

SmartStart Release Notes



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Intended audience

This document is for the person who installs, administers, and troubleshoots servers and storage systems. HP assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.

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Overview

These release notes discuss any issues and their potential workarounds, as well as special information regarding the contents of the SmartStart CD.

SmartStart

- As of SmartStart version 8.20, only baseline support is available for the following servers, and will be removed from 8.30 versions of SmartStart and ProLiant Support Packs:
 - HP ProLiant BL20p G2 Server Blade
 - HP ProLiant BL30p Server Blade
 - HP ProLiant BL40p Server Blade
 - HP ProLiant DL360 G2 Server
 - HP ProLiant DL360 G3 Server
 - HP ProLiant DL380 G2 Server
 - HP ProLiant DL560 Server
 - HP ProLiant DL580 G2 Server
 - HP ProLiant DL760 G2 Server
 - HP ProLiant ML350 G2 Server
 - HP ProLiant ML350 G3 Server
 - HP ProLiant ML370 G3 Server
 - HP ProLiant ML530 G2 Server
 - HP ProLiant ML570 G2 Server
- HP ProLiant Essentials Foundation Pack delivery option is changing.

To support HP's commitment to reduce our overall environmental impact, the HP ProLiant Essentials Pack is available as a selectable option for the 300/500 G6 and newer servers at the time servers are ordered through CTO. This change allows customers the flexibility to order the number of media kits that best meet their needs, eliminating the receipt of unnecessary duplicate media.

This change starts with the G6 servers. No change is being made to previous generations. BTO products will continue to ship with the ProLiant Essentials Foundation Pack.

To ensure that customers continue to have access to the latest updates, the contents of this kit are available as a downloadable ISO image from HP at the following HP websites:

 - HP ProLiant Essentials Foundation Pack (<http://www.hp.com/go/foundation>)
 - SmartStart CD (<http://www.hp.com/cgi-bin/hpsupport/index.pl>)
 - Management DVD (<http://www.hp.com/go/foundation>)
- Beginning with the SmartStart 8.00 release, the content is separated into two SmartStart CDs: One CD for all x86 32-bit components (supported Linux and Microsoft® Windows® versions) and one CD for all x86 64-bit components (supported Linux and Microsoft® Windows® versions).
- All the supported operating system selections are listed on the OS Selection screen during the SmartStart process.

All the supported operating systems are displayed on the OS Selection screen during the SmartStart assisted install for all the servers, despite what is chosen in RBSU. If an operating system is displayed, but is not selectable, then it is not supported by either the server or the primary controller

in the server. A FAQ is displayed on this screen indicating what operating systems are not supported by the server and what operating systems are not supported by the primary controller.

- Known important product issues associated with specific versions of SmartStart and their resolutions are documented. Go to Known Important Product Issues (<ftp://ftp.compaq.com/pub/products/servers/management/smartstart/known-important-product-issues-on-smartstart.pdf>).
- HP strongly recommends that the resolutions listed in this document be applied accordingly to instructions in the resolution documents. Failure to do so might result in issues that can cause disruption to the operation and functionality of HP ProLiant servers. This list is proactively updated as new issues are discovered and resolved.
- Using external storage and SmartStart takes a long time to load drivers.

Description

The error occurs when an Ultra3 SCSI disk drive is installed in an HP StorageWorks Enclosure (4300 family) that has an Ultra2 SCSI interface and is attached to an Ultra3 host bus adapter (for example, 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI adapter).

The error occurs because the drive and HBA negotiate Ultra3 between them, but the interface in the HP StorageWorks Enclosure is not compatible with Ultra3 traffic.

The error is observed when SmartStart boots and pauses for approximately 5 minutes during the driver load phase. The installation typically fails after SmartStart boots.

Workarounds

Upgrade the I/O module in the HP StorageWorks Enclosure (4300 family) to Ultra3.

Use only Ultra2 disk drives in an HP StorageWorks Enclosure (4300 family) with an Ultra2 controller.

Notes

Ultra2 disk drives should work correctly in an HP StorageWorks Enclosure (4300 family) with an Ultra3 controller.

- Booting SmartStart 8.x on unsupported servers

Description

Booting SmartStart 8.x on unsupported servers behaves differently based on the server. Below is a list of results you may encounter:

- System might freeze while SmartStart is loading.
- Boot up to a # prompt.
- SmartStart displays access to the Maintenance tab.
- If using an old monitor, you might not see anything on the screen.
- A message is displayed: SmartStart 6.00 and later do not support this system. Please reboot with SmartStart 5.50 or earlier.

