

HP Client Manager 6.1



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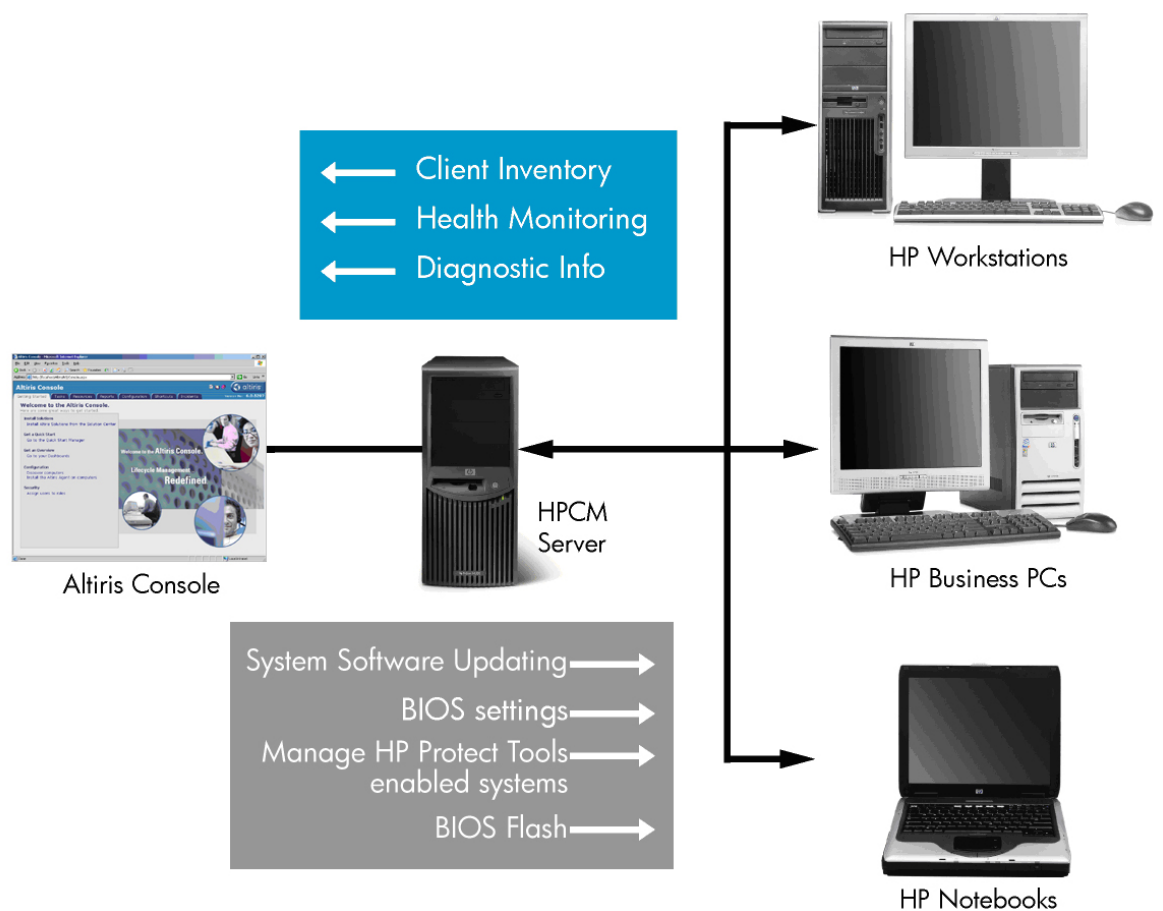
Introduction

Today's complex client/server computing environments can contain hundreds, if not thousands, of client computers such as workstations, business PCs, and notebooks. Managing the hardware and software on client computers can be challenging and often requires that each computer be visited individually for tasks such as upgrading the BIOS firmware or performing diagnostics. It's often difficult to keep track of the computer hardware deployed within the enterprise as well as the version of the operating system installed on each client computer.

To help solve these problems, Hewlett-Packard Company (HP) and Altiris, Inc., have developed HP Client Manager Software 6.1 (HPCM 6.1). HPCM is a free hardware management tool that allows HP workstations, business PCs, and notebook computers running Microsoft Windows to be efficiently managed from a central location.

Figure 1 shows HP workstations, business PCs, and notebook computers connected to a Microsoft Windows 2000 server or Microsoft Windows 2003 server running HPCM. This server is called the HPCM Server. All operations are performed on the HPCM Server through the Altiris Console window, which allows local or remote Web-based operation. From the Altiris Console window, you can obtain information from and perform operations on the client computers.

Figure 1. HP workstations, business PCs, and notebook computers connected to a Microsoft Windows 2000 server or Microsoft Windows 2003 server running HPCM 6.1



There are three classes of information that you can obtain from the client computers.

- **Client inventory:** Includes detailed client information such as the chassis serial number, computer model number, memory size, operating system, CPU identification, and many more inventory items. With HPCM 6.1, you can even gather basic information for your non-HP client computers.
- **Health monitoring:** The health monitoring capabilities of HPCM allow you to select from a set of client-side events, such as a chassis intrusion, disk drive error, battery status, thermal changes, and “walking assets” such as new or missing PCs, memory, battery, disk drives, CPUs, and monitors. When one of these events occurs, the client alerts the HPCM Server, which takes the predefined action that you have specified, such as sending you an e-mail alert. You can also monitor the status of these events using one of the pre-configured reports.
- **Diagnostic information:** Client diagnostics are performed on the memory, CPU, storage devices, and I/O devices. The diagnostic results are returned from each client computer to the HPCM Server for display.

