

### MODELS

#### Compaq SANworks Virtual Replicator v2.0

##### Part Numbers

1 Lic, Media, & Doc	191802-B21
5 Lic, Media, & Doc	191807-B21
10 Lic, Media, & Doc	191803-B21
25 Lic, Media, & Doc	191804-B21
50 Lic, Media, & Doc	191805-B21
100 Lic, Media, & Doc	191806-B21

##### Upgrade Part Numbers

1 License Upgrade	191796-B21
5 License Upgrade	191801-B21
10 License Upgrade	191797-B21
25 License Upgrade	191798-B21
50 License Upgrade	191799-B21
100 License Upgrade	191800-B21

##### Services Part Numbers

QB-66M\*\*\*\*\*

Installation and Telephone Support services available

##### Feature List:

- Support for Windows 2000
- Online volume growth for virtual disks and Windows 2000 basic disks
- Instant, point-in-time snapshots for backup, online restore, testing or data mining
- Virtual disks, sized to the needs of the application or user – up to 1TB
- Fully cluster-aware
- Command line interface for scripting
- Scheduling wizards remove the guesswork from repetitive operations
- Capacity planning tools included

### PRODUCT DESCRIPTION / OVERVIEW

Compaq SANworks™ Virtual Replicator combines a rich set of innovative capabilities that enhances and simplifies storage management for Windows NT and Windows 2000 environments. Through virtualization, online volume growth, snapshot and management features, the software complements the standard capabilities within the operating system. SANworks Virtual Replicator utilizes industry-standard server, storage, and network-interconnect components, protecting an organization's current and future storage investments.

### CUSTOMER BENEFITS

- Provides maximum flexibility when configuring Windows NT and Windows 2000 storage through virtualization.
- Allows easy expansion of existing storage capacity on Windows 2000 for quick response to evolving storage requirements
- Enables minimal downtime for backup since backups are performed against the snapshot, leaving the production volume available to support normal business operations
- Facilitates fast-restores through the ability to keep snapshots online and use to quickly recover lost or damaged files.
- Provides quick and efficient volume copies that are created in seconds and only use storage capacity when production data changes.
- Reduces system administration of data and storage with easy-to-use and automated management to increase productivity of IT staff.

### SOFTWARE FEATURES / FUNCTIONALITY

- **Virtualization:** Allows companies to respond quickly to rapidly changing storage capacity requirements. With storage virtualization, multiple storage arrays can be grouped into a pool of disk space for individual or clustered systems to use. Multiple virtual disks, up to 1 terabyte in size, can be created from a pool for users and their applications. System administrators can tailor disk space to specific requirements.
- **Online volume growth:** Enables easy, non-disruptive growth for Windows 2000 with zero downtime. Online Volume Growth allows a system administrator to grow an existing volume on a SANworks Virtual Replicator virtual disk and also a Windows 2000 basic disk. The system will remain online, and the data on the volume will remain intact.
- **Snapshots:** Enable the instant creation of multipurpose virtual replicas of production data without the requirement of a physical copy. Snapshots function identically to ordinary physical disks with both read and write capability. Whenever a quick copy of production data is needed, snapshots can be used with minimal disruption to running applications. For example, the snapshot can be the source for backup using standard backup tools. Snapshots can remain online for restore operations, testing, and data mining.
- **Management:** Simplification through easy-to-use interfaces using Microsoft Management Console or a command line. Interactive wizards are available to guide the administrator through all management tasks and create automatic schedules of operations.

### HARDWARE SUPPORT

SANworks Virtual Replicator is supported on any Intel CPU, as documented in the Microsoft Windows NT or Windows 2000 Hardware Compatibility List.

In Microsoft Cluster Server configurations, refer to the MSCS Hardware Compatibility List.

#### Peripheral Option and Storage Controller Support

Any disk and associated I/O subsystem supported by the Windows NT or Windows 2000 operating system can be used to provide storage units for inclusion in a pool.

### SOFTWARE PRE-REQUISITES

SANworks Virtual Replicator is supported on:

- Microsoft Windows 2000, Professional, Server, and Advanced Server
- Microsoft Windows NT, Version 4 with service pack 4, 5 or 6.

#### Clustering Environment

SANworks Virtual Replicator is supported in any valid Microsoft Cluster Server configuration.

#### Internet Explorer

Internet Explorer V5.0 or later is required.

## **HARDWARE PRE-REQUISITES**

- Pentium class Intel Processor
- 128 MB Memory
- 40 MB available disk space for full installation

## **DISTRIBUTION MEDIA**

*SANworks* Virtual Replicator is available on CD-ROM. 60-day evaluation kits are available from the *SANworks* web site.

## **DOCUMENTATION**

The *SANworks* Virtual Replicator *System Administrator's Guide* is provided as hardcopy documentation. Documentation is also provided on the distribution CD in PDF format. You may print the electronic software documentation accompanying the software as reasonably necessary to exercise your license to use the software.

## **SOFTWARE LICENSING**

This software is furnished under the licensing provisions of Compaq Computer Corporation's Standard Terms and Conditions. For more information about Compaq's licensing terms and policies, contact your local Compaq office.

All *SANworks* Virtual Replicator functionality is licensed per system. The only exception is the management GUI, for which a single license grants the right to install the software on multiple systems.

Increment Licenses, or multiple licenses sold together, are available in denominations of 5, 10, 25, 50 and 100.

New versions of *SANworks* Virtual Replicator are available by purchasing upgrades.

## **SOFTWARE PRODUCT SERVICES**

Services for *SANworks* storage management software products include telephone support services and installation services. Access to bug fixes and maintenance releases will be included in the telephone support service. When new versions of *SANworks* products become available, existing customers can purchase upgrades. There are no update services available for new versions of *SANworks* products. For more information, contact your local Compaq office.

## **SOFTWARE WARRANTY**

Compaq provides this software with a 90-day conformance warranty in accordance with the Compaq warranty terms applicable to the license purchase

The above information is valid at time of release. Contact your local Compaq office for the most up-to-date information.

## CONFIGURATION INFORMATION

- The maximum number of storage units in a pool is 8.
- A storage unit must not be any of the following devices:
  - Removable disks, including CD-ROMs and Jazz drives.
  - System or quorum disks.
  - Mirror, stripe and volume sets created by Windows Disk Administrator
  - Network disks served from a remote system.
- The number of pools that may be configured on a system is unlimited, but will be constrained by the number of storage units available.
- The maximum number of virtual disks that may be created in a pool is 8.
- The largest virtual disk that can be created is one Terabyte.
- The smallest virtual disk that can be created is 10 Megabytes.
- The maximum number of snapshots and snapshots-of-snapshots of a virtual disk is 12.
- All virtual disks, snapshots, and network disks must have only one partition, which must be formatted with the NTFS file system.
- The maximum number of network disks a system (or cluster) may serve is 23 (drive letters D-Z).
- The maximum number of served network disks that a network disk client system (or cluster) may connect to is 23 (drive letters D-Z).
- A storage unit can be a member of only one pool.
- In MSCS cluster configurations all storage units that comprise a storage pool must be configured on a shared access interconnect (such as SCSI or Fibre Channel).
- Dynamic LUN extension is not supported. To increase physical capacity, create new logical units from an existing or new RAID array and then add the new logical units to the storage pool.