

Compaq SANworks

Release Notes –
Secure Path Version 3.1A Service Pack 2 for Microsoft
Windows

Part Number: AA-RL4TF-TE

First Edition (December 2001)

Product Version: 3.1A, SP2

This document summarizes the features and characteristics of SANworks Secure Path Version 3.1A SP2 for Microsoft Windows,

For the latest version of these Release Notes and other Secure Path documentation, visit the Compaq storage website at: <http://www.compaq.com/storage>

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Release Notes – Secure Path Version 3.1A Service Pack 2 for Microsoft Windows
First Edition (December 2001)

Part Number: AA-RL4TF-TE

These Release Notes provide information for the release of SANworks Secure Path Version 3.1A, SP2 not available elsewhere in the product documentation, and take precedence over all other sources.

IMPORTANT: Read this entire document before upgrading the software.

Release Notes Contents

These Release Notes cover the following major topics:

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Intended Audience

This document is intended for customers who are responsible for installing, configuring and maintaining *Compaq SANworks Secure Path Version 3.1A SP2 for Microsoft Windows* in their Windows server environment with Enterprise Virtual Array controllers.

Secure Path 3.1A SP2 Availability

Secure Path 3.1A SP 2 for Microsoft Windows is available to Enterprise Virtual Array users only. The software can be downloaded from our website at <http://www.compaq.com/products/sanworks/secure-path>

There must be an existing version of Secure Path 3.0 or 3.1 on your system to install Secure Path 3.1A SP 2.

Notes and Warnings

- If you are using Microsoft Cluster Server Software, please go to <http://search.support.microsoft.com/kb/c.asp> and search for the “specific article ID number” on the following Technical Bulletins:

Q247065 - Microsoft Cluster Server with Service Pack 6A

Q258750 – Recommended Private “Heartbeat” Configuration on a Cluster Server

- The Secure Path Agent Configuration utility will occasionally append a period to the end of the client’s name as shown in the Client box. This will prevent client connections to the agent. If this occurs, first select the client name with the period from the Client box and choose Delete Client. Then re-enter the name without the period in the Selected Client box and choose Add Client.

Secure Path Guidelines

- Load distribution is not supported and is automatically disabled in Microsoft Cluster Service (MSCS).
- The use of FTDISK functions, such as host-based RAID and stripesets, is not supported with Secure Path protected devices.
- After uninstalling Secure Path Version 3.1A SP 2, the server must be rebooted.
- There is no support for Windows 2000 dynamic disks.
- All controller-based partitions built on a single storageset must be assigned to the same controller and the same host.
- Standalone and clustered hosts may not be assigned to the same SPM profile.
- Replacement of a controller requires that all cluster servers sharing the affected storage system be rebooted to re-synchronize the Secure Path databases.
- SPM passwords for all hosts in a profile must be the same.
- Changing the Agent's list of authorized clients or passwords requires that the Agent be manually stopped and restarted.
- Modifications to device volume labels made with Windows NT Disk Administrator require that the Agent be manually stopped and restarted before they become visible in SPM.

Secure Path Installation

The following sections provide installation procedures for Secure Path for Windows V3.1A, SP2.

Prerequisite Drivers

StorageWorks RAID systems are generally installed with a “platform” kit, such as the Fibre Channel Installation kit, contained on the Secure Path for Windows V3.1 CD. These kits install or refresh certain drivers necessary for using StorageWorks products with Windows. Please check to see that the following drivers are installed and at the indicated revision level as shown below:

Table 1: Driver Revision Levels

Driver Type	Windows NT V4.0	Windows 2000
HszDisk	v4.4.0.9 ¹	N/A
Hs_Service	v3.1.0.1 ¹	v3.1.0.1 ¹
CPQKGPSA	N/A	5-4.53A7
LP6NDS335	4-4.53A7	N/A

¹Indicates minimum acceptable level.

Refer to the Compaq website to obtain updates for HszDisk and Hs_Service Upgrade Utility Version 1.4 at:

www.compaq.com/sanworks

Refer to the Compaq website to acquire updates to the HBA adapter drivers at:

www.compaq.com/products

Maintenance Release Procedures

Prior to installing Secure Path V3.1A SP 2, you should check to ensure that prerequisite drivers are installed and at correct revision levels, as shown in Table 1.

Secure Path for Windows V3.1A SP2 can be applied only to a previously installed version of 3.0 or version 3.1 of Secure Path for Windows, with or without previously released Software Updates 1, 2 or 3 (for DRM environments only) or for Service Pack 1. Secure Path for Windows V3.1A SP2 incorporates all the features and enhancements of these Update or Service Pack packages.