With HPCM, the user can perform the following types of operations on the client computers from the Altiris Console on the HPCM Server.

System software installation: HPCM allows you to install or update system software on the client computers from a central Filestore on the HPCM Server. Software installations are performed only on those client computers that match the hardware and software criteria that you specify. For example, you can download a network driver or audio driver SoftPaq to the HPCM Server and then use HPCM to schedule the installation of the drivers on the client computers. HPCM will install the drivers only on those client computers that contain hardware supported by each particular driver.

SoftPaqs

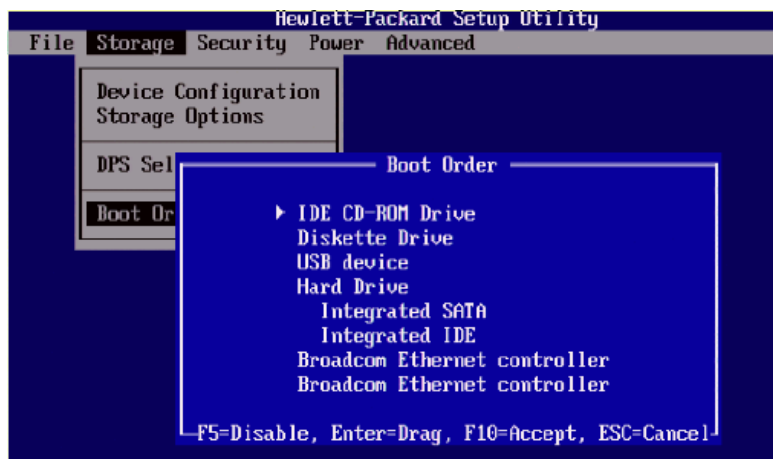
SoftPaqs are Web-downloadable software packages made available by HP to ensure that our customers have the most up-to-date and highest-quality system software. Normally, a SoftPaq would be downloaded to each client machine and installed separately. With HPCM, SoftPaq installation can be configured to happen automatically and remotely across all client computers.

BIOS Flash: HPCM can be used to upgrade the BIOS firmware on client computers. HPCM can automatically and remotely update the BIOS on any client computer. You can use it to flash a single computer or a group of computers. It also allows you to view reports for computers not receiving updates or to see where installation failed.

Manage HP ProtectTools enabled clients: Identify and inventory HP client computers that include the ProtectTools embedded security chip. Use the HP Client Manager console to remotely initialize the security chip on your computers, saving time in setting-up a more secure client infrastructure. **Note:** This requires HPCM 6.1 SP1.

Change BIOS settings: When booting a computer you can press the F10 key to pause the boot process in order to change the BIOS settings, such as the Storage Options or the Boot Order, as shown in Figure 2. After Microsoft Windows has booted on the client computers, you can use HPCM to change the BIOS settings simultaneously on multiple client computers without having to visit each computer individually.

Figure 2. Manually changing BIOS settings using the F10 key.



These capabilities make it clear that the key benefit of HPCM is increased productivity. By quickly gathering information from all of your HP client computers, rapidly making changes to client computer system software, and changing the BIOS settings, all from a central location, you'll be much more productive in managing your HP client computers. Furthermore, HPCM provides a rich set of customizable reporting tools so you can display exactly the information you need to manage your client computers. Combined, these capabilities translate into greater efficiencies and lower IT costs.

To better understand the capabilities of HPCM and how it works, you are encouraged to download and install HPCM 6.1 from the Altiris website at www.altiris.com/eval.

