

# *Compaq StorageWorks*

## **Fibre Channel Storage Switch (Model DS-DSGGA-AA) Release Notes**

These release notes contain late-breaking and supplemental information for the Compaq StorageWorks™ Fibre Channel Storage Switch and Compaq StorageWorks™ Command Console (SWCC).

**Be sure to read these notes before installing your Fibre Channel Storage Switch.**

### **Firmware Version 1.6d**

The current firmware for the Fibre Channel Storage Switch is version 1.6b. The upgrade is version 1.6d and is only available from the Compaq website at [www.compaq.com/products/storageworks/hubs-and-bridges/firmwareupdate.html](http://www.compaq.com/products/storageworks/hubs-and-bridges/firmwareupdate.html)

The firmware code needs to be downloaded from the website into a computer then downloaded into your Fibre Channel Storage Switch. Choose one of the following methods to download the firmware to your host system:

- Downloading to an Intel-based system with Windows NT
- Downloading to an Alpha-based system with Windows NT
- Downloading to an Alpha-based system with Compaq Tru64 UNIX

## Downloading the Firmware to an Intel-Based or an Alpha-based System with Windows NT

1. From the Compaq website or from the Compaq StorageWorks Fibre Channel Switch CD that came with your switch, copy the files *Rshd.exe* and *Cat.exe* to the root directory on your host system.

**NOTE:** Choose the *Rshd.exe* and *Cat.exe* files from the folder that represents your host system.

2. On your host system, double-click *Rshd.exe*. RSHD is a server program that allows the switch to request the firmware from the host system over an Ethernet connection. Leave RSHD running in a separate window.
3. Select Start > Run and enter TELNET.
4. Select Connect > Remote System.
5. In the Host Name field, type the IP address of your Fibre Channel Storage Switch and select the Connect button.
6. Log in as:

admin  
password: password

7. At the Telnet prompt, enter:

```
firmwareDownload "192.168.60.200", "administrator" , "v1.6d"
```

where "192.168.60.200" is your IP address of your host system, "administrator" is the account you are using to run *Rshd.exe*, and "v1.6d" is the firmware image to be downloaded to your switch.

**NOTE:** If you are logged into an NT system under an account other than administrator, you will have to modify "administrator" to the account you are using to run *Rshd.exe*. *Rshd.exe* must be run from the directory that contains the *Cat.exe* file.

The output displays as follows:

```
1330320+203572+427356
writing flash 0 .....
writing flash 1 .....
download complete
switch:admin>
```

8. Click the RSHD window and select File > Exit.
9. At the Telnet prompt, enter **reboot**. The switch reboots and copies the firmware into RAM.

## Downloading the Firmware to an Alpha-based System with Compaq Tru64 UNIX

1. FTP to the firmware download site located at <ftp://ftp.compaq.com/pub/products/storageworks/hubs-and-bridges/v1.6d>
2. Download the firmware to the Compaq Tru64 UNIX host system.
3. Telnet to the switch by entering:

```
telnet <switch_hostname>
user: admin
pswd: <password>
```

**NOTE:** You can substitute the IP address of the switch for <switch\_hostname>.

4. To download the firmware from the host system to the switch's flash memory, enter the following command line at the <switch>:admin> prompt:

```
firmwareDownload "16.140.32.60", "mary", "/tmp/v1.6d"
```

where "16.140.32.60" is the IP address of the host system with the firmware image, "mary" is the user to RSH, and "/tmp/v1.6d" is the firmware image to be downloaded into the Fibre Channel Storage Switch flash ROM.

**NOTE:**

- The quote marks are very important in the firmwareDownload command line.
- RSH without a password must be enabled for the user that RSH is executing under. To enable RSH without a password, add the switch IP name to ~<user>/.rhosts). The format of .rhosts is: hostname [ user ].

5. Enter **reboot** at the Telnet prompt. The switch reboots and copies the firmware into RAM.

## Release Files

### V1.6d dated 7/25/99

The release files for the Fibre Channel Storage Switch firmware, dated 7/25/99, includes:

- MIB Files are available from Compaq
  - ❑ femib.smiv1 1/20/99
  - ❑ swmib.smiv 1/15/99
  - ❑ swtrap.smiv 1/7/99

## About Releases

Firmware releases whose number starts with “1” execute only on the Fibre Channel Storage Switch. Do not attempt to load this firmware on Compaq *StorageWorks Fibre Channel SAN Switches*.

## Changes from V1.6b to V1.6d

These notes reflect a maintenance release being issued to correct minor problems in firmware version 1.6b. There are no feature enhancements in maintenance releases.

## Telnet Commands

There are no changes to the Telnet commands. The Fibre Channel Storage Switch Telnet interface does not support “type-ahead”. When a command is entered and either the output is being written to the display or the command has yet to complete, any characters typed will be ignored until the prompt returns. You should always wait until you have a valid prompt before entering commands. There is no harm in typing the characters but they will be ignored as well as the command the characters represent.

## Diagnostics

There are no diagnostic changes.

## Operating System

There are no Fabric Operating System changes.

## **Error Messages**

There are no new error messages.

## **Command Console Software Release Notes**

You can find late-breaking and supplemental information for Command Console Software by referring to the Command Console Release Notes on the CD.

## **Known DS-DSGGA-AA Problems as of 4/7/99**

Managing the switch with an Ethernet connection directly from a repeater to the Fibre Channel Storage Switch does not work. Small frames work fine, but large frames and WEB-based management do not work. The temporary solution is to connect to an Ethernet hub or put an Ethernet hub between the repeater and the switch. Direct connections from a management station using a crossover cable to the Compaq StorageWorks also works.

## **Cables**

Optical cables for the Fibre Channel Storage Switch must be ordered separately. 500 meters or less cables should be multi-mode Fibre Channel Cables. Cables longer than 500 meters should be single-mode. Multi-mode optical cables are connected to short wave Giga Bit Interface Converters (GBICs) in the Fibre Channel Storage Switch. Single-mode optical cables are connected to long wave GBICs in the Fibre Channel Storage Switch.

## **GBICs**

GBICs are not included with the Fibre Channel Storage Switch. They must be ordered separately. If you wish to purchase GBICs, order Compaq Optical GBIC for multi-mode cable, Part Number 234456-003.

## **NOTICE**

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