Workarounds

Use SmartStart 5.50 on older servers that are not supported with SmartStart 8.x. For a list of servers supported by SmartStart 8.x, see the Supported Servers Guide (<ftp://ftp.compaq.com/pub/products/servers/management/smartstart/serversupportmatric.pdf>).

- Localization

Some strings might not be localized and are displayed in English.

- Launching the Adaptec array configuration utility using a French keyboard requires selection of **Ctrl + Q** rather than **Ctrl + A** during the boot process.

Description

Text included with the SmartStart application and on the SmartStart install poster informs the customer to press **F8** or **Ctrl + A** during the boot process to launch the ROM based utility, which allows the user to configure the array controller. This instruction assumes use of a U.S. keyboard. Because the **A** key location on a French keyboard does not correspond with the **A** key location on the U.S. keyboard, pressing **Ctrl + A** on the French keyboard does not launch the Adaptec array configuration utility.

Workarounds

The **A** and **Q** key locations are reversed. Pressing **Ctrl + Q** launches the Adaptec array configuration utility.

Diagnostics

HP Insight Diagnostics

The HP Insight Diagnostics maintenance utility displays information about the server hardware configuration and performs system and component tests to help ensure that the server is operating properly.

HP Insight Diagnostics overview

HP Insight Diagnostics is available in two editions: The HP Insight Diagnostics Offline Edition and HP Insight Diagnostics Online Edition.

HP Insight Diagnostics Offline Edition performs various in-depth system and component tests while the operating system is not running. Access the Offline edition of Insight Diagnostics by booting to a SmartStart CD, clicking the 'Maintain Server' button, and then clicking the 'Diagnose Server' button.

The HP Insight Diagnostics Offline Edition now includes a ROM Based Memory Test available in the custom/interactive test suite. This memory test is available on systems supporting Fully Buffered DIMMs and provides the most comprehensive testing on memory modules. The ROM Based Memory Test must be run exclusively from other tests and requires a reboot during the test. For more information, see the HP Insight Diagnostics Users Guide.

HP Insight Diagnostics Online Edition is a web-based application that captures detailed hardware and software system configuration information and other related data required for effective server management. It also provides the ability to compare these configurations to form a complete and thorough auditing process for the system. With this version, the administrator can run Insight Diagnostics without rebooting the server and while the server is online. The online edition is installed automatically by the Windows or Linux PSP. It can also be downloaded from the Software and Drivers page on the HP website (<http://www.hp.com>) and installed independently of a PSP. The online edition is available through the System Management Homepage.

The HP Insight Diagnostics Online Edition now includes a Diagnose feature. This feature provides the ability to diagnose devices using non-intrusive system level checks of the device operational history. Beginning with Insight Diagnostics version 7.4.0, Insight Diagnostics Online Edition provides the ability to diagnose Smart Array SCSI hard disk drives. Diagnosis supports SCSI, SATA, and SAS hard drives that are attached to a Smart Array controller and configured as part of a logical volume. Diagnosis is NOT component testing, but is a combination of algorithms using hard disk drive operational history and proprietary Smart Array Controller statistics that ultimately diagnose a hard disk drive with 99.9% accuracy. Diagnosis assists in confirming hardware status and is much quicker than traditional 'offline' testing. Using the Diagnosis feature reduces customer downtime and provides complete hard drive troubleshooting information with just 'one click'.

The Smart Array Drive Diagnosis feature should be used in the following situations:

- To troubleshoot why a hard disk drive is in a particular state
- When Systems Insight Manager reports a disk drive pre-failure or failure

- When data corruption or storage problems exist but no physical indications are present
- When conflicting errors exist
- When repeated failures occur

Starting with SmartStart CD version 8.10, the "Diagnosis" tool within HP Insight Diagnostics is available in the Offline Edition of HP Insight Diagnostics version 8.1.1. Previously, the Smart Disk Array "Diagnosis" tool was only available in the Online Editions of HP Insight Diagnostics delivered through ProLiant Support Packs.

Starting with SmartStart CD version 8.10 and PSP 8.11/LSP 8.11 the Disk Array "Diagnosis" has been enhanced to support the new generation of intelligent Power Supplies offered with selected ProLiant servers. This tool enables users to diagnose and troubleshoot power supply related problems and perform repair with the aid of Recommended Repair Action (RRA) messages when displayed on the screen. The user interface in this enhanced version of the "Diagnosis" tool might appear similar to previous versions, however, the internal conditions governing functionality might be different than Disk Array Diagnosis. When a user attempts to run Diagnosis, it automatically detects the hardware configuration and presents to the user interface only those devices that are applicable for "Diagnosis." Software logic within "Diagnosis" determines if a particular power supply or disk drive is able to perform necessary testing.