New Features in HPCM 6.1

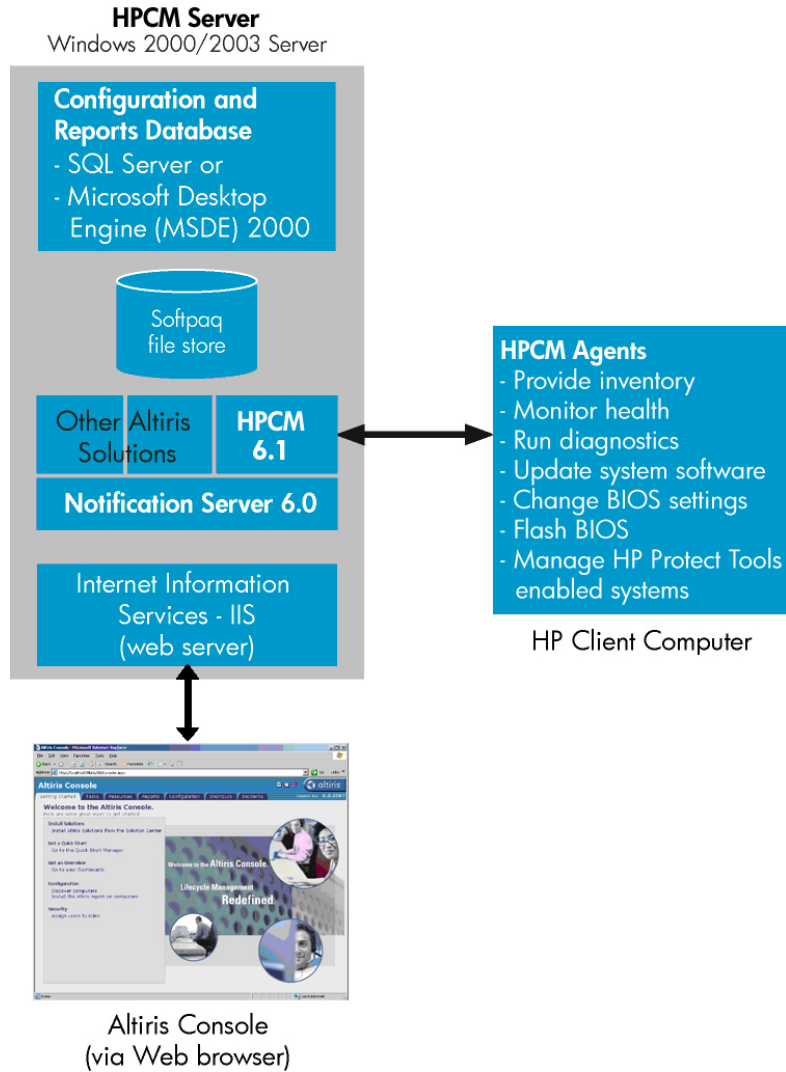
- Improved BIOS information collection – BIOS date, version number, SysID, etc.
- Improved BIOS Settings Wizard lets you remotely set most BIOS settings that are currently available via F10 Setup on client systems such as Remote Wakeup Boot Source, enable/disable serial ports, boot order, etc.
- Integration with HP Instant Support
 - Run a system health scan that checks your computers for hardware issues tracked by the HP Instant Support knowledgebase. Scan results identify HP SoftPaqs posted on hp.com needed to resolve the issues.
 - Point-and-click to select and download SoftPaqs. A SoftPaq package is dynamically created that can be scheduled for delivery to your computers.
 - Perform diagnostics on computer components and view reports of test results.
 - Connect to an HP Support Representative through an Active Chat session if needed or link to the HP Instant Support knowledgebase for more information.
- In addition to receiving hardware alerts at the management console, the IT Administrator now has the option to enable alerts to be displayed locally on the user's computer. These alerts include asset changes, low free disk space, hardware health, and low battery.
- Collection of basic inventory extended to include non-HP computers. Information collected includes manufacturer, OS, language, processor, memory, and free disk space.
- HP Tool Update Wizard provides an easy method to keep the HP tool components (e.g. SSM, Diagnostics) used in HP Client Manager up-to-date.
- Improved WMI event handling on newer desktops and workstations (notebooks coming soon)

- Management of systems with HP ProtectTools embedded security chip (requires SP1) – Identify and inventory HP client computers that include the ProtectTools embedded security chip. Use the HP Client Manager console to remotely initialize the security chip on your computers saving time in setting-up a more secure client infrastructure.

Understanding how HPCM works

Understanding HPCM is aided by viewing the HPCM client/server block diagram, shown in Figure 3.

Figure 3. HPCM block diagram



The underlying infrastructure of HPCM is Notification Server 6.0 (NS 6.0). HPCM 6.1 plugs into NS 6.0, as do a number of other manageability solutions from Altiris, including Altiris Client Management Suite and Altiris Asset Management Suite. HPCM, in concert with NS 6.0, downloads several HPCM agents to each client computer to perform the functions shown above.

Information reported from the HPCM agents to the HPCM Server is stored in a database (Microsoft's SQL database or, for evaluation purposes, Microsoft's MSDE database). This database is also used to store the HPCM configuration information that you specify, such as the names of the client computers to be managed. HPCM generates and displays its reports from this database. The Altiris Console window receives its information from a Microsoft's Internet Information Services (IIS) Web server. The SoftPaq Filestore is used to store the SoftPaqs that will be installed on the client computers, such as hardware drivers and BIOS updates.

Extensive reporting capability

HPCM provides extensive and customizable reporting capabilities. You can view the standard reports that are pre-configured with HPCM, or you can create your own customized Web reports.