The following sequences provide supplemental procedures for the most common installation scenarios.

Updating Stand-alone Server

- Stop all applications that access Secure Path storage.
- Back up data on Secure Path Storage.
- Install the Secure Path Server software.
- Install the Secure Path Client software on desired systems.
- Shut down the server.
- Reboot the server.

Updating Cluster Servers

- Stop any non-cluster aware applications on one of the servers to be updated.
- Back up data on Secure Path Storage.
- Using Cluster Administrator, move all Secure Path storage groups from the server to be upgraded.
- Install Secure Path for Windows V3.1A SP2 Server (or Server and Client) software.
- Shut down and reboot the updated server.
- Using Cluster Administrator, move all Secure Path storage groups to the updated server.
- Install Secure Path V3.1A SP2 (or Server and Client) software on remaining server.
- Shutdown and reboot the server
- Redistribute devices to original configuration.

Secure Path Operational Features

Secure Path Manager Refresh

SPM automatically refreshes the display every 90 seconds. If you wish to update the displayed information sooner, press the F5 key. (Please see “Known Problems in this Release.”)

Secure Path Manager Controller Designations

In the SPM display, the controller designations are based on manufacturing designated serial numbers assigned to physical controllers in your RAID Array cabinet. This does not necessarily correlate to the physical position (upper and lower) of the controllers within the cabinet. Always reference the controller serial numbers if you need to associate information in the SPM display with the controllers.

Controller Hot Swap

If it becomes necessary to hot swap one of the RAID Array controllers in a storage system, schedule a reboot of each cluster server sharing that system as soon as possible to re-synchronize the Secure Path databases. If only one of the servers is rebooted, SPM management capability is compromised.

Configuration Information

Operating System Compatibility

Secure Path Version 3.1A SP 2 is supported on platforms running the following operating systems:

- Windows NT Enterprise Edition or Server Version 4.0, Service Pack 5 or Service Pack 6A
- Windows 2000 Standard Server, Advanced Server.
- Microsoft Cluster Server (MSCS) may be optionally installed.

Supported Storage System Types

Secure Path Version 3.1A, SP 2 is supported on Enterprise Virtual Array controllers only.

Secure Path Supported Configurations

The following list defines operational configuration limits for Secure Path Version 3.1A SP2. The effective limit may be less due to Windows storage constraints, storage system type, or interconnect requirements. Refer to the appropriate Application Notes included with the install kit (also available from the www.compaq.com website) for details.

- Maximum 8 storage systems shared by a set of hosts (per profile)
- Maximum 8 hosts per set of shared storage systems (per profile)
- Maximum 64 LUNs per target – (LUN numbers must be in the range 0–63)
- Maximum 8 paths per LUN
- Maximum 64 storagesets per subsystem for Fibre Channel configurations

Secure Path Install Kit Contents

The following components are supplied in the Secure Path for Windows V3.1A SP 2 release.

Table 2: Secure Path Installation Components

Windows 2000	Windows NT	Windows 2000/NT Common Components
RaiDisk v3.5.0.12	RaiDisk v 3.0.64	Secure Path Agent v3.4.7
RdFil v3.1.0.12	HszDisk v4.4.0.9	Secure Path Manager v3.1.24d

Corrections in this Release

- Changed the communication method between the raidisk and the phone home support (hs_service) functions.
- Eliminated the 8 HBA per server limit in the Windows NT 4.0 driver.
- Incorporated Large LUN support for up to 64 LUNs per controller pair in the Windows 2000 driver.

NOTE: LUN numbers must be in the 0 –63 range.

- The Windows NT/Windows 2000 GUI now accepts hyphenated host names.
- GUI supports WNT/W2K and Netware hosts. The GUI works with any Secure Path for Windows v3.x agent.
- Corrected problem with GUI's handling of non-shared LUNs in Cluster configurations.
- Added Rdfil filter driver to manage device objects for Plug and Play compatibility while maintaining path state information that Secure Path needs.

Known Problems in this Release

- Memory utilization by Secure Path Manager may exhibit a sizable step function following the first use of the screen refresh feature (pressing the F5 key). Memory utilization goes from a nominal 6 – 8 Mbytes to 22 Mbytes, but plateaus at that point. This phenomenon does not seem to cause any other adverse affect; closing and re-launching the Secure Path Manager restores memory consumption to nominal value.
- With Secure Path Manager, use of the F5 screen refresh key under heavy host system load may result in loss of right screen display. Closing and re-launching Secure Path Manager resolves this problem.
- Secure Path may continue to indicate healthy paths to devices even if access has been disabled at the controller.