

COMPAQ

SMART ARRAY 5300 CONTROLLER

INSTALLATION OVERVIEW



System Requirements

■ **System compatibility**

To check that your server supports the Smart Array 5300 Controller, visit the Compaq website at www.compaq.com/products/servers.

■ **Hard drive compatibility**

For the most current drives supported by the Smart Array 5300 Controller, visit the Compaq website at www.compaq.com.

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Compaq, Compaq Insight Manager, ROMPaq.
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Thank You! *for purchasing your new Compaq Smart Array 5300 Controller. Please take the time to review the instructions provided in this overview before beginning installation.*

Before you begin...

... make sure that you have the latest versions of the software mentioned in this installation overview. Visit the Compaq website at www.compaq.com and compare the version numbers available for System ROMPaq™, System Configuration Utility, Array Configuration Utility, the Compaq Insight Manager™ agents, and the device drivers for your operating system.



WARNING: To reduce the risk of personal injury or damage to the equipment, consult the safety information and user documentation provided with your computer before attempting the installation.

Many personal computers are capable of providing energy levels that are considered hazardous. These computers are intended to be serviced by qualified personnel trained to deal with these hazards. Do not remove enclosures or attempt to bypass any interlocks that may be provided for the purpose of removing these hazardous conditions.

What's on Your CDs?

Smart Array 5300 Controller Support Software CD

The Smart Array 5300 Controller Support Software CD contains software, utilities, and drivers that you will need to install the Smart Array 5300 Controller in a Compaq server.

Controller Products Documentation CD

The Controller Products Documentation (CPD) CD is shipped with all new Compaq controller products. It contains user documentation for this product and other Compaq controllers. The CPD CD is regularly updated with new information as products are released. If you purchase another controller product in the future, the CPD CD will be a newer version.

The documentation files are formatted for viewing and printing with Adobe Acrobat Reader 4.0. When the CPD CD is loaded, an installation wizard will prompt the installation of Acrobat Reader 4.0.

Installation Procedure

1 Overview

To install the Smart Array 5300 Controller in your server, perform these steps in the order given:

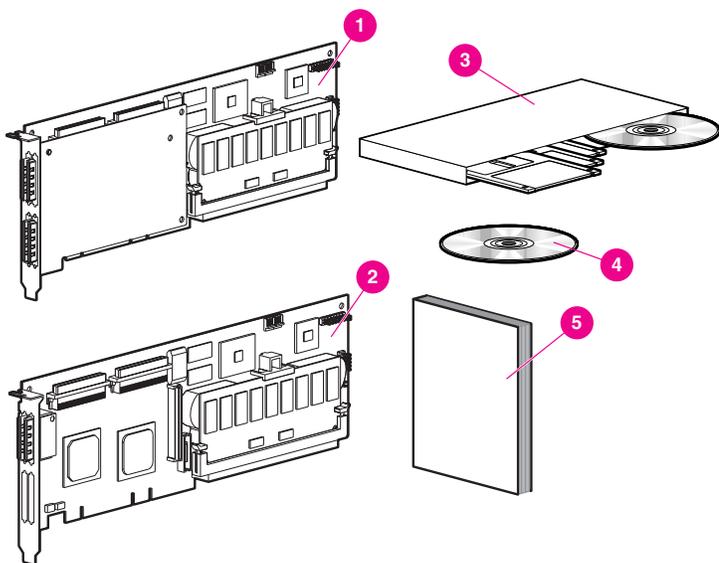
1. Ensure that your system meets the requirements for operating the Smart Array 5300 Controller. For complete system compatibility and requirements, refer to the System Requirements card included with this option kit, or visit the Compaq website: **www.compaq.com/products/StorageWorks/array_scsi_controllers.html**.
2. Identify the contents of the Option Kit.

IMPORTANT: If replacing an existing SMART controller, install the software drivers at this point. Refer to the *Compaq Smart Array 5300 Controller User Guide* for further information.

Otherwise, omit this step and go directly to step 3.

3. Install the Smart Array 5300 Controller and cables in your server.
4. Set the boot controller order.
5. Configure your array.
6. Install the device driver for your operating system.
7. Update your Compaq Insight Manager agents (if required).

2 Identify the Contents of the Option Kit



- ❶ Smart Array 5304 Controller **OR** ❷ Smart Array 5302 Controller
- ❸ Smart Array 5300 Support Software Kit
- ❹ Controller Products Documentation CD
- ❺ *Compaq Smart Array 5300 Controller User Guide*

Depending on your server model, you may also need a 3/16" flat-bladed screwdriver or a Torx T-15 screwdriver.

3 Install the Smart Array 5300 Controller and Cables



WARNING: To reduce the risk of injury, electric shock, or damage to equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Insert the power plug into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Disconnect power from the server by unplugging all power cords from either the electrical outlet or server.
- Allow the internal system components and hard drives to cool before touching them.

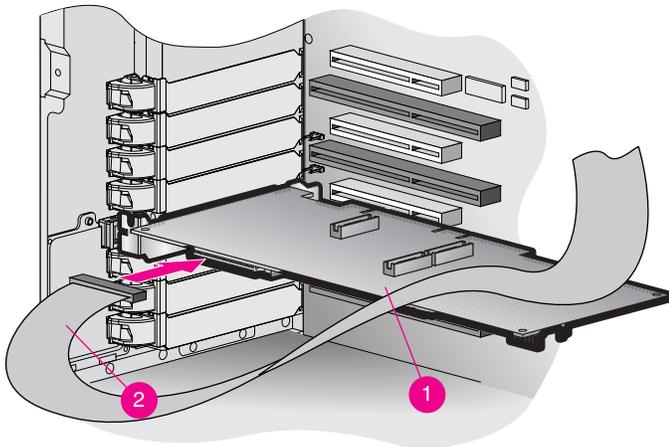
To install the hardware in your server:

1. Perform a normal system shutdown, power OFF the server, then turn off the external storage units and remove all external cables from the server.
2. Open the server to gain access to the option slots and SCSI cabling inside.
3. Install the controller board ❶ in an available slot.
4. Connect internal hard drives to the controller using an internal SCSI cable ❷

OR

use the existing cable from the hot-pluggable drive cage.