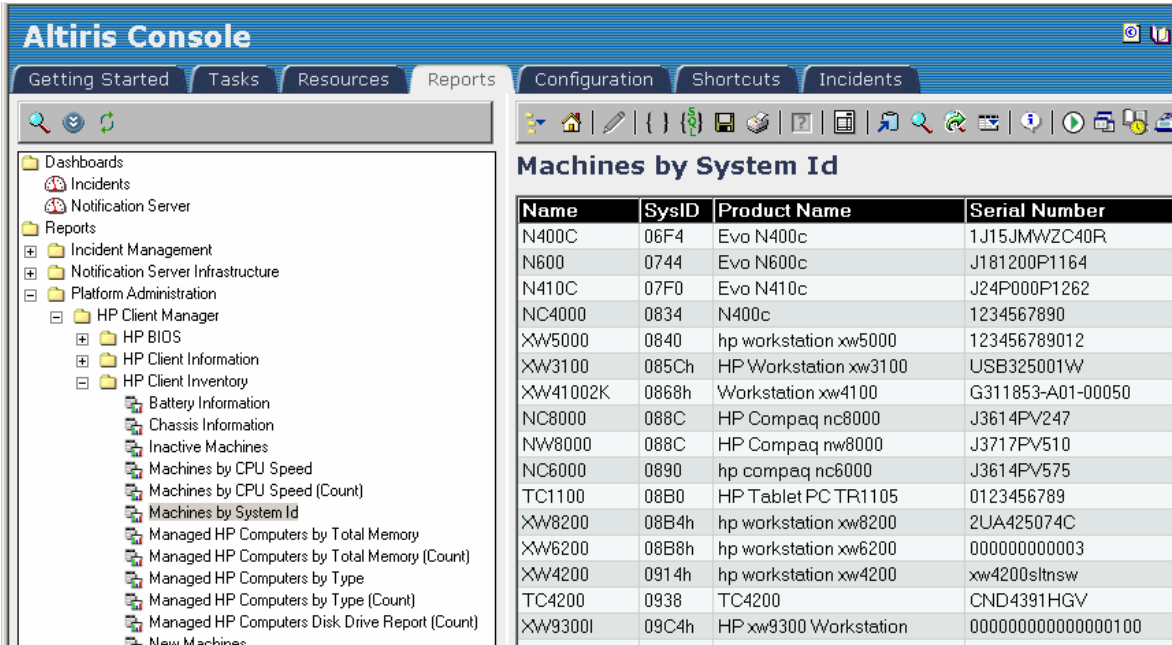
HPCM in operation

This section shows HPCM in operation to more clearly demonstrate its capabilities. We'll focus on the some of the primary capabilities of HPCM shown in Figure 1.

Client inventory

The Altiris Console Client Inventory screen, shown below, highlights some of the inventory information that is available from HP client computers. In this case, **Machines by System ID** is selected in the left pane and the SysID for each client machine is displayed in the right pane.

Figure 4. Sample Client Inventory display



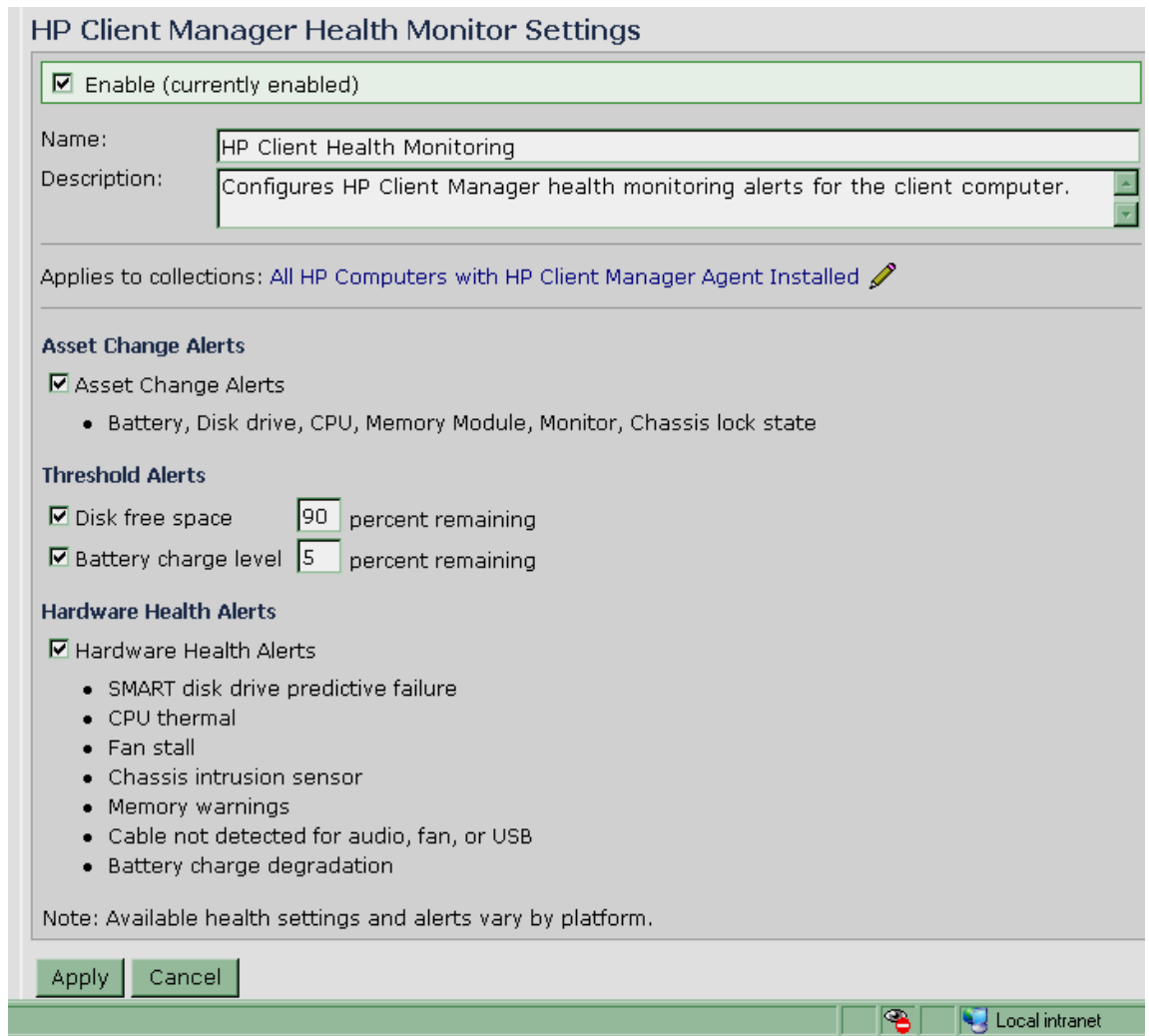
Name	SysID	Product Name	Serial Number
N400C	06F4	Evo N400c	1J15JMWZC40R
N600	0744	Evo N600c	J181200P1164
N410C	07F0	Evo N410c	J24P000P1262
NC4000	0834	N400c	1234567890
XW5000	0840	hp workstation xw5000	123456789012
XW3100	085Ch	HP Workstation xw3100	USB325001W
XW41002K	0868h	Workstation xw4100	G311853-A01-00050
NC8000	088C	HP Compaq nc8000	J3614PV247
NW8000	088C	HP Compaq nw8000	J3717PV510
NC6000	0890	hp compaq nc6000	J3614PV575
TC1100	08B0	HP Tablet PC TR1105	0123456789
XW8200	08B4h	hp workstation xw8200	2UA425074C
XW6200	08B8h	hp workstation xw6200	0000000000003
XW4200	0914h	hp workstation xw4200	xw4200sltnsw
TC4200	0938	TC4200	CND4391HGV
XW9300I	09C4h	HP xw9300 Workstation	00000000000000100

