

Release Notes

These release notes discuss any issues and their potential workarounds, as well as special information regarding the contents of the SmartStart CD. For the latest information and any updated release notes, see the SmartStart website: www.hp.com/servers/smartstart.

SmartStart

- 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, irrespective of what is chosen in RBSU. If an operating system is displayed, but is not selectable then it is either not supported by 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 are not supported by the primary controller.

- Webpage for known important SmartStart product issues

Known important product issues (associated with specific versions of SmartStart) and their resolutions are now documented. To access the links, go to the SmartStart website www.hp.com/servers/smartstart, and then click on Support & Documents.

HP strongly recommends that the resolutions listed in this document be applied accordingly per instructions in the resolution documents. Failure to do so might result in issues that can cause disruption to the operation and

functionality of ProLiant servers. This list will be proactively updated as new issues are discovered and resolved.

- Using external storage and SmartStart takes a very long time to load drivers.

Description

The error occurs when an Ultra 3 SCSI disk drive is installed in an HP StorageWorks Enclosure (4300 family) which has an Ultra 2 SCSI interface and is attached to an Ultra 3 host bus adapter (e.g., 64-bit/66MHz Dual Channel Wide Ultra3 SCSI adapter).

The error occurs because the drive and HBA negotiate Ultra 3 between them, but the interface in the HP StorageWorks Enclosure is not compatible with Ultra 3 traffic.

The error is observed when SmartStart boots and pauses for approximately 5 minutes during the driver load phase. Generally, the installation will fail after SmartStart boots.

Workarounds

Upgrade the IO module in the HP StorageWorks Enclosure (4300 family) to Ultra 3.

Use only Ultra 2 disk drives in an HP StorageWorks Enclosure (4300 family) with an Ultra 2 controller.

Notes

Ultra 2 disk drives should work correctly in an HP StorageWorks Enclosure (4300 family) with an Ultra 3 controller.

- Booting SmartStart 7.x on unsupported servers

Description

Booting SmartStart 7.x on unsupported servers will behave differently based on the server. Below is a list of results you may encounter:

- Boot up to a "#" prompt.
- System may freeze while SmartStart is loading.
- SmartStart displays access to the Maintenance tab.
- If using an old monitor, you may not see anything on the screen.
- A message is displayed that "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 7.x. Visit www.hp.com/servers/smartstart/supportmatrices for a list of servers supported by SmartStart 7.x.

- 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 US keyboard. Since the 'A' key on a French keyboard does not correspond with the 'A' key on the US keyboard, pressing CTRL-A on the French keyboard does not launch the Adaptec array configuration utility.

Workarounds

The 'A' and 'Q' keys are flipped. Selection of CTRL-Q launches the Adaptec array configuration utility.

HP Insight Diagnostics

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

1. 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; press the 'Maintain Server' button, and then 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 further details, 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 needed to effectively manage servers in today's challenging environments. It also allows the ability to compare these configurations to form a complete and thorough auditing process for the system. Use of this version removes the need to take the server offline or reboot the server in order to use Insight Diagnostics. The online edition is installed automatically by the Windows or Linux PSP. It can also be downloaded from the Software and Drivers page of 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 new 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, Serial Advanced Technology Attachment (SATA), and serial attached SCSI (SAS) disk 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:

- To troubleshoot why a hard disk drive is in a particular state
- When Systems Insight Manager reports a disk drive pre-failure or that a disk drive has failed
- When there is data corruption or storage problems but there are no physical indications
- When there are conflicting errors
- When there are repeated failures

2. 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 presented to the user may be in English when running in French, Italian, German, Spanish, or Japanese.

Workarounds

No workaround. A correction will be added in 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.

Workarounds

No workaround. A correction will be added in a future version of HP Insight Diagnostics.

- Application error may display when Online Edition is launching via iLO Remote Console with the High Performance Mouse enabled.

Description

When launching HP Insight Diagnostics Online Edition via iLo Remote Console with the High Performance Mouse enabled, an application error may display.

Workarounds

Do not enable High Performance Mouse when launching via iLo Remote Console. A correction will be added in a future version of HP Insight Diagnostics.

- Some buttons or scrollbars used for navigation may 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 may not appear on the viewable page. Some screens also do not have a scroll bar for navigating down that page.

Workarounds

The Page Up and Page Down keys are effective for navigating up and down the page and for accessing the

action buttons. Hiding some of the browser menus allows 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 backplanes that report or indicate SCSI ID information do not consistently follow a 0-base or 1-base ordering convention. As a result, it is difficult to identify a drive in question for servicing or configuration.