IMPORTANT: A Smart Array 5300 Controller will support external hard drives or those internal to the server, but not on the same channel.



5. Close the server.
6. Reconnect all external cables to the server, including any external SCSI cables to new storage devices.

Refer to the *Compaq Smart Array 5300 Controller User Guide* for detailed instructions on controller installation and SCSI cabling for your Compaq server.

4 *Set the Boot Controller Order*

You will only need to set the boot controller order if the Smart Array 5300 Controller will be the boot controller. If this is not the case, omit this step and go directly to step 5.

To set the boot controller order, you will need to run Option ROM Configuration for Arrays (ORCA). Power on the server, and while the console displays the ORCA prompt, press **F8** to start the ORCA utility. For additional information about ORCA, refer to the *Compaq Smart Array 5300 Controller User Guide*.

5 *Run Array Configuration Utility*

Compaq has provided two different mechanisms to configure your array controller, based on your familiarity with RAID technology and the control that you need over the physical configuration:

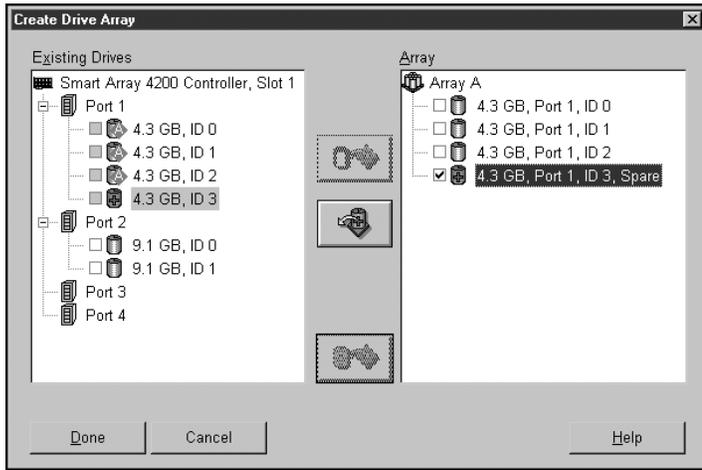
- Option ROM Configuration for Arrays (ORCA)
- Array Configuration Utility (ACU)

For further information regarding ORCA, refer to the *Compaq Smart Array 5300 Controller User Guide*.

To configure drive arrays using ACU:

1. Run ACU by:
 - ❑ Booting the server from the Support Software CD supplied with the Smart Array 5300 Controller,
OR
 - ❑ If your server is running Microsoft Windows 2000, Microsoft Windows NT 4.0, or Novell NetWare, you may install and run the ACU online.
2. Follow the steps in the Configuration Wizard, or create a custom configuration.

NOTE: The board will be identified as a Smart Array 5300 in the ACU.



3. Save the configuration and exit.

Refer to the *Compaq Smart Array 5300 Controller User Guide* for detailed instructions on running the ACU.

6 Install the Device Drivers

Install the device drivers by:

- Using the appropriate Smart Array 5300 Controller Support Software diskette to load the device driver during operating system installation,

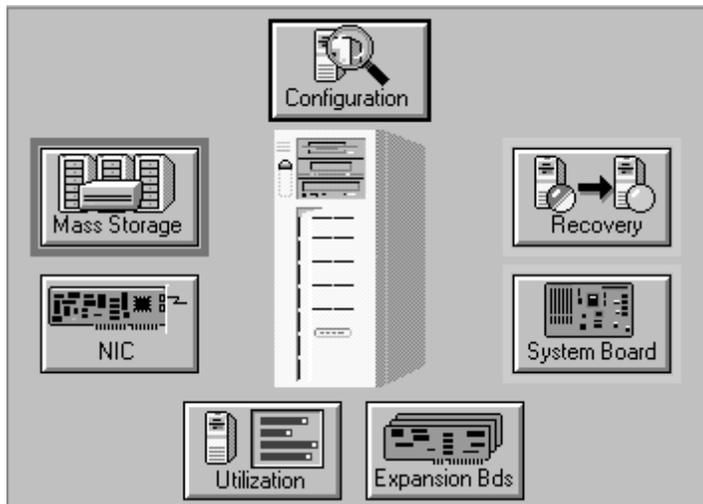
OR

- Executing the appropriate installers for your operating system. These installers are present on the Smart Array 5300 Controller Support Software CD.

Refer to the installation insert that shipped with the Compaq Smart Array 5300 Controller Support Software Kit for specific instructions on installing the device drivers for your operating system.

7 Update the Compaq Insight Manager Agents

If you are using Compaq Insight Manager to monitor and manage your network devices, update the agents on your server so that Compaq Insight Manager will recognize and monitor the Smart Array 5300 Controller's performance. The correct Insight Manager agents can be downloaded from the Compaq website at www.compaq.com/manage/.



Refer to Compaq Insight Manager documentation for detailed instructions on updating the agents for your operating system.

***This completes the installation of your
Smart Array 5300 Controller.***