The above is a small sample of the wealth of client information provided by HPCM, which includes detailed information down to the hardware component level.

Health monitoring

The partial screen capture below shows the events that can be selected in order to monitor the health of your client computers. You can select the threshold values for free disk space and battery charge level. When a selected event occurs, such as a battery fault, HPCM responds based on your predefined notification policies. For example, you can specify that an e-mail be sent to you to alert you to the situation.

Figure 5. Sample Health Monitoring display



The screenshot shows the 'HP Client Manager Health Monitor Settings' dialog box. At the top, there is a green bar with a checked checkbox labeled 'Enable (currently enabled)'. Below this, the 'Name' field contains 'HP Client Health Monitoring' and the 'Description' field contains 'Configures HP Client Manager health monitoring alerts for the client computer.'. Under 'Applies to collections:', it says 'All HP Computers with HP Client Manager Agent Installed' with a pencil icon. The settings are organized into three sections: 'Asset Change Alerts' with a checked checkbox and a list including 'Battery, Disk drive, CPU, Memory Module, Monitor, Chassis lock state'; 'Threshold Alerts' with two checked checkboxes: 'Disk free space' set to '90' percent remaining and 'Battery charge level' set to '5' percent remaining; and 'Hardware Health Alerts' with a checked checkbox and a list including 'SMART disk drive predictive failure', 'CPU thermal', 'Fan stall', 'Chassis intrusion sensor', 'Memory warnings', 'Cable not detected for audio, fan, or USB', and 'Battery charge degradation'. A note at the bottom states 'Note: Available health settings and alerts vary by platform.'. At the bottom left are 'Apply' and 'Cancel' buttons. The Windows taskbar at the bottom right shows 'Local intranet'.

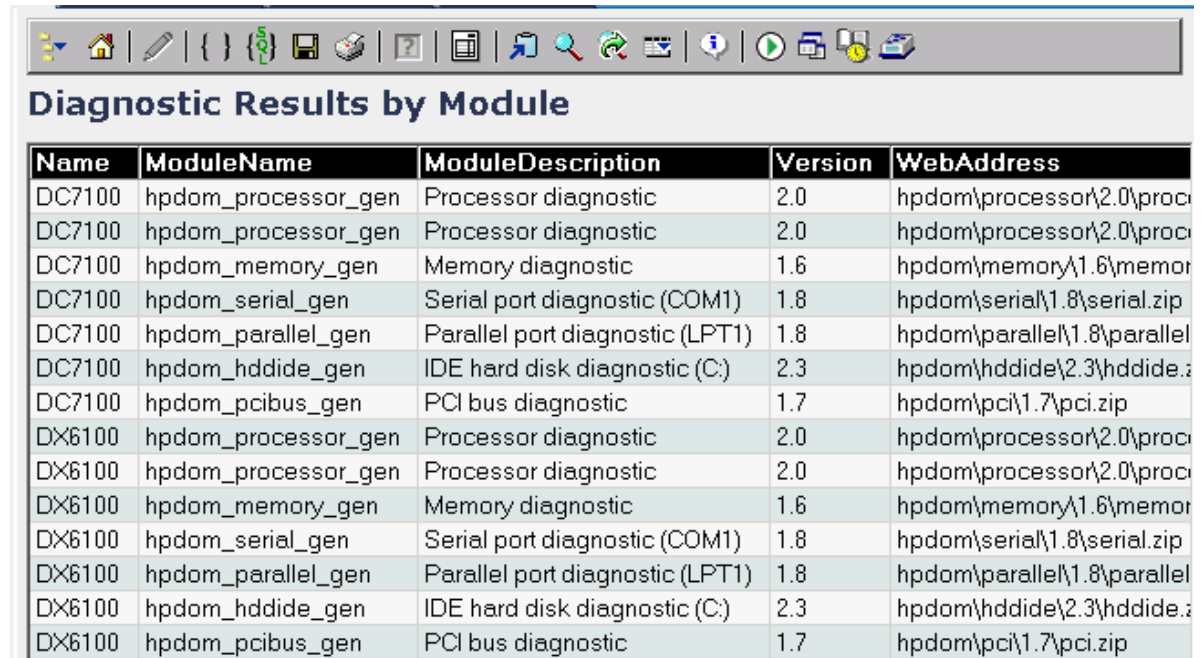
Note: The number of health events that can be monitored varies by computer model.

