location of specific devices
- Single and multiple system reports
- Pre-defined and custom reports
- Configuration snapshot compares – single and multi-system
- WBEM property pages for real-time information display
- Show SQL queries and export to CSV file



Bundled Databases

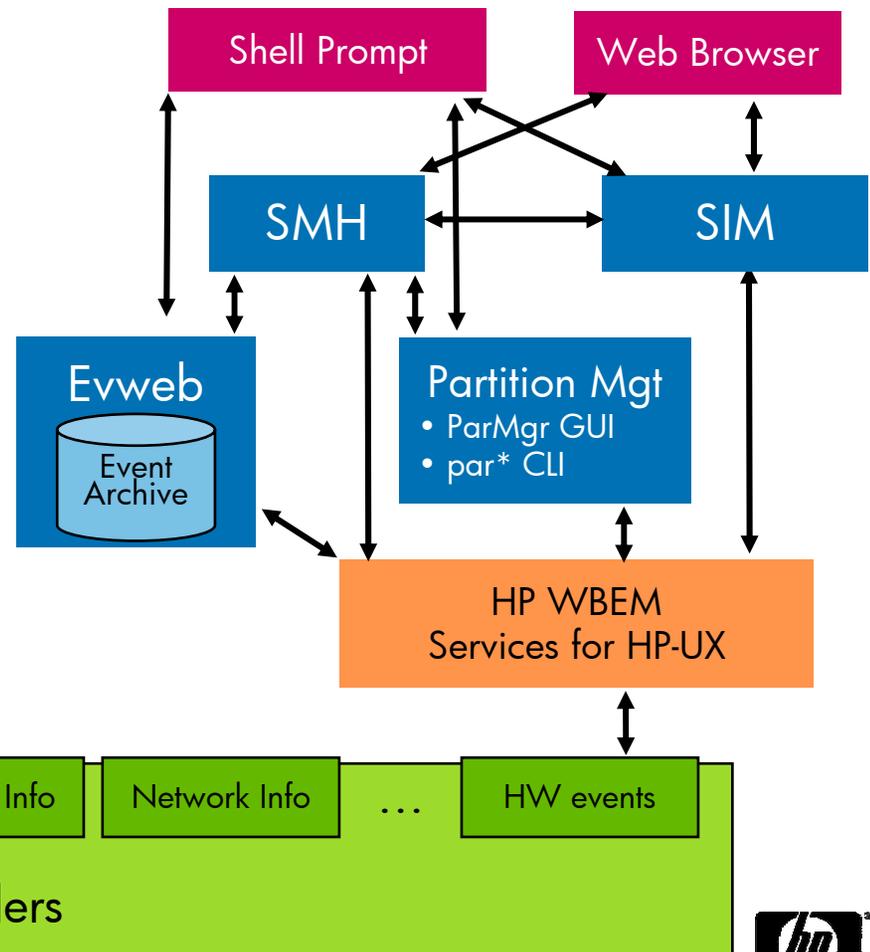
Enterprise Databases



WBEM-Based Systems Management

A robust, secure, standards-based management solution for HP systems (Web-Based Enterprise Management)

- System information is exposed via providers (parallel to SNMP agents)
- Some providers support active management
- HP SIM, SMH, and other clients consume this information for display & management
 - HP SIM uses to discover and build associations
 - HP SIM uses for health status, property pages and inventory reports
 - SMH uses for status info and property pages
 - Events (indications) used by HP SIM and evweb
 - Used for partition management
- HP WBEM Services and providers implementations across a variety of OSs (HP-UX 11i, Linux, Tru64, OpenVMS) with a mapper for Microsoft WMI



Enhanced HP-UX 11i Management

Additional WBEM Instrumentation

- Further expansion of WBEM information already present for HP-UX 11i
 - OS and computer system
 - CPU and Memory
 - Firmware
 - Management Processor
 - Disk
 - Enclosure (and blade info)
 - EMS HW monitors wrapped to WBEM
 - LAN and PCI Cards, HBAs (FC, SCSI)
 - Ethernet, LAN, IP, DNS, NTP, NIS
 - Process
 - Software Distributor (SD)
 - File System, LVM
 - nPars , vPars, Integrity Virtual Machines
 - Serviceguard clusters and packages
 - Utilization information (used by Capacity Advisor)
 - iCAP information
 - Boot, Dump, Swap

Inventory reports SIM Property pages SMH Status

HP WBEM Services for HP-UX 11i

Providers

Richness of HP-UX 11i instrumentation keeps growing and supports additional displays, reports, and features in HP SIM and SMH

Bundled with OE/AR for easy access with HP-UX 11i



HP SIM Features

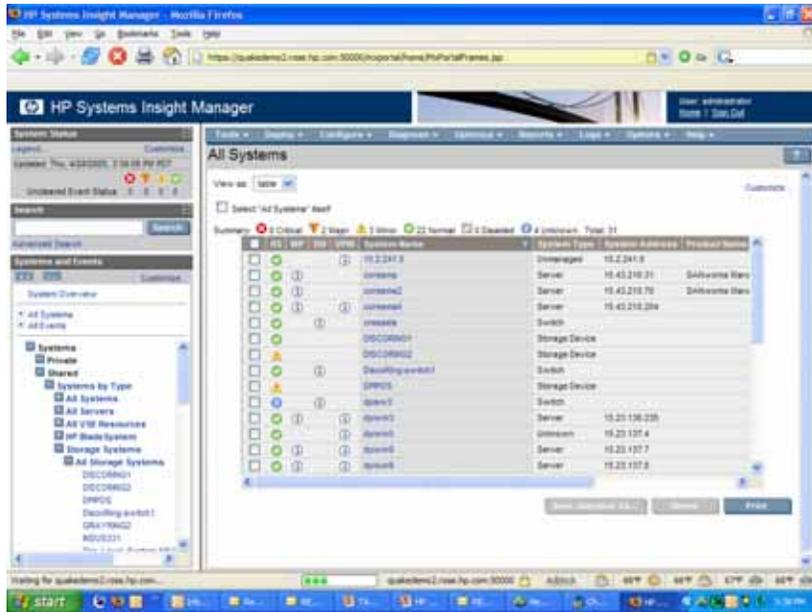
- Discovery and Inventory

➤ **Monitoring**

- Fault Management
- Role-based Authorization
- Customizable Distributed Task Facility



