

Veritas Appliance

Hardware Service Procedure

Operating System Disk Drive Replacement: NetBackup 5030/5230 Appliance

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Purpose

This document describes the process for replacing a 1-TB operating system hard disk drive in the NetBackup 5030 and 5230 appliances.

Affected Models

NetBackup 5030 Appliance

The NetBackup 5030 Appliance is a 2U system with no internal storage. It relies on a single, 3U Veritas Storage Shelf, which is connected to an external storage RAID controller on the back panel of the appliance. From the front panel of the NetBackup 5030, you can view 12 disk slots, arranged horizontally. Two SAS disks are installed in slots 0 and 1. The remaining slots hold blank carriers. A small control panel is on the right side of the front panel. It contains system LEDs and operations buttons, including the power button. The power sockets are on the left side of the rear panel. The rear panel contains six PCIe slots. Slot 1 in the PCIe riser 2 holds the external storage RAID controller that is used to connect the appliance to the storage shelf.

Figure 1 Front view of the NetBackup 5030 Appliances

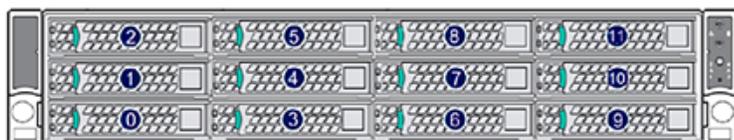
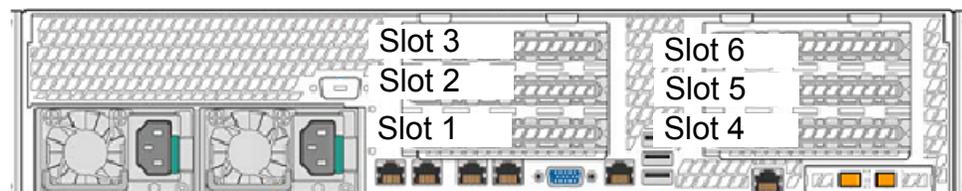


Figure 2 Rear view of the NetBackup 5030 Appliances



NetBackup 5230 Appliance

The NetBackup 5230 Appliance is a 2U system with 4 TB or 14 TB of internal storage. It consists of either a stand-alone base server or a base server with one to four attached 3U Veritas Storage Shelves. From the front panel of the NetBackup 5230, you can view 12 disk slots, arranged horizontally. Two 1-TB SAS disks are installed in slots 0 and 1. Slots 2 and 3 hold blank carriers. The remaining slots hold eight storage disks with a capacity of 1 TB or 3 TB each. All eight storage disks must have the same capacity. Using 3-TB disks in slots 0 or 1 is not permitted. A small control panel is on the right side of the front panel. It contains system LEDs and operations buttons, including the power button.

Figure 3 Front view of the NetBackup 5230 Appliances

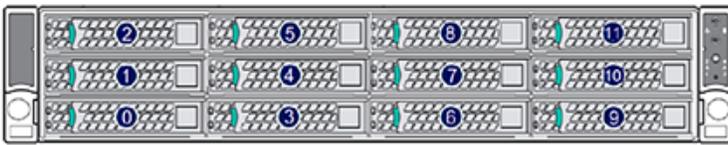
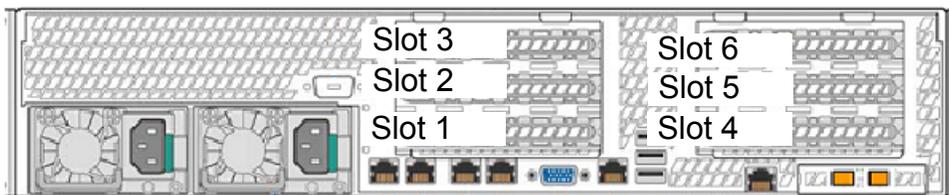


Figure 4 Rear view of the NetBackup 5230 Appliances



The power sockets are on the left side of the rear panel. The rear panel contains six PCIe slots. Slot 1 is used for the external storage RAID controller if the appliance is connected to a storage shelf. The remaining slots may hold 10 Gb Ethernet NICs or Fibre Channel HBAs, depending on the configuration. An internal storage RAID controller is installed on the mainboard of the appliance.

Onsite Policies and Procedures

Electrical safety

The static discharged by human bodies can damage static-sensitive components on the boards. When installing and maintaining the equipment, observe appropriate electrostatic safety precautions to prevent personnel injuries or device damage.

When operating a device in an electrostatic sensitive area, you must take electrostatic-discharge (ESD)-preventive measures. These include wearing ESD-preventive gloves, an ESD-preventive wrist strap, and ESD-preventive clothes to avoid personnel injury or device damage.

To prevent damage to the device, pay attention to the following during operations:

- Do not touch devices with bare hands because ESD from the human body may damage the electrostatically sensitive elements on a board.
- When dealing with the server or any of the internal components, wear an ESD-preventive wrist strap, ESD-preventive gloves, and ESD-preventive suit.

Hardware part replacement procedure

Replacing a NetBackup 5030/5230 1-TB operating system hard disk drive

This section describes how to replace the 1-TB operating system disk drives in the NetBackup 5030 and 5230 appliances. The two 1-TB disk drives located in Slots 0 and 1 contain the operating system for the appliance. Both drives are mirrored.

Figure 5 NetBackup 5030/5230 Appliance operating system disk drive slot locations



Caution: Only 1-TB drives can be used in slots 0 and 1. Make sure you do not replace the faulty drive with any other size drive.

This repair can be accomplished with the appliance installed in the rack.