HP Insight Diagnostics issues

HP Insight Diagnostics issues are known problems in HP Insight Diagnostics that will be corrected in a future HP Insight Diagnostics release.

- While running Insight Diagnostics in a non-English language, some messages are still in English.

Description

Some messages might be in English when running in French, Italian, German, Spanish, or Japanese.

Workaround

No workaround. A correction is scheduled for a future version of HP Insight Diagnostics.

- Survey displays incorrect rotation rate on some SATA drives.

Description

On systems with SATA, survey may report an incorrect rotation rate.

Workaround

No workaround. A correction is scheduled for a future version of HP Insight Diagnostics.

- An application error might display when Online Edition is launching through iLO Remote Console with the High Performance Mouse enabled.

Description

When launching HP Insight Diagnostics Online Edition using iLO Remote Console with the High Performance Mouse enabled, an application error might display.

Workaround

Do not enable High Performance Mouse when launching HP Insight Diagnostics using iLO Remote Console. A correction is scheduled for a future version of HP Insight Diagnostics.

- Some buttons or scrollbars used for navigation might not appear on the page in HP Insight Diagnostics Online or Offline Edition.

Description

When using HP Insight Diagnostics Online Edition on some browser configurations (mostly in Linux operating systems), some buttons might not appear on the viewable page. Some screens also do not have a scroll bar for navigating that page.

Workaround

The Page Up and Page Down keys are effective for navigating the page and for accessing the action buttons. Hiding some of the browser menus enables these items to be visible.

- Physical drive numbering appears different in HP Insight Diagnostics as compared to the HP Array Configuration Utility.

Description

The SCSI ID of physical drives is different in HP Insight Diagnostics as compared to the HP Array Configuration Utility. HP utilities and disk drive backplanes that report or indicate SCSI ID information do not consistently follow a 0-base or 1-base ordering convention. As a result, identifying a drive in question for servicing or configuration is difficult.

Workarounds

Use Insight Diagnostic's new Smart Array Drive Diagnosis Identify Drive button to flash the amber Fault LED and identify the disk drive. For SATA and SAS drives, the Identify Drive command activates the drive's front panel blue LED.

HP Insight Diagnostics limitations

HP Insight Diagnostics limitations are feature constraints caused by the environment that HP Insight Diagnostics is running in or features that have not been added in the current version.

- Limited Survey information

Description

Survey might not display complete information for some devices, or information for some devices might be limited. Data captures are based upon drivers available to HP Insight Diagnostics.

- Limited or no hard disk drive information or tests available on RAID controllers that are not Smart Array Controllers

Description

In RAID configurations that are configured without Smart Array Controllers, physical and logical drive information and available tests are limited. Depending on the configuration and RAID controller, Insight Diagnostics might not be able to view the physical and logical drives managed by the RAID controller.

Workaround

No workarounds exist.

- No fan, temperature, or power supply information is available unless the HP Management Agents are installed and running.

Description

Diagnostics is dependent on the HP Management Agents for several health-related devices such as fans, temperature sensors, and power supplies. If the Management Agents are not running, HP Insight Diagnostics ignores these devices because they are not visible to the software.

Workaround

Be sure that you are running the latest HP Management Agents, and then Install HP Insight Diagnostics on your Linux partition.

- Limited Survey data in RILOE II

Description

Survey data viewed through RILOE II is limited.

- No keyboard, mouse, or graphics diagnostics support for systems with 512 MB of system memory or less installed

Description

Due to limited available memory on systems with less than 512 MB of system memory, keyboard, mouse, and graphics tests have been disabled.

- No Fibre Channel diagnostics support

Description

Fibre Channel PCI cards are identified, but testing and identification of attached storage devices are not available at this time.

- Certain devices are not available for testing when running HP Insight Diagnostics.

Description

Network Interface Controllers and CD-ROM drives cannot be tested.

- Physical drives that are configured as part of a logical volume on non-Smart Array Controllers are not diagnosable.

Description

HP Insight Diagnostics Diagnosis only supports physical drives that are configured as part of a logical volume on HP Smart Array Controllers.

HP Insight Diagnostics notes

Diagnostics notes are usability issues, but are not considered problems.