HP System Insight Manager Monitoring



Monitoring

- Health Status (HS)
 - From WBEM consolidated status provider on HP-UX 11i, from Insight Agents on Windows/Linux
 - Connection test via ping or TCP/IP
- Event Status (ES)
 - Incoming events (SNMP and WBEM)
- Others (based on plug-ins)

Server instrumentation:

- HP-UX 11i Integrity servers
 - via SNMP (EMS) and/or WBEM
- ProLiant servers
 - via SNMP or WBEM Insight agents

Storage instrumentation

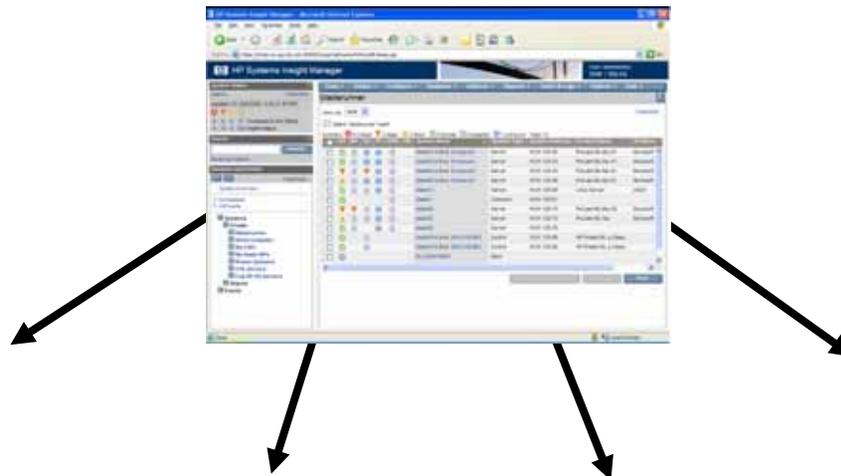
- SAN and NAS device management
 - via WBEM



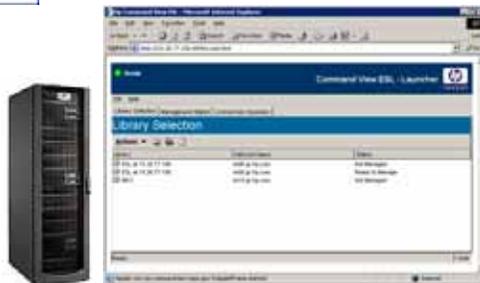
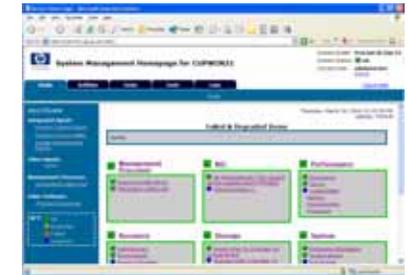
HP SIM – “Follow the Red”

Drill down to device element managers in context

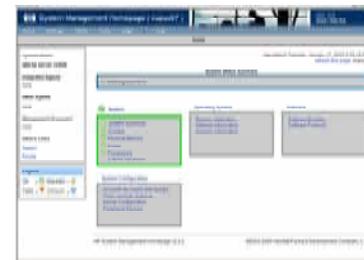
Array
Configuration
Utility for entry-
level Storage



System
Management
Homepage for
ProLiant servers



CommandView
for mid-range and
enterprise Storage



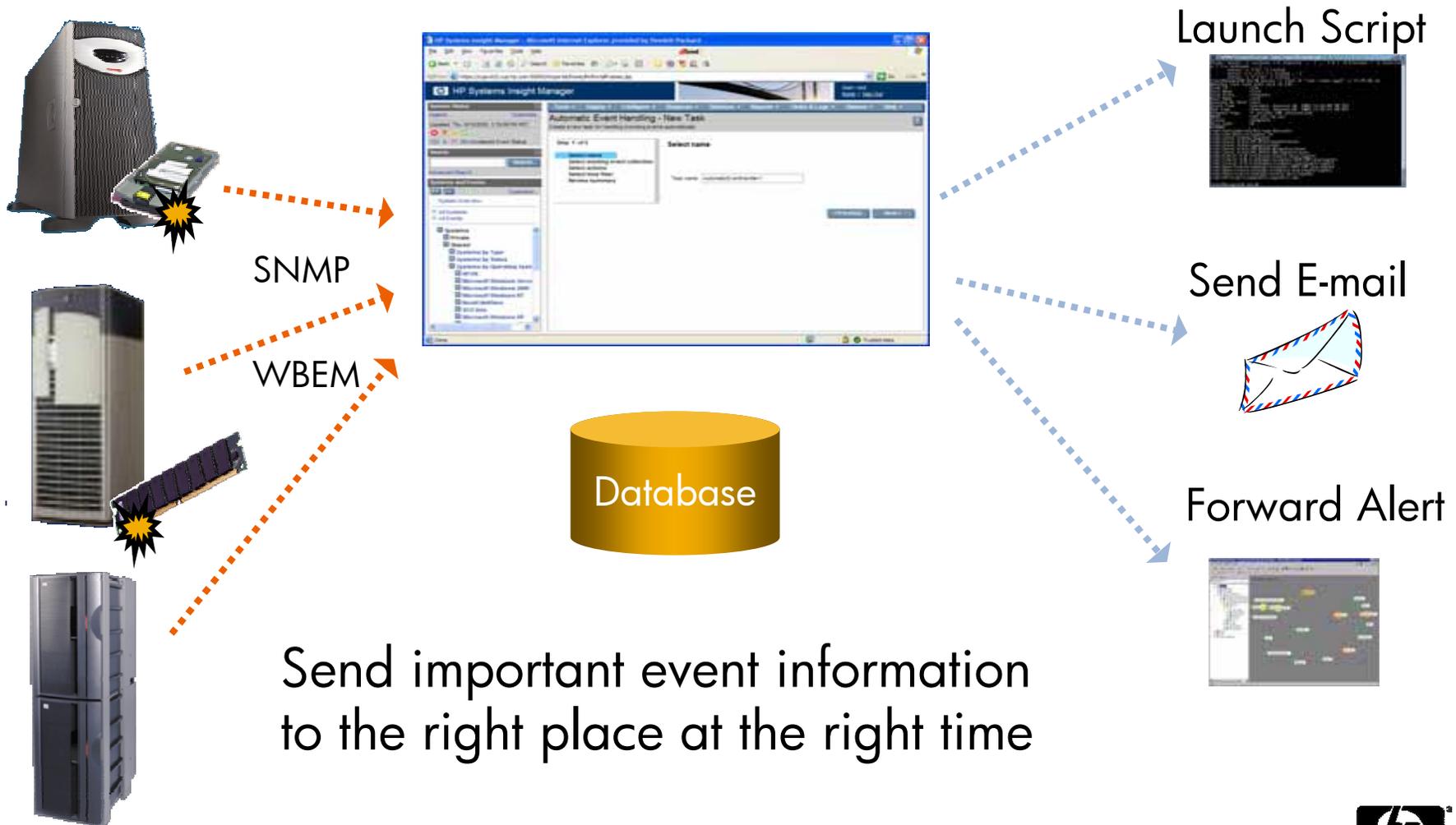
System
Management
Homepage for
HP-UX 11i servers