You can also monitor the status of these events using one of the pre-configured reports. The health monitoring capability of HPCM simplifies the task of hardware change management by alerting you to memory changes, disk drive changes, or CPU changes. In addition to change management, security enhancements include chassis intrusion alerts, which may indicate the occurrence of a theft.

Diagnostics

Diagnostics are performed on the memory, CPU, storage devices and I/O devices. The partial screen capture in Figure 6 shows a typical diagnostics report. Errors detected by the diagnostic software are reported in the far right column (not shown in this screen shot).

Figure 6. Sample Diagnostics screen



The screenshot shows a software interface with a toolbar at the top containing icons for home, edit, undo, redo, search, and other functions. Below the toolbar is a section titled "Diagnostic Results by Module" which contains a table with the following data:

Name	ModuleName	ModuleDescription	Version	WebAddress
DC7100	hpdom_processor_gen	Processor diagnostic	2.0	hpdom\processor\2.0\proc
DC7100	hpdom_processor_gen	Processor diagnostic	2.0	hpdom\processor\2.0\proc
DC7100	hpdom_memory_gen	Memory diagnostic	1.6	hpdom\memory\1.6\memor
DC7100	hpdom_serial_gen	Serial port diagnostic (COM1)	1.8	hpdom\serial\1.8\serial.zip
DC7100	hpdom_parallel_gen	Parallel port diagnostic (LPT1)	1.8	hpdom\parallel\1.8\parallel
DC7100	hpdom_hddide_gen	IDE hard disk diagnostic (C:)	2.3	hpdom\hddide\2.3\hddide.z
DC7100	hpdom_pcibus_gen	PCI bus diagnostic	1.7	hpdom\pci\1.7\pci.zip
DX6100	hpdom_processor_gen	Processor diagnostic	2.0	hpdom\processor\2.0\proc
DX6100	hpdom_processor_gen	Processor diagnostic	2.0	hpdom\processor\2.0\proc
DX6100	hpdom_memory_gen	Memory diagnostic	1.6	hpdom\memory\1.6\memor
DX6100	hpdom_serial_gen	Serial port diagnostic (COM1)	1.8	hpdom\serial\1.8\serial.zip
DX6100	hpdom_parallel_gen	Parallel port diagnostic (LPT1)	1.8	hpdom\parallel\1.8\parallel
DX6100	hpdom_hddide_gen	IDE hard disk diagnostic (C:)	2.3	hpdom\hddide\2.3\hddide.z
DX6100	hpdom_pcibus_gen	PCI bus diagnostic	1.7	hpdom\pci\1.7\pci.zip

Updating system software

HPCM allows you to configure system software such as device drivers and BIOS firmware on the HPCM Server for downloading and installation on client computers. HPCM installs software that is encapsulated into SoftPaqs and stored in the SoftPaq Filestore on the HPCM Server. The HP SoftPaq Filestore Configuration screen shown below is used to enter the path to the SoftPaq Filestore.

Figure 7. System software installation sample screen

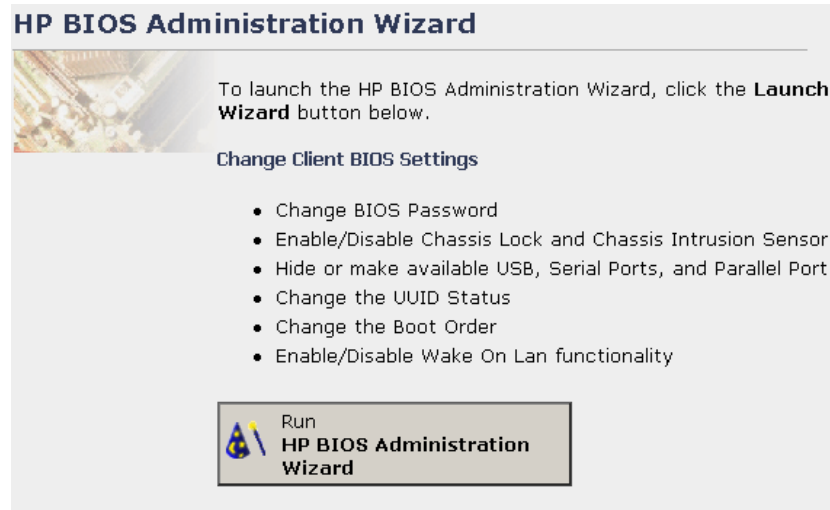
The screenshot shows a web-based configuration interface. At the top, there are navigation tabs for 'Configuration', 'Shortcuts', and 'Incidents', and a version number '6.0.5287'. The main heading is 'HP SoftPaq Filestore Configuration'. Below this, a paragraph explains the purpose of the page. A section titled 'Filestore Configuration' contains a text input field with the path 'C:\Program Files\Altiris\Notification Server\NSCap\Bin\Win32\X86\HPCMS\Filestore'. Another section titled 'Update the Filestore' provides instructions on how to update the filestore. At the bottom, there is a large 'Update Filestore' button and smaller 'Apply' and 'Cancel' buttons.

Through this mechanism, HPCM allows you to completely control which SoftPaqs are downloaded and installed on each of your client machines.

BIOS settings

HPCM allows you to modify the BIOS settings on client computers without having to individually visit and reboot each client computer. The HP BIOS Administration Wizard helps you change the BIOS settings that HPCM can modify, as shown in Figure 8.