- RPM does not uninstall all diagnostics files.

Description

Uninstallation of HP Insight Diagnostics does not remove files generated when running diagnostics.

Workaround

Some files might be generated during the execution of HP Insight Diagnostics. Manually remove the /opt/hp/hpdiags directory with the command `rm -rf /opt/hp/hpdiags`. By default Survey capture XML files are not removed.

- An incorrect PCI slot number is reported by a device.

Description

An incorrect PCI slot number might be reported by the SMBIOS and subsequently by HP Insight Diagnostics.

Workaround

Update to the current system ROM, and then re-run HP Insight Diagnostics.

- Array Controller memory size is reported incorrectly on some controllers.

Description

Array Controller memory is often underreported in the Overview section of diagnostics, especially for controllers with 64 MB or less of memory. This condition is a problem when the array controller firmware misreports the physical memory size to HP Insight Diagnostics.

Workaround

The actual controller memory size is reported during power-on self-test (POST). An Array Controller firmware upgrade might resolve this issue.

- USB Root Hub information is different from what is reported by the operating system.

Description

The Root Hub information might be displayed differently from the operating system information.

Workaround

USB information is correctly displayed by the operating system. A correction is scheduled for a future version of HP Insight Diagnostics.

Operating systems

Microsoft® Windows Server® 2008

SmartStart 8.0 is the first release with full support for Microsoft® Windows Server® 2008.

Microsoft® Windows Server® 2003

You can manually execute the ProLiant Support Pack (PSP) for Microsoft® Windows Server® 2003 by browsing to the \compaq\csp\nt\ directory on the SmartStart CD, and then double-clicking `setup.exe`. The ProLiant Remote Deployment Utility launches, enabling you to select the appropriate ProLiant Support Pack.

- An HP ProLiant server running Microsoft® Windows Server® 2003 with HP ProLiant Smart Array SAS/SATA Controller Driver (HPCISS2.SYS) Version 6.6.0 (or earlier) and HP Insight Management Agents might blue screen after applying HP ProLiant Support Pack (PSP) 7.80. For more details on this issue, see the following customer advisories.
 - Customer Advisory, Document ID: c01102958 (<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01102958>)
 - Customer Advisory, Document ID: c01102961 (<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01102961>)The HPCISS2.SYS driver is fixed in (PSP) 7.90.
- An HP ProLiant server running Microsoft® Windows Server® 2003 with HP Network Configuration Utility for Windows Server 2003 (CPQTEAM.SYS) Version 8.60 might blue screen after applying HP ProLiant Support Pack (PSP) 7.80. The CPQTEAM.SYS driver is fixed in (PSP) 7.90.
- After installing Windows Server® 2003 using the Windows Server® 2003 base media, the HP ProLiant Array Configuration Utility for Windows (ACU) and HP ProLiant Array Diagnostics Utility for Windows (ADU) display the slot information for HP Smart Array SAS/SATA controllers as "Unknown." In addition, the Insight Management Agents do not provide information for any HP Smart Array SAS/SATA controllers installed in the system.

Description

The version of the Storport.sys driver that is included on the Microsoft® Windows Server® 2003 base media returns incorrect data to the HP Smart Array SAS/SATA controller driver (Hpciss2.sys). This action results in the slot information not showing correctly in ACU and ADU and the storage agents not reporting any information for any HP Smart Array SAS/SATA controllers installed in the server.

Workarounds

- Apply Microsoft hot fix 883646 from the Microsoft website (<http://support.microsoft.com/kb/883646>).
- Upgrade to Windows 2003 SP1
- Microsoft® Windows Server® 2003 Select Operating System Selection

No separate operating system selection exists for Microsoft® Windows Server® 2003 Select products during SmartStart assisted installation, unlike the process for Microsoft® Windows Server® 2000. Use the regular Windows 2003 products listed for both Select and Retail licenses. Microsoft® Windows® 2000 Select media uses a technique where setup does not prompt for a product key, but instead generates a semi-random product key value with some channel information. Microsoft® Windows Server® 2003 Select prompts for a Volume License Key that each customer receives with the contract.

Microsoft® Windows Server® 2003 x64 Editions

To manually execute the ProLiant Support Pack for Microsoft® Windows Server® 2003 x64 Editions, browse to the `\compaq\csp\nt\` directory on the SmartStart CD, and then double-click `setup.exe`. The ProLiant Remote Deployment Utility launches and allows you to select the appropriate ProLiant Support Pack.