HP SIM Features

- Discovery and Inventory
- Monitoring
- **Fault Management**
 - Role-based Authorization
 - Customizable Distributed Task Facility



HP SIM – Fault Management

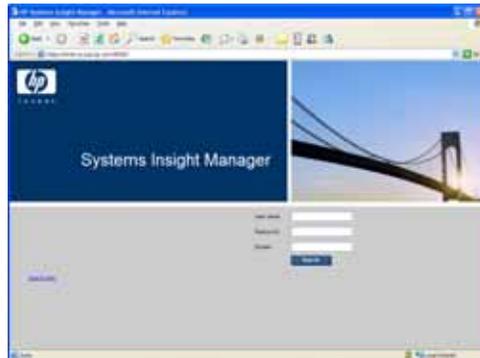


HP SIM Features

- Discovery and Inventory
- Monitoring
- Fault Management
- **Role-based Authorization**
- Customizable Distributed Task Facility

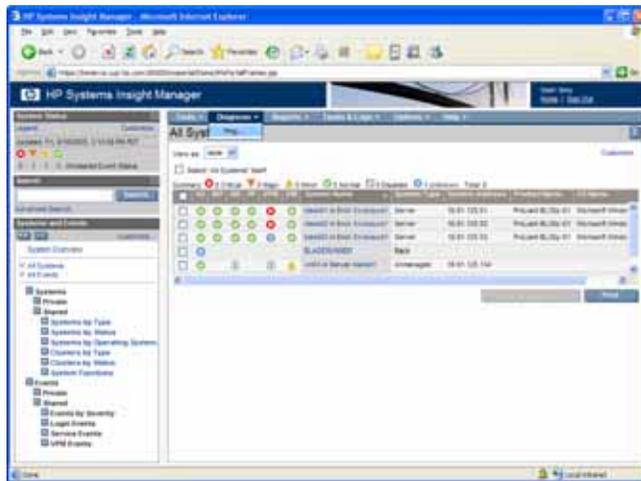


HP SIM – Role based authorization

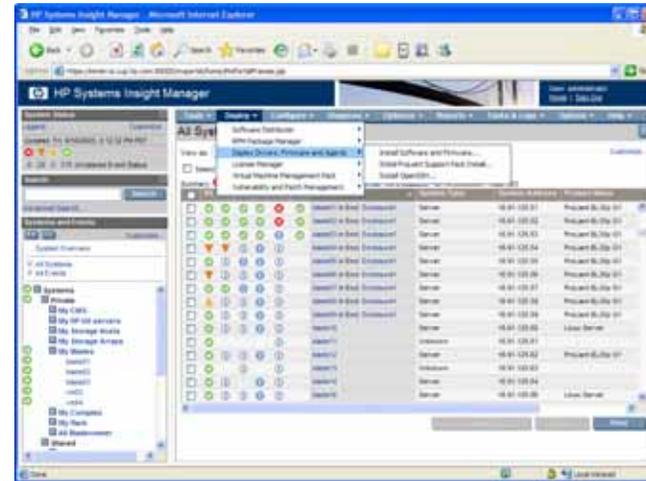


HP SIM secure login screen

- All users must login and authenticate with HP SIM (uses OS authentication)
- Visibility and access to tools and systems can be customized per user
- An authorization = user + tools + systems



Example of restricted user – only specified tools and systems can be accessed or viewed.



Example of full capability user – all tools and systems can be seen and accessed



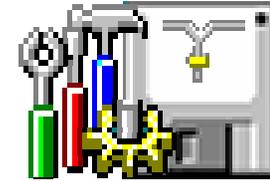
HP SIM Features

- Discovery and Inventory
- Monitoring
- Fault Management
- Role-based Authorization
- **Customizable Distributed Task Facility**

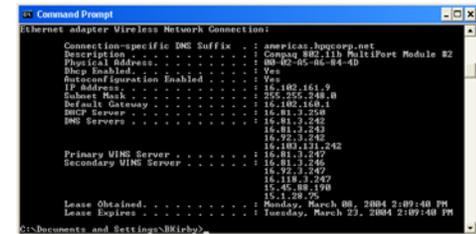


HP SIM - Distributed Task Facility

- Tool definitions (TDEFs) facilitate integration of custom scripts, OS commands, and other tools into HP SIM.
- Integrated tools can take advantage of HP SIM scheduling and security.
- Remote tool execution conducted through secure SSH session. (To easily set up trust, use "Configure and Repair Agents" menu item.)
- All tool output (stdout and stderr) captured and displayed on task results page.
- Tools can run on CMS or on managed nodes. Tools can operate on single or multiple nodes.



