
Hot swappable drive replacement for the DV2000 with Rack-mount chassis

Overview

This document provides helpful hints for drive replacement in the unlikely event of a drive failure with the Adaptec® RAID 1 controller connected to hot-swappable hard-drive carriers and frames in a DV2000 rack-mount system. For more detailed information, refer to the *Adaptec® SCSI RAID 2100S Installation Guide* provided with your DV2000 system.

Storage Manager Pro:

The Graphic User Interface (GUI) that interacts with the storage subsystem to provide an intuitive graphical interface that enables the technician to do such things as create and manage RAID arrays, set up security levels for users and administrators and establish the means of notifying users of disk failures, etc. For more detailed information, refer to the *Storage Management Users Guide* provided with the DV2000 system (in .PDF format on the Adaptec® CD).



Note: The technician will be prompted to provide a user ID and password when starting Storage Manager Pro. The default user ID is *administrator*, the default password is *adaptec*.

Certain functions may also be done from the CTRL-A menu on system reboot but should only be undertaken at the direction of DuVoice Technical Support.

Hot-swappable carrier/frame:

As the title implies, this consists of two components. The *frame* is the component that is permanently mounted within the PC and connected to

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the Adaptec® RAID Controller. The *carrier*, is the component which houses a hard-disk drive that is removable by unlocking from the frame (using the keys provided with your system) and pulling straight out (using the attached handle). It can be re-inserted by reversing the process.



Notes: When re-inserting, allow the handle on the carrier to close and push the carrier in until it catches and feels secure, then lock.

If a carrier has been removed from the system, it will likely require a rebuild upon re-insertion.

The carrier also defines the SCSI ID number for that particular drive. The actual drive inside the carrier is always set to SCSI ID 0 and the carrier provides the translation to the controller. There are only two choices in this configuration, SCSI ID 0 or SCSI ID 1 (ID numbers are displayed on the front of the carrier when power is applied). The ID is set on the carrier by means of a thumbwheel on the backside of the carrier (the end that is inserted into the frame). Normally, it shouldn't be necessary to set (or adjust) the SCSI ID settings.

Drive failure:



In the event of a drive failure, an alarm will sound continuously and the failed drive will be taken offline. The system should operate normally on the single mirrored drive that remains online.



Launch the Storage Manager Pro program by clicking on the Start menu, highlight Programs|Adaptec® Storage Manager Pro, and double-click on the Adaptec® Storage Manager Pro option. The technician will be prompted for the User ID and password, refer to the Storage Manager Pro Note discussed earlier in this document for defaults.

Once logged on, select the Open System option. The Storage Manager Pro System Browser will launch a four-window display. Highlight the Adaptec® 2100S Array in the *Device* window. Select *Silence Alarm* from the list of menu options on the right.

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Review the drives in the Device window by single clicking on the symbol to the left of the Adaptec® 2100S Array item, then single-click the *Channel 0* item to expand the display to show both hard drives. An  should be displayed next to one of the drives. The drives are identified by their ID numbers; (0:00:0) equals ID 0, and (0:01:0) equals ID 1.

Remove the corresponding failed drive (carrier and all) from the rack-mount system and replace drive (carrier and all) with a known-good spare as described earlier in this document.

After replacing the drive, go to the *Array* window in Storage Manager Pro's System Browser. Highlight the *Adaptec® 2100S Array* item and single click the symbol to the left of this item. This will expand the item to display the Mirror Set (RAID 1) item underneath. Highlight the Mirror Set (RAID 1) and select the *Rebuild* option from the menu to the right. When the Rebuild is complete, the system will once again run in optimal condition.

The Rebuild status may be viewed in detail by highlighting the Mirror Set (RAID 1) item in the *Array* window. Then, select the *Tasks* tab in the *Detail* window below.

For further assistance, call DuVoice Corporation Technical Support at (425) 889-9790.