Microsoft® Windows® 2000

SmartStart version 7.91 was the last release to contain the Windows® 2000 PSP. Windows® 2000 PSP has not been updated since version 7.60 and will continue to be available on the web for download.

Netware PSPs

SmartStart version 7.91 was the last release to contain the NetWare PSP. The NetWare PSP will continue to be available on the web for download.

Red Hat Enterprise Linux 4 Update 5

Timeouts can occur when loading System Management Homepage on a server running RHEL4 U5.

Description

The timeouts are caused by slow SNMP response time. Red Hat is aware of the problem and a simple workaround has been identified.

Workarounds

Remove the string `"*.info"` from `/etc/syslog.conf`, and then restart syslog (service syslog restart). This action fixes the slow SNMP problem and System Management Homepage timeouts experienced with RHEL4 U5.

If the System Management Homepage is already installed, you must restart the service after performing this workaround.

Workaround source is available on the Red Hat website (https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=241581).

HP StorageWorks MSA1000 and MSA1500

The bootable environment provided by SmartStart does not support the MSA1000 or MSA1500. As a result, utilities accessed by booting from the SmartStart CD are not available to users attempting to

perform actions on volumes present on the MSA1000 or MSA1500. This limitation includes use of the ADU, ACU, and the ROM Update Utility.

HP Insight Management WBEM Providers for Microsoft® Windows Server® 2003/2008

These providers have the following features:

- Emulate industry standard technologies for accessing management information in an enterprise environment
- Supply system management data through the Windows Management Instrumentation (WMI) framework for ProLiant server platforms and options
- Serve as an alternative to SNMP-based management agents
- Support by HP-SIM 5.2
- Extend the Common Information Model (CIM) defined by the DMFT to provide a rich set of standards-based management data that is specific to ProLiant systems
- Leverage the rich set of base level instrumentation provided by the system management controllers and drivers
- Deliver in-depth hardware management, inventory, system state, and event notifications

For more information, see the HP website (<http://www.hp.com/go/HPwbem>).

Customer advisories

- Smart Array Controller Driver - HpCISSs2 Version 6.13.0.x (or Later) Cannot Be Downgraded to Version 6.12.0x (or Earlier) on Windows Server 2003
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01614693>)
- SmartStart - NIC 1 may not be recognized as "eth0" during assisted installation on ProLiant Servers with Multiple Network Interface Controllers if "Network" is selected as the OS source type
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01611222>)
- SmartStart - Unsupported USB DVD-ROM Drives may not function during a SmartStart Assisted Installation
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01597034>)
- ProLiant ML350 G5 Server running Windows Server 2003 Standard Edition R2 SP2 (Japanese Version) may intermittently stop responding and display a black screen while booting in certain configurations
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01554944>)
- SmartStart - An "Invalid Entry" message will be displayed during a SmartStart 8.10 Assisted Installation of Windows Server 2008 if the "Without Hyper-V Media" option is chosen and the operating system cannot be installed
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01601312>)
- Small memory leak may intermittently occur in certain versions of Integrated Lights-Out Agent (cmasm2d) for Linux
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01581680>)
- (Revised) ProLiant Servers with greater than 64 GB of memory may stop responding while booting the SmartStart Release 8.10 or the Firmware Maintenance CD version 8.20
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01554945>)
- HP Insight Diagnostics Online Version 8.00 for Linux User Interface May Stop Responding and Cease Loading Test Modules Before the Progress Bar Reaches 100 Percent
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01421033>)
- Firmware Upgrade Components for SAS/SATA Hard Drives attached to an HP Smart Array P600 Controller running Firmware Version 1.88 or 1.98 are not currently supported under Linux
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01403290>)
- HP NC-Series Network Adapter Firmware Components for Windows cannot be deployed using HP Smart Update Manager version 3.1.0 on Firmware Maintenance CD version 8.0
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01409706>)
- Minimum Versions of System ROM Support for Quad-Core AMD-Based Processors on HP ProLiant Servers
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01421363>)
- SmartStart 8.00 Can not be used to deploy an Operating System if the Logical Drive size created is equal to or larger than one Terabyte (1 TB)
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01495273>)

- ProLiant DL580 G4 or ProLiant ML 570 G4 Server may stop responding when running HP Insight Foundation Agents for Windows version 8.00 or earlier
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01490010>)
- HP Embedded SATA RAID driver may not load during Microsoft Windows installation on certain HP ProLiant 300 series servers configured without a floppy disk drive
(<http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01382037>)