

IBM TotalStorage DS4300 Turbo Upgrade Kit



Getting started

The DS4300 Turbo Option upgrade kit contains the following:

- Two controllers with 1 GB cache
- IBM DS4000 Storage Manager Version 9.1 CD
- Eight-partition entitlement and Web activation instructions
- Seven DS4000 EXP700 storage expansion enclosure attachment entitlement and web registration instructions
- IBM DS4000 FlashCopy entitlement and web activation instructions

Refer to the *IBM TotalStorage DS4300 Fibre Channel Storage Server Installation and User's Guide* provided with the upgrade kit for detailed instructions on how to perform the DS4300 turbo option controller upgrade. The controller upgrade process can be summarized as followed:

1. Install the Storage Manager 9.1 host software. See the Storage Manager Installation Guide for your operating system on the IBM DS4000 Storage Manager Version 9.1 CD included in your upgrade kit for further instructions. The latest version of the Storage Manager 9.1 host software is available at the following DS4000 support Web site at:

www.ibm.com/servers/storage/support/disk/

2. Verify the firmware of the ESM in the current DS4300 configuration/setup. Upgrade the EXP700 or EXP100 ESM firmware to the following or higher version - 9326 or 9554, respectively.
3. Replace the DS4300 controllers with the DS4300 turbo controllers (FRU 24P8225). You should do this replacement as a "hot-swap." A controller hot-swap replacement occurs when the controllers are replaced one at a time while the storage server is powered on. Care must be exercised to ensure a successful upgrade.

Hot-swap replacement is the preferred method for upgrading your controllers. However, there are some instances where hot-swap replacement is not possible. Please refer to the OS-specific readme file on the CD included with the upgrade kit for any restrictions or additional instructions before performing the upgrade.

Note: You could also choose to do the upgrade as a "cold-swap." A controller cold-swap replacement occurs when both controllers are replaced at the same time after the storage server is powered off. Power is turned back on to the storage server after the controllers are replaced. However, if you choose to do a cold-swap, you will have to re-enable any premium features you might have installed because your premium feature ID will change. You will have to regenerate the key files using your new premium feature ID to re-enable your existing premium features. Do not use this upgrade procedure if you do not have access to the premium feature activation code for your storage subsystem. See the Storage Manager online help for locating your premium feature ID and see the instructions that came with your premium features for more details on regenerating feature keys.

Refer to the *IBM TotalStorage DS4300 Fibre Channel Storage Server Installation and User's Guide* provided with the upgrade kit for further instructions on how to replace your controllers.

4. Check the Turbo controller firmware and NVSRAM level using the Storage Manager 9.1 client and reload them using the DS4300 firmware and NVSRAM on the IBM DS4000 Storage Manager Version 9.1 CD included in your upgrade kit. Review the controller firmware readme file for any firmware

prerequisites/dependencies and download requirements. Refer to the Storage Manager 9.1 client online help or the Storage Manager Installation and User's Guide for instructions for downloading controller firmware and NVSRAM files. The firmware and NVSRAM from the IBM DS4000 Storage Manager Version 9.1 CD is needed to update the controllers with the latest firmware and NVSRAM. Then, check the DS4000 support Web site for any updates to the firmware code for the DS4300 controllers, hard drives, and storage expansion enclosure ESMs..

5. Activate via the Web the eight-storage-partition premium feature, the FlashCopy premium feature, and register the ability to attach seven additional DS4000 EXP700 storage expansion enclosures. Follow the Web activation instructions provided in the kit.

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