Schedule execution of commands & custom scripts



OS command & script "fan-out" capability for execution on multiple systems

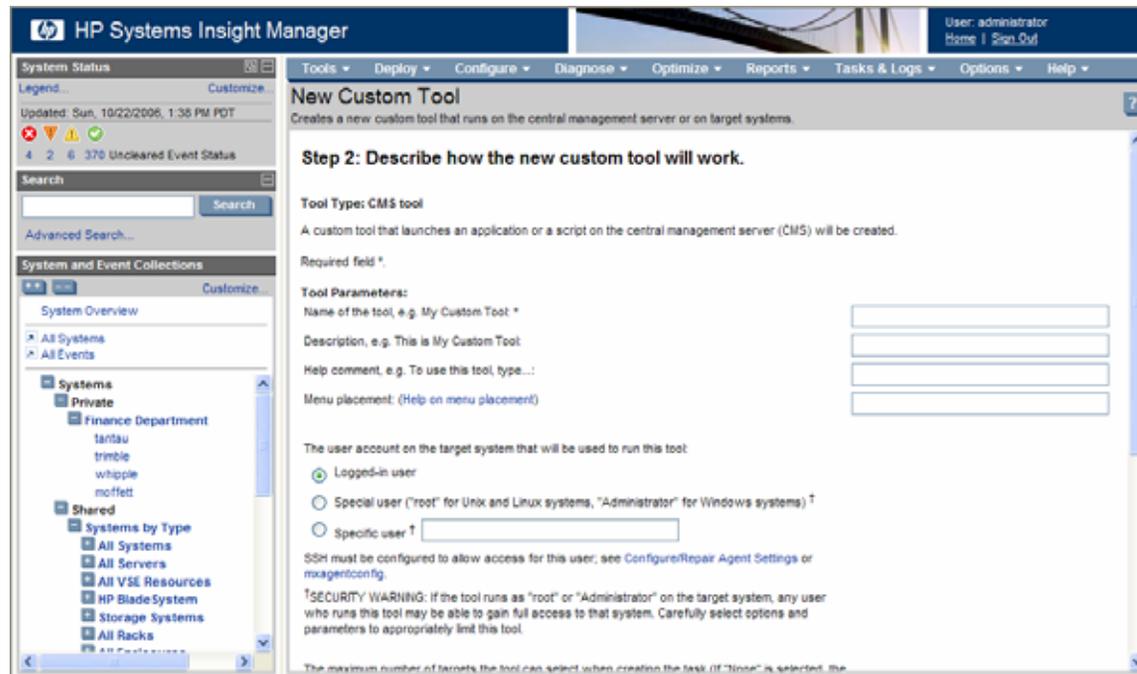


In-context launch of OS administration tools



Custom Tool Wizard

- Allows you to easily integrate your programs, scripts and custom commands into HP SIM
- Eliminates the need to write XML scripts
- You can configure tool type security and environment variables



New Features in HP SIM 5.2



HP SIM 5.2 Features



Make it easier to setup and maintain the communication between managed systems and the HP SIM central management server.

- First-Time Wizard changes
- New “Manage Communications” tool

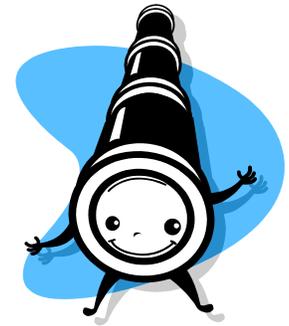
Easier to launch tools

- Task Wizard improvements
- Tool Search
- Quick Launch
- Select targets by “search”
- Queries selected by default in task wizard without needing to wait for display

Easier to use

- “go back” links
- Give you more space to work (full screen mode)

More HP SIM 5.2 Features



Improved management of HP-UX 11i

- Search for HP-UX 11i SW/FW versions
- Report info from HP-UX 11i firmware, file system and iCap providers
- Property pages include info on Cooling, Power, HBA, Disk Drive and MP
- Show HP-UX 11i OS Version in System list

Other new features

- Support for new hardware in BladeSystem including BL870c blades and virtual connect domains
- Discovery of VMware ESX VM Hosts and Windows guests
- Support for new WMI-based agents for ProLiant Windows
- Improved “Initial ProLiant Support Pack Install” uses HPSUM (can be run on multiple machines at once) for Windows and Linux on Windows CMS

HPSIM 5.2: Manage Communications

Main Screen

- Run this HPSIM tool on one or more systems to see how well they are communicating with the HP SIM central management server.
- It gives status on identification (WBEM, SNMP, etc.), event subscriptions, SSH and trust configuration (“Run tools”) and Version Control Agent configuration (Windows and Linux only).

Manage Communications
Diagnose and repair communication problems between the Central Management Server(CMS) and the managed system(s).

To maximize the manageability of each system HP SIM can configure communication protocols, passwords, agents.

Displaying Page 1 (results: 1 500 of 726) 1 | 2 Next »

<input type="checkbox"/>	System Name	↑	Identification	Events	Run tools	Version Control	System Type	OS Name
<input type="checkbox"/>	16.1C1.169.114		✓	?	?	?	Unmanaged	
<input type="checkbox"/>	16.1C1.169.140		✓	?	✗	?	Unmanaged	
<input type="checkbox"/>	16.1C1.169.144		✓	?	✗	?	Unmanaged	
<input type="checkbox"/>	16.1C1.169.164		✓	?	?	?	Unmanaged	
<input type="checkbox"/>	16.1C1.169.168		✓	?	✓	?	Server	
<input type="checkbox"/>	16.1C1.169.174		✓	?	✓	?	Server	
<input type="checkbox"/>	16.1C1.169.217		✓	?	✓	✓	Server	
<input type="checkbox"/>	blade10		✓	?	?	?	Server	
<input type="checkbox"/>	blade14		✓	?	✓	?	Server	
<input type="checkbox"/>	blade16		✓	?	?	?	Unmanaged	
<input type="checkbox"/>	blade17		✓	?	?	?	Cluster	HP Serviceguard
<input type="checkbox"/>	blade19		✓	?	?	?	Server	HP-UX

Advise and Repair Quick Repair Print

Select systems and click here to see details on next screen.

