Compaq SANworks

Release Notes -Secure Path Version 3.1B for Windows Workgroup Edition

Part Number: AA-RR47A-TE

First Edition (November 2001)

Product Version: 3.1B

This document summarizes features and characteristics of SANworks Secure Path for Microsoft Windows Workgroup Edition, a High-Availability software solution for platforms used with the MSA1000 controller.

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



© 2001 Compaq Computer Corporation.

Compaq, the Compaq logo, StorageWorks and SANworks, are trademarks of Compaq Information Technologies Group, L.P. in the United States and other countries.

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corporation in the United States and other countries.

All other product names mentioned herein may be trademarks of their respective companies.

Confidential computer software. Valid license from Compaq required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Compaq shall not be liable for technical or editorial errors or omissions contained herein. The information in this document is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Compaq products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty.

Compaq service tool software, including associated documentation, is the property of and contains confidential technology of Compaq Computer Corporation. Service customer is hereby licensed to use the software only for activities directly relating to the delivery of, and only during the term of, the applicable services delivered by Compaq or its authorized service provider. Customer may not modify or reverse engineer, remove, or transfer the software or make the software or any resultant diagnosis or system management data available to other parties without Compaq's or its authorized service provider's consent. Upon termination of the services, customer will, at Compaq's or its service provider's option, destroy or return the software and associated documentation in its possession.

Printed in the U.S.A.

Release Notes - Secure Path Version 3.1B for Windows Workgroup Edition First Edition (November 2001)

Part Number: AA-RR47A-TE

Release Notes Contents

These release notes cover the following Secure Path topics:

- Kit Contents
- Secure Path Guidelines
- Secure Path Operational Features
- Configuration Information

Intended Audience

This document is intended for customers who purchased *Compaq SANworks Secure Path Version 3.1B for Windows Workgroup Edition* and are responsible for installing, configuring and maintaining this product in their Windows server environment with the MSA1000.

Kit Contents

The Secure Path kit includes:

- Secure Path Version 3.1B for Windows Workgroup Edition CD-ROM.
- Compaq Secure Path Version 3.1B for Windows Workgroup Edition Installation and Reference Guide, part number AA-RR48A-TE.
- License, part number AV-RN0MA-RK
- Warranty, part number 3R-Q409A-AA
- Compaq Secure Path Version 3.1B for Windows Workgroup Edition Release Notes, part number AA-RR47A-TE (this document)

Additional documentation, including white papers and best practices documents, are available via the Compaq website at: http://www.compaq.com/storage.

Notes and Warnings

- To ensure driver compatibility with Secure Path, servers must use SmartStart version 5.3 or above and Modular SAN Array 1000 Support Software, version 5.3.1.
- *To manually repair a path under the Secure Path Manager (SPM)*: Repair the condition that caused the path failure, then perform the following procedure:
 - 1. Highlight the broken path in SPM.
 - Select Verify.
 - 3. If the path verification pop-up box indicates successful completion of path verification, select **Repair**.

Manual repairs can initially appear to work even if there is a path problem, but eventually revert back to a broken state under SPM.

- Controller Redundancy is disabled during the MSA1000 LUN expansion process and SPM does not indicate it.
- If you are using Microsoft Cluster Services (MSCS) Software, ensure the proper network adapter binding order. From Windows 2000 Advanced Server:
 - 1. Click Start, point to Settings, and click Network and Dial-up Connections.
 - 2. On Advanced menu, click Advanced Settings.
 - 3. In the **Connections** box, make sure your bindings are ordered as follows:
 - a. First: external public network
 - b. Second: internal private network
 - c. Third (if applicable): remote access connections
- 4. Reorder if necessary.
- HBA slot number is not displayed in the SPM under Windows NT 4.0.
- The Secure Path Agent Configuration utility occasionally appends a period to the end of the client's name in the Client box. This prevents client connections to the Agent. If this occurs, proceed as follows:
 - a. Select the client name with the period from the Client box and choose **Delete** Client.
 - b. Reenter the name without the period in the selected Client box and choose **Add Client**.

After the Server reboots, the Secure Path Agent starts automatically.

Secure Path Guidelines

• Use the Cluster Profile for viewing a cluster configuration. Profiles for cluster configurations should contain both nodes of the cluster.

NOTE: Viewing a single host profile can cause an inaccurate SPM display.

- The Windows NT Fault-Tolerant driver (for host-based RAID sets) may not be used in conjunction with Secure Path.
- There is no support for Windows 2000 dynamic disks.
- 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 2000 Disk
 Management require that the Agent be manually stopped and restarted before the
 labels are visible in SPM.

Secure Path Operational Features

Secure Path Manager Refresh

SPM automatically refreshes the display every 90 seconds. If you want to update the displayed information sooner use the F5 key.

Secure Path Manager Controller Designations

In the SPM display, 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 (right or left) 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.

Secure Path Manager Heterogeneous GUI

Secure Path Manager, versions 3.1.025a and later (currently 3.1.3.29) include a universal Secure Path Management utility that supports profiles consisting of mixed heterogeneous operating systems.

Presently, the operating systems profiles supported are:

- Windows NT 4.0
- Windows 2000
- Novell NetWare

Depending on the host operating system in the profile, some or all of the features may be available. Features include:

- Load balancing
- Path verification
- Device identification options

NOTE: Device identification options vary between Windows NT, Windows 2000, and Novell Netware operating systems.

Configuration Information

Operating System Compatibility

Secure Path for Windows Workgroup Edition Version 3.1B is supported on platforms running the following operating systems:

- Microsoft Windows NT 4.0 Enterprise Edition
- Microsoft Windows 2000 Advanced Server for the Secure Path Server installation (or combined Server-Client installations)
- Microsoft Windows 2000, and NT 4.0 (all versions) for the Secure Path Client installation.

Supported Storage System Types

Compaq StorageWorks MSA1000 storage systems.

Secure Path Supported Configurations

The following list defines operational configuration limits for Secure Path Version 3.1B. The effective limit may be less due to Windows storage constraints, storage system type, or interconnect requirements.

- MSA1000 cannot be shared by more than one cluster when using Microsoft Windows NT or Microsoft Windows 2000.
- Redundant MSA1000 controllers cannot be shared with non-redundant servers/clusters.
- An MSA1000 owned by a Microsoft Windows NT or Microsoft Windows 2000 cluster cannot be shared with standalone servers.
- A server can only support a single or redundant path to the Storage Area Network (SAN). A server cannot attach to multiple SANs.
- Special Considerations for using fabric switches:
 - When implementing more than one cluster on the same SAN Switch infrastructure (that is, Multi-Clusters), zoning must be applied to isolate the clusters from each other to achieve the highest levels of stability. For more information see the Compaq StorageWorks SAN Switch Zoning Reference Guide.
 - For MSA1000 SAN configurations with heavy I/O traffic, increase the fabric switch buffer capacity from the default value of 16 to 27. See www.compaq.com/storageworks for more details.

Fibre Channel Configurations

For the latest device drivers and firmware information, please check the Compaq website at www.compaq.com/storageworks.