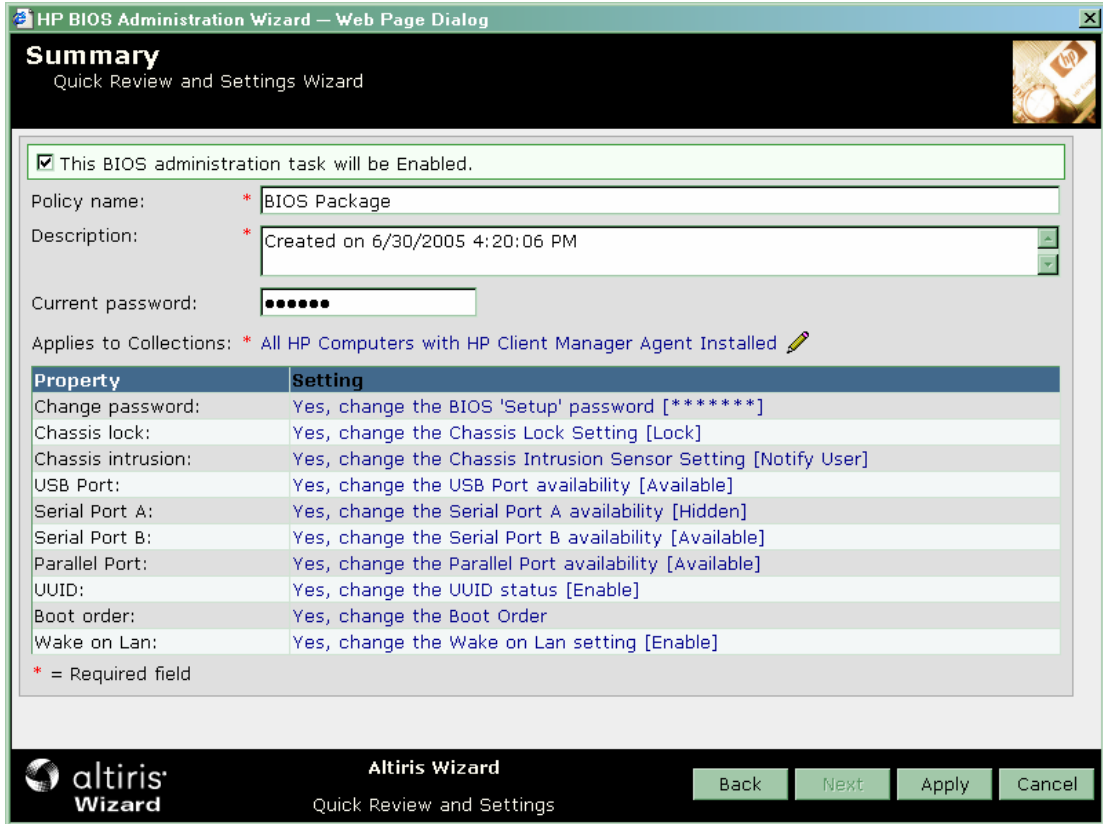
Figure 8. BIOS setting administration wizard



Note: The BIOS settings that can be changed vary by computer model.

When you run this wizard, you'll be presented with the actual BIOS settings that you can change on the client computers. The wizard either walks you through each BIOS setting step-by-step or allows you to go directly to a summary page to make changes, as shown in Figure 9.

Figure 9. Changing BIOS settings



HPCM installation and evaluation

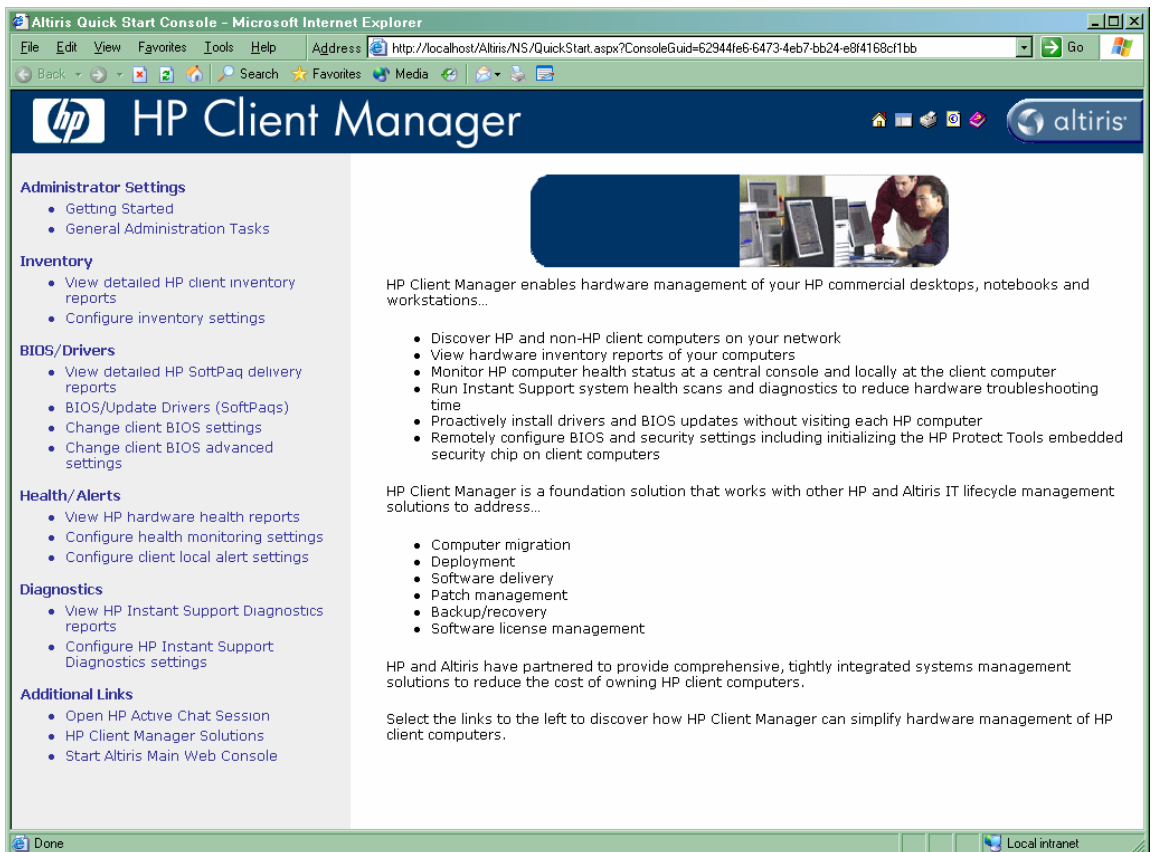
The best way to learn about the capabilities of HPCM is to install it and use it. HP recommends that you do this first in a simple workgroup environment consisting of one Microsoft Windows server and just one client computer. This will simplify the installation process and enable you to focus on learning the capabilities of HPCM. Once you're comfortable with the installation and use of HPCM in this environment, you can roll it out into your production environment.