Click here to run “Configure and Repair Agents” tool

HP SIM 5.2: Manage Communications

Advise and Repair screen

Select one or more systems on main "Manage Communications" screen and click "Advise and Repair" button to show details:

The screenshot shows the HP SIM interface with tabs for Identification, Events, Version Control, and Running Tools. The main content area displays two error messages:

- Error 1:** "The managed system(s) has been identified correctly in the past. Now neither WDCM nor SNMP instrumentation can be found." Applies to: blade01, blade02. Causes and Recommendations include: Global WDCM identification is disabled (Apply to blade01), HP SIM cannot connect with the WMI Mapper (Apply to blade02), and HP SIM does not have the required SSL certificates (Apply to blade02, blade01).
- Error 2:** "HP SIM can access the managed system's basic data through WBEM, but it can not access the most complete system information." Applies to: blade05. Cause and Recommendation: Install the HP Insight WBEM Agents for Windows.

A "Quick Repair" button is located at the bottom right of the screen.

HP SIM 5.2: HP-UX 11i OS Version in System List

Summary: 2 Critical 2 Major 1 Minor 15 Normal 0 Disabled 0 Unknown Total: 20

<input type="checkbox"/>	HS	MP	SW	ES	System Name	System Type	System Address	Product Name	OS Name
<input type="checkbox"/>					blade41	Server	16.91.126.112	ia64	HP-UX B.11.23
<input type="checkbox"/>					blade42	Server	16.91.126.113	ia64	HP-UX B.11.23
<input type="checkbox"/>					blade43	Server	16.91.126.114	ia64	HP-UX B.11.23
<input type="checkbox"/>					blade49 in Encl. BMW	Server	16.91.126.120	ia64 hp server BL870c	HP-UX B.11.23
<input type="checkbox"/>					cupux01	Server	16.91.125.1	9000/800	HP-UX B.11.23
<input type="checkbox"/>					cupux02	Server	16.91.125.2	9000/800	HP-UX B.11.11
<input type="checkbox"/>					cupux03	Server	16.91.125.3	9000/800/A500-7X	HP-UX B.11.11
<input type="checkbox"/>					cupux04	Server	16.91.125.4	9000/800/A500-7X	HP-UX B.11.23
<input type="checkbox"/>					cupux05	Server	16.91.125.5	ia64 hp server rx1620	HP-UX B.11.23
<input type="checkbox"/>					cupux06	Server	16.91.125.6	ia64 hp server rx1620	HP-UX B.11.23
<input type="checkbox"/>					cupux07	Server	16.91.125.7	ia64	HP-UX B.11.23
<input type="checkbox"/>					cupux08	Server	16.91.125.8	ia64	HP-UX B.11.23
<input type="checkbox"/>					cupux10	Server	16.91.125.10	9000/800	HP-UX B.11.23
<input type="checkbox"/>					cupux11	Server	16.91.125.11	9000/800/rp3410	HP-UX B.11.11
<input type="checkbox"/>					cupux12	Server	16.91.125.12	9000/800/rp3410	HP-UX B.11.23
<input type="checkbox"/>					cupux13	Server	16.91.125.13	ia64 hp server rx2620	HP-UX B.11.31
<input type="checkbox"/>					npar01 Hosted by Partition 0_SIM1234567	Server	16.91.125.224	ia64 hp server rx7620	HP-UX B.11.31
<input type="checkbox"/>					npar02 in Complex astraee_SIM1234567	Server	16.91.125.225	ia64 hp server rx7620	HP-UX B.11.31
<input type="checkbox"/>					vmcup14 Hosted by blade49	Server	16.91.127.190		HP-UX
<input type="checkbox"/>					vmcup15 Hosted by blade49	Server	16.91.127.191		HP-UX



HP SIM 5.2: Search for HP-UX 11i SW/FW Versions

- Search by HP-UX Product and Bundle name (includes patch bundles).
- Includes “greater than”, “less than” and “equals” comparisons of version string.

Advanced Search Maximize ?

Search for matches based on selected criteria

Search for :

where :

component type is

and operating system is

and category type is

and name is

and version is

Search Results View [Quick Launch...](#)

Summary: 0 Critical 0 Major 0 Minor 1 Normal 0 Disabled 0 Unknown Total: 1

	HS	MP	SW	ES	System Name	System Type	System Address	Product Name	OS Name	SW Description	SW Version
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cupux12	Server	16.91.125.12	9000/800/rp3410	HP-UX B.11.23	Asian Printer Support	B.11.23



Integrity Essentials



Integrity Essentials for HP-UX 11i



HP Insight Software



Integrate

- HP Insight Integration for HP NNM, CA Unicenter, and Tivoli



Deploy

- Ignite-UX
- Dynamic Root Disk
- Software Distributor-UX
- Software Package Builder



Optimize

- Capacity Advisor
- Virtualization Manager
- HP Process Resource Manager
- HP Global Workload Manager
- GlancePlus & Performance Manager
- HP Insight Power Manager

HP-ux11i

And Virtual Server Environment



Monitor

- HP Systems Insight Manager
- HP System Management Homepage
- HP Serviceguard Manager, DSAU
- Partition Manager