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.

3. HP Insight Diagnostics Limitations

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

- Limited Survey information.

Description

Survey may not display complete information for some devices or information for some devices may 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, there will be limited physical and logical drive information and available tests. Depending on the configuration and RAID controller, Insight Diagnostics may not be able to view the physical and logical drives behind the RAID controller.

Workarounds

There are no workarounds

- No Fan, Temperature, or Power Supply information available without the HP Management Agents 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 and it appears as if they do not exist.

Workarounds

Ensure that you are running the latest HP Management Agents, 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 512MB system memory or less installed.

Description

Due to limited available memory on systems with less than 512MB 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

4. HP Insight Diagnostics Notes

Diagnostics notes are usability issues that the user should be aware of, but should not be considered problems.

- RPM does not uninstall all diagnostics files.

Description

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

Workarounds

Some files may 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.

- Incorrect PCI slot number reported a device.

Description

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

Workarounds

Update to the current system ROM and 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 is a problem where the array controller firmware misreports the physical memory size to HP Insight Diagnostics.

Workarounds

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

- USB Root Hub information is different from what is reported by the Operating System.

Description

The Root Hub information may be displayed differently from the Operating System information.

Workarounds

USB information is correctly displayed by the operating system. A correction will be added in a future version of HP Insight Diagnostics.

Microsoft® Windows Server™ 2008

SmartStart version 8.0 is the first release that contains full support of 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 double clicking setup.exe. The ProLiant Remote Deployment Utility will then launch and allow you to select the appropriate ProLiant Support Pack.

1. 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 may blue screen after applying HP ProLiant Support Pack (PSP) 7.80. For more details on this issue, please refer to the following customer advisories. The HPCISS2.SYS driver is fixed in (PSP) 7.90.

- <http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01102958>
- <http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c01102961>

2. An HP ProLiant server running Microsoft Windows Server 2003 with HP Network Configuration Utility for Windows Server 2003 (CPQTEAM.SYS) Version 8.60 may blue screen after applying HP ProLiant Support Pack (PSP) 7.80. The CPQTEAM.SYS driver is fixed in (PSP) 7.90.

3. 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) will display the slot information for HP Smart Array SAS/SATA controllers as "Unknown." In addition, the Insight Management Agents will not provide information for any HP Smart Array SAS/SATA controllers installed in the system.

Description

The version of the Storport.sys driver which is included on the Microsoft® Windows Server™ 2003 base media returns incorrect data to the HP Smart Array SAS/SATA controller driver (Hpcisss2.sys). This 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

Workarounds include any of the following:

- Apply Microsoft hot fix 883646 from <http://support.microsoft.com/kb/883646>
- Upgrade to Windows 2003 SP1

4. Microsoft® Windows 2003 Select Operating System Selection

No separate operating system selection exists for Microsoft® Windows 2003 Select products during SmartStart assisted installation, unlike the process for Microsoft® Windows 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 2003 Select prompts for a Volume License Key that each customer gets with the contract.

Microsoft® Windows Server™ 2003 x64 Editions

You can manually execute the ProLiant Support Pack for Microsoft® Windows Server™ 2003 x64 Editions by browsing to the **\compaq\csp\nt** directory on the SmartStart CD and double clicking setup.exe. The ProLiant Remote Deployment Utility will then launch and allow you to select the appropriate ProLiant Support Pack.

Microsoft® Windows 2000

SmartStart version 7.91 was the last release that contains 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 that contains 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 very 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 fixes the slow SNMP problem and System Management Homepage timeouts experienced with RHEL4 U5.

Please note, if System Management Homepage is already installed, it will be necessary to restart the service after this workaround is performed.

Workaround source:

https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=241581

HP StorageWorks Modular SMART Array 1000 and 1500 (MSA1000 and MSA1500)

The bootable environment provided by SmartStart does not support the MSA1000 or MSA1500. As a result, utilities accessed from booting

off the SmartStart CD are not available to users attempting to perform actions on volumes present on the MSA1000 or MSA1500. This includes use of the Array Diagnostics Utility (ADU), Array Configuration Utility (ACU), and the ROM Update Utility.

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

These providers:

- Are based on 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.
- Are now available as an alternative to SNMP-based management agents.
- Are supported 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 additional information, go to www.hp.com/go/HPwbem.