HPCM is available for HP client computers as a free download from the Altiris Web site. Installing HPCM is described in detail in the *HP Client Manager 6.1 Product Guide*, which can be downloaded from the Altiris Web site at www.altiris.com/support/documentation.

From the URL above, scroll down to HP Client Manager Software and then click **Product Guide** to open or save this document. The Product Guide will walk you through the HPCM installation process. As part of the installation process, you'll download a helper program which will identify any additional software that you need on your Microsoft Windows 2000/2003 server and guide you through its installation.

When you're ready to install HPCM, begin at www.altiris.com/eval. Under **Free Software**, select **HP Client Manager Software 6.1** and follow the instructions from the Web site and the Product Guide. After the installation and during the setup process, the HP Client Manager Software Quick Start page will provide quick links to the most commonly-used tasks, as shown in Figure 10.

Figure 10. HP Client Manager Software Quick Start page



Integration with other Enterprise Management Solutions

Altiris Connector for HP Systems Insight Manager

The Altiris Connector for HP Systems Insight Manager enables IT professionals to consolidate deployment and management of HP clients and servers within a single HP Systems Insight Manager console. The connector integrates with HP Client Manager and extends HP Systems Insight Manager core functionality with client deployment, HP client hardware management, and access to additional Altiris lifecycle management functionality. Use the connector to:

- Extend HP Systems Insight Manager by integrating client hardware and software management
- Discover and monitor health of HP clients
- Manage systems software updates for HP clients
- Deploy new client systems through an integrated deployment wizard
- Remotely troubleshoot HP client problems using in-depth diagnostic reports
- Access additional client lifecycle tasks through menu links to the Altiris console

For more information on HP Systems Insight Manager, visit www.hp.com/go/hpsim.

For more information on the Altiris Connector for HP Systems Insight Manager, visit www.altiris.com/products/hpsimconnector.

Altiris Connector for HP OpenView

HP OpenView provides a proactive, service centric approach to monitoring the network, systems, applications and storage. By anticipating hardware and software problems before they occur, HP OpenView optimizes system performance and availability.

The Altiris Connector for HP OpenView extends and enhances HP OpenView Network Node Manager, Operations, and Service Desk. The connector enables client alerts to be forwarded to the OpenView console. Detailed client inventory is made accessible from within HP OpenView, providing the information needed to properly troubleshoot problems. Using the link from the HP OpenView console to the HP Client Management Solutions, you can reduce the time needed to resolve issues such as identifying inventory changes, image deployment, and software repair and updates. Hardware and software inventory can automatically be imported into the Service Desk CMDB.

For more information on the Altiris Connector for HP OpenView, visit www.altiris.com/products/hpopenview.

HP Client Management Solutions

HP and Altiris have partnered to provide HP Client Management Solutions—a complete portfolio of solutions for managing the hardware and software aspects of HP client computers. HPCM provides client hardware management and is tightly integrated with the Altiris management infrastructure. Additional Altiris client software management solutions, based on this same infrastructure, are available to provide complete client IT lifecycle management. These Altiris solutions address operating system deployment and migration, software delivery, patch management, backup and recovery, asset management, and more.

Summary

HPCM should be a welcome addition to the manageability toolkit of IT personnel who manage complex HP client computing environments. HPCM will help increase your efficiency and productivity in managing your HP client computers. You won't need to visit a particular computer in order to perform tasks like running diagnostics or changing the BIOS settings. From the Altiris Console, you can perform these tasks centrally and view detailed client information. These benefits will help lower your IT costs as well as your overall cost of ownership.

For more information

As noted above, HP recommends that you perform a trial download and installation of HPCM to verify for yourself that it will significantly enhance the manageability of your HP client computer systems.

For further information on HPCM and other HP Client Management Solutions, please visit www.hp.com/go/easydeploy.

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403147-001, 07/2005