Protect

- HP-UX Bastille
- Software Assistant



Control

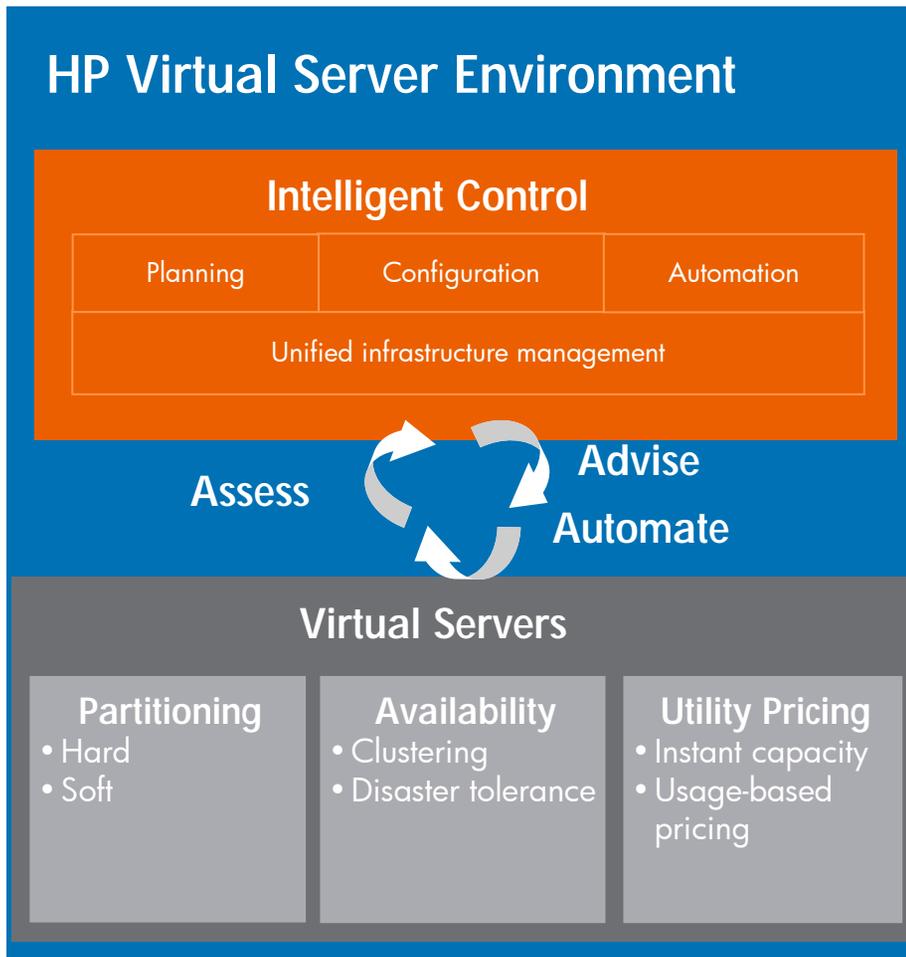
- Integrity iLO 2 Remote Management
- Integrity iLO Power Regulator for HP-UX 11i v3

HP-UX specific Essentials management tools

For more information visit www.hp.com/go/managehpux11i

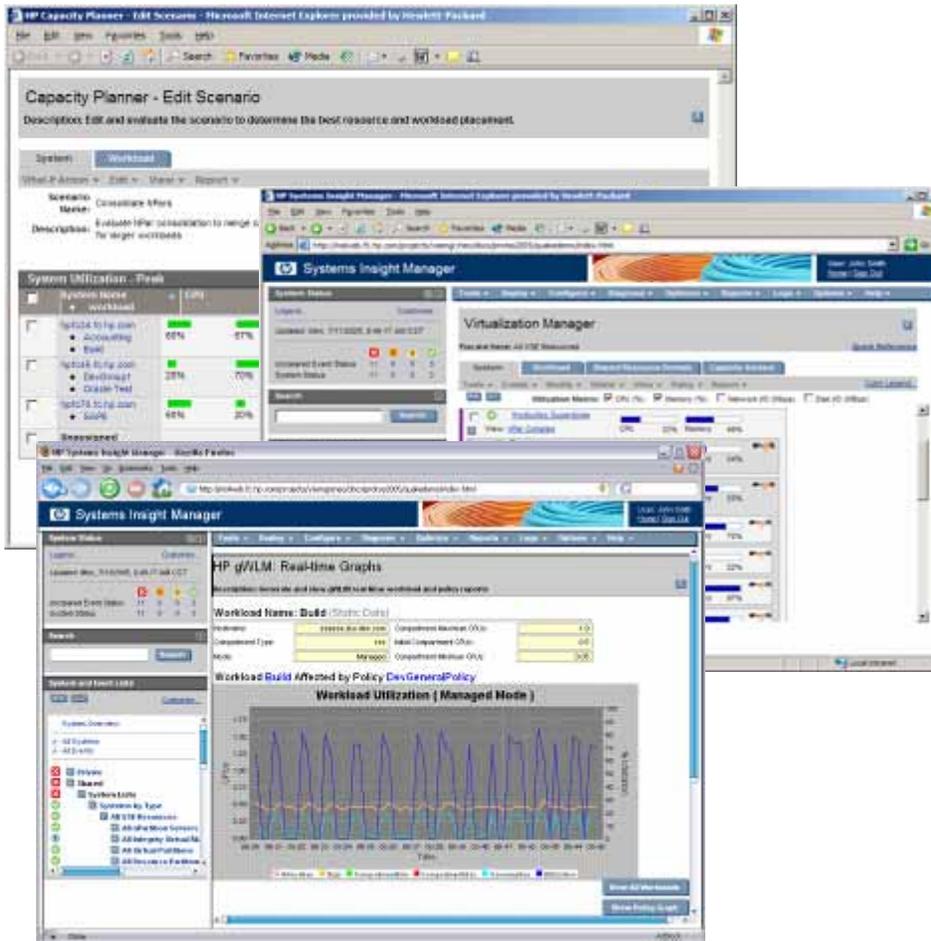


HP Virtual Server Environment (VSE) Vision



- Workloads are encapsulated in isolated compartments
- Workloads are installed once and can run anywhere
- Resources are automatically applied to workloads as they are needed
- If necessary, workloads are moved to provide better resource allocation or high availability
- Groups of systems managed as a single entity from a workload service and physical view

Integrated VSE management tools for planning, managing, and automating servers



- **Planning**
HP Integrity Essentials
Capacity Advisor
Industry's first intuitive, integrated tool for ongoing capacity planning simulating placement of application workloads
- **Configuration**
HP Integrity Essentials
Virtualization Manager
Reducing complexity with comprehensive, integrated configuration and management of all VSE elements
- **Automation**
HP Integrity Essentials
Global Workload Manager
Automatically aligning server resources with business needs

<http://www.hp.com/go/tryintegrityessentials>

HP Integrity Essentials Virtualization Manager

HP Systems Insight Manager

User: Isa
Home | Sign Out

System Status
Legend... Customize...
Updated: Tue, 1/15/2008, 12:11 PM PS
31 89 27 9066 Uncleared Event Status

Search
Search
Advanced Search... Tool Search...