Caution: You must complete the hard disk drive swap within three minutes. Leaving the disk drive slot open for longer than three minutes can result in the appliance overheating and cause other components to fail.

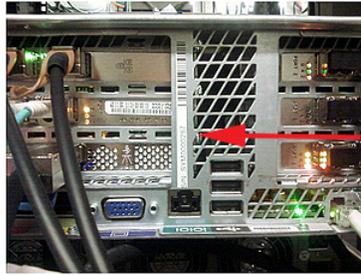
Note: If the appliance has attached storage shelves, these do not need to be powered down while the appliance is being serviced.

Requirements

- NetBackup 5030/5230 replacement 1-TB hard disk drive
- ESD wrist strap

To locate and identify the appliance that has the faulty operating system disk drive

- 1 Verify the appliance serial number. The serial number begins with the letters SYM or VTAS, and is located on a label on the rear panel of the appliance.



- 2 In the front panel, locate the operating system drive to be replaced. The drive must be in Slot 0 or 1, and the drive status LED must be a solid amber color before you disconnect the drive. The drive status LED is the top LED of the two LEDs that are located on the disk drive face plate.



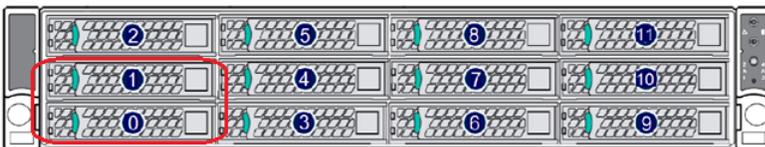
If the LED is blinking amber, the disk drive is in the process of rebuilding and must not be disturbed. If the drive status LED is off, the drive is working properly.

Warning: Disconnecting the drive incorrectly can cause data loss or data corruption. Therefore, if the drive status LED is not solid amber, contact Veritas Support.

To remove the disk drive

- 1 Put on an ESD-compliant wrist strap or take other ESD-protective measures.
- 2 Remove the front bezel. Grip the bezel on the sides and pull it from the appliance.
- 3 Locate the drive that you want to replace. The drive must be in either Slot 0 or 1 and the drive status LED should be solid amber. The drive slots are shown in the figure below.

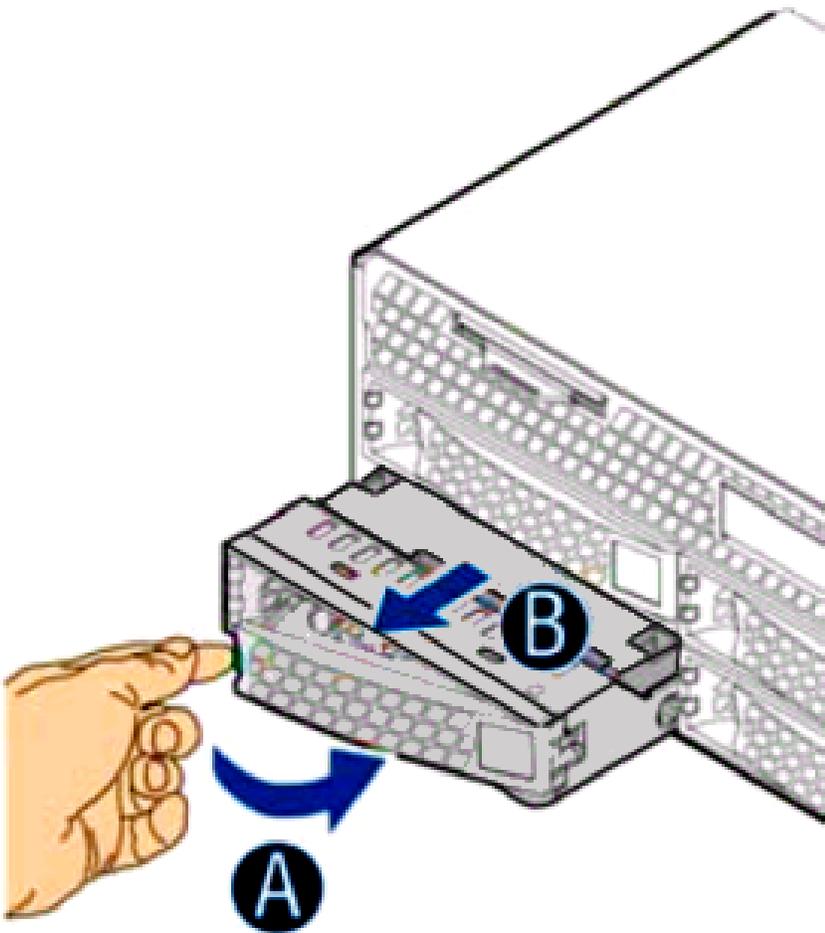
Warning: The drive status LED must be solid amber. Solid amber indicates that the disk drive has failed. If the drive status LED is not solid amber, contact Veritas Support before you proceed.



- 4 Press the green button on the left side of the drive to release the disk drive lever.



- 5 Pull the lever open completely but do not slide the drive out of the slot. Let the drive motor stop spinning. This takes about 30 seconds.
- 6 Slide the drive out of the slot.



- 7 Place the drive in an ESD-protective bag.

To install the disk drive

- 1** Put on an ESD-compliant wrist strap or take other ESD-protective measures.
- 2** Remove the replacement disk drive from the ESD-protective wrapper.
- 3** Press the green button to release the lever.
- 4** Pull the lever open completely.
- 5** Slide the disk drive completely into the slot.
- 6** Close the lever. Make sure that the disk drive cover is flush with the front panel. The drive activity LED turns green when the connection is good. After a short period, the drive status LED starts blinking amber to indicate that the rebuild is in progress.