System and Event Collections
Customize...
All Systems
All Events

Systems
Private
Shared
Systems by Type
All Systems
All Servers
All VSE Resources
HP BladeSystem
Storage Systems
All Racks
All Enclosures
All Clients
All Net...

Clusters by Status
System Functions
Events
Private
Shared
Events by Severity
Sign-In Events

Tools Deploy Configure Diagnose Optimize Reports Tasks & Logs Options Help

VSE Management: Virtualization Manager
All VSE Resources

Visualization Workload Shared Resource Domain Capacity Advisor

Tools Create Modify Delete

Perspective: Physical and Virtual Show Workloads

View all Physical and Virtual systems (including nPars, vPars, VMs, VC Domains and Blade Enclosures)

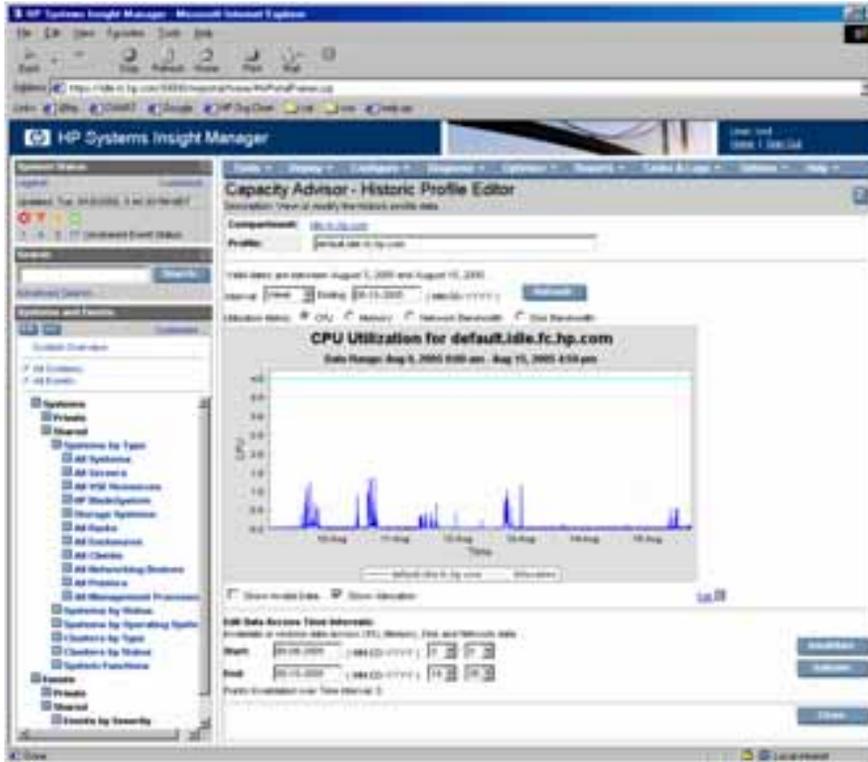
Support for Virtual Machines, with single click launch to Integrity Virtual Machine Manager or VMM

Single-click access to HP SIM System Page for various types of objects

- crystal (Integrity VM Host)
- crystal01 (Integrity VM)
- esxhost4.testdom.rdm01.ada... (VMware ESX Host)
- BTRDHCP (VMware ESX VM)
- BTRVM1 (VMware ESX VM)
- BTRVM10 (VMware ESX VM)
- BTRVM11 (VMware ESX VM)
- BTRVM12 (VMware ESX VM)
- BTRVM13 (VMware ESX VM)
- BTRVM14 (VMware ESX VM)
- BTRVM2 (VMware ESX VM)
- BTRVM3 (VMware ESX VM)
- Partition 1_USE4416CNL (nPartition)
- Partition 2_USE4416CNL (nPartition)
- Partition 3_USE4416CNL (nPartition)
- sapphire (Integrity VM Host)
- saw_vc (Virtual Connect Domain)
- saw (Enclosure)
- saw1_edgar (VMware ESX VM)
- spain (Server)
- sulu (Integrity VM Host)
- TEST1 (VMware ESX VM)



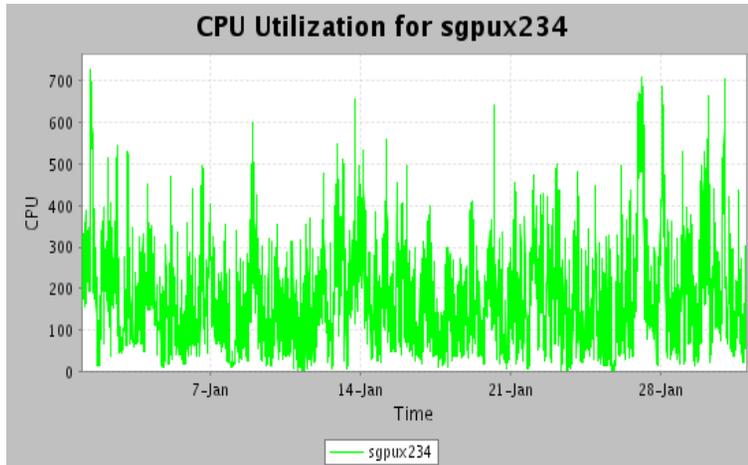
HP Integrity Essentials Capacity Advisor



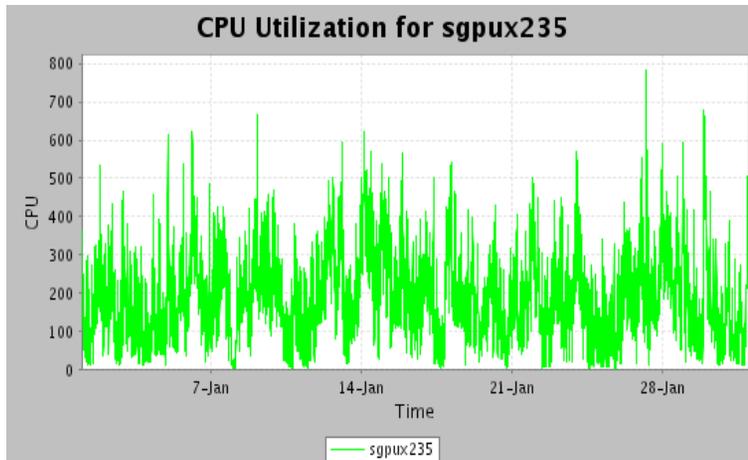
- **Experiment with different scenarios**
 - Fully integrated with VSE technologies to simulate major configuration changes before implementation
- **Easier to use and more accurate**
 - Designed for on-going use by general server administrators
 - Uses historic data of actual usage
- **Determines ideal amount of resources needed for:**
 - Existing workloads
 - Planned migrations
 - New workloads
- **Recommends placement of workloads such that**
 - Each workload has sufficient resources
 - Over-capacity is minimized

Support for HP-UX 11i, Windows and Linux on HP Integrity, and HP-UX 11i on HP 9000

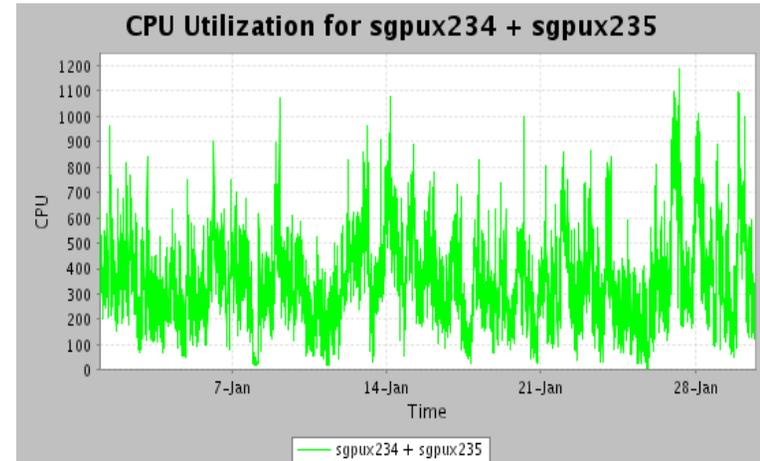
Trace based simulation



+



=



- Peaks for different workloads do not all happen at the same time

- Two workloads each have an 8 CPU peak demand but the peak of their sum is 12 CPUs

HP Global Workload Manager

Centralized Workload Management

HP Systems Insight Manager - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://mslweb.fc.hp.com/projects/vsemgr/neo/docs/protos2005/quakedemo/index.html

hp Systems Insight Manager User: John Smith Home | Sign Out

System Status Legend... Customize...
Updated: Mon, 7/11/2005, 8:49:17 AM CST

Uncleared Event Status 11 0 0 3
System Status 11 0 0 3

Search

System and Event Lists

System Overview

- All Systems
- All Events
- Private
- Shared
- System Lists
 - Systems by Type
 - All VSE Resources
 - All nPartition Servers
 - All Integrity Virtual M...
 - All Virtual Partitions
 - All Resource Partition...

Tools Deploy Configure Diagnose Optimize Reports Logs Options Help

Global Workload Manager

You are here: All VSE Resources [Quick Reference](#)

System Workload Shared Resource Domain Capacity Advisor

Tools Create Modify Delete View Policy Report

Show: Deployed SRDs Undeployed SRDs

	Name	Mode	State	Size	Utilization	Last Update
<input type="radio"/>	Development SRD	managed	Deployed	8.0	<div style="width: 95%;"><div style="width: 95%;">CPU 95%</div></div>	Apr 20, 2005 13:54:30
<input checked="" type="radio"/>	Production SRD	managed	Deployed	32.0	<div style="width: 78%;"><div style="width: 78%;">CPU 78%</div></div>	Apr 20, 2005 13:57:30
<input type="radio"/>	Testing SRD	managed	Deployed	16.0	<div style="width: 89%;"><div style="width: 89%;">CPU 89%</div></div>	Apr 20, 2005 13:54:50

Shared Resource Domain Production SRD

Mode Managed [\(change\)](#)

TiCAP Satisfy Borrow [\(change\)](#)

State Deployed [\(change\)](#)

	Workload	Policy	Policy Status	Request	Allocation	Size	CPU Utilization	Hostna
<input type="radio"/>	billing.corp.com	ProdBillingPolicy	<input checked="" type="checkbox"/>	4	4	4	<div style="width: 14%;"><div style="width: 14%;">14%</div></div>	web.fc.t
<input type="radio"/>	database.corp.com	ProdDatabasePolicy	<input checked="" type="checkbox"/>	4	4	4	<div style="width: 4%;"><div style="width: 4%;">4%</div></div>	web.fc.t
<input type="radio"/>	exceptions.corp.com	ProdGeneralPolicy	<input checked="" type="checkbox"/>	8	8	8	<div style="width: 14%;"><div style="width: 14%;">14%</div></div>	web.fc.t
<input type="radio"/>	payments.corp.com	ProdGeneralPolicy	<input checked="" type="checkbox"/>	4	4	4	<div style="width: 7%;"><div style="width: 7%;">7%</div></div>	web.fc.t
<input type="radio"/>	portal.corp.com	ProdGeneralPolicy	<input checked="" type="checkbox"/>	4	4	4	<div style="width: 7%;"><div style="width: 7%;">7%</div></div>	web.fc.t

Done Adblock



For more
information



For more information

- System Management Homepage:
<http://www.hp.com/go/smh>
- HP SIM:
<http://www.hp.com/go/hpsim>
- Integrity Essentials:
<http://www.hp.com/go/integrityessentials>



Got questions? Get answers!

Make the most of your infrastructure

www.hp.com/go/TechForumInsight

Learn more

about the Insight Software you've seen here at Tech Forum with white papers, podcasts, and videos



Register

for our online customer community to get tips, tricks, forums, and special webinars

Use Customer Connect Access Code "TechForum08"
and be entered into a drawing (grand prize: Nintendo Wii)



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