

SGI® InfiniteStorage NEXIS 9000
Quick Start Guide

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Contents

1. SGI InfiniteStorage NEXIS 9000 Quick Start	1
NAS Hardware Overview	2
NAS Compute Appliance Front Components	2
Drive Controller Enclosure Rear Panel	4
Drive Expansion Enclosure Rear Panel	4
Powering On an SGI InfiniteStorage NEXIS 9000 System	5
SGI InfiniteStorage NEXIS 9000 Rack Configuration	5
Software Configuration	7
Drive Module Indicators	11
The RAID Controller Module	12
Drive Locations and Indicators	12
Contacting SGI	14

SGI InfiniteStorage NEXIS 9000 Quick Start

This document guides a knowledgeable user through the basic setup of an SGI InfiniteStorage NEXIS 9000 system. You should have received your NAS system already racked and cabled. Professional assistance with the setup of your new NAS solution is available through SGI Managed Services. If you ordered such service, please contact the SGI Customer Support Center to schedule the on-site visit. If you are performing your own setup of the SGI InfiniteStorage Appliance Manager software, see “Software Configuration” on page 7. Keep this document for future reference.

For more information on hardware/software used with the SGI InfiniteStorage NEXIS 9000, see:

- *SGI Altix 4700 System User's Guide* (P/N 007-4823-00x)
- *SGI InfiniteStorage 220 Initial Setup Guide* (P/N 007-4938-00x)
- *SGI InfiniteStorage Appliance Manager User's Guide* (P/N 007-4699-005 or later)

These documents can be accessed and downloaded from the SGI publications library at:

<http://docs.sgi.com>

Various formats are available. This library contains the most recent and most comprehensive set of online books, release notes, man pages, and other information related to SGI products.

This document contains the following major topics:

- “NAS Hardware Overview” on page 2
- “Powering On an SGI InfiniteStorage NEXIS 9000 System” on page 5
- “SGI InfiniteStorage NEXIS 9000 Rack Configuration” on page 5
- “Software Configuration” on page 7
- “Drive Module Indicators” on page 11
- “Contacting SGI” on page 14

NAS Hardware Overview

Depending on your NAS configuration, the system may come with up to ten Serial Attached SCSI (SAS) drive trays. The NAS appliance is a 10U compute and I/O enclosure that cables directly to the RAID controller or controllers in the primary drive enclosure.

NAS Compute Appliance Front Components

Figure 1-1 shows the ports and indicators on the front of the compute appliance (SGI Altix 4700). Your configuration may differ slightly from the example shown.

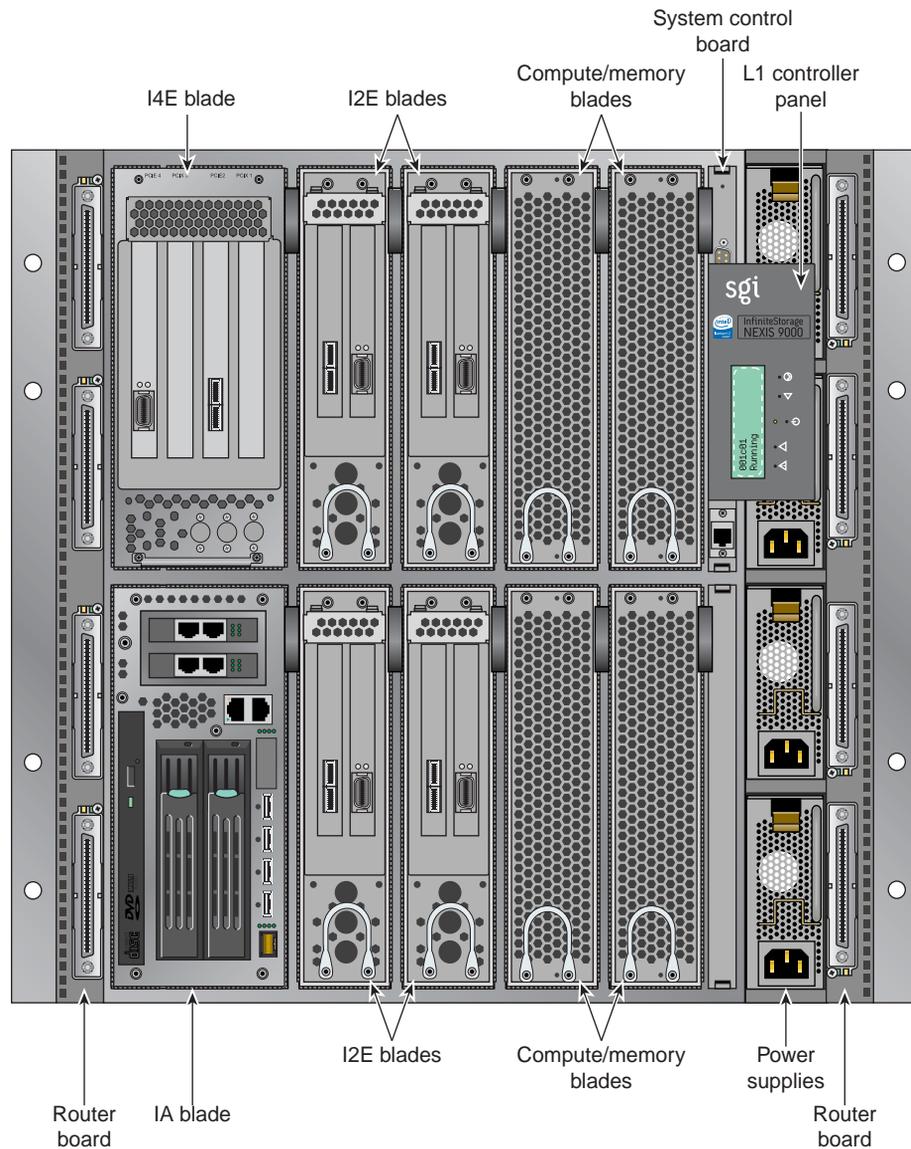


Figure 1-1 Compute Appliance Front Panel Components Example

Drive Controller Enclosure Rear Panel

Note that controller A (left side of enclosure) contains drive channel 1, while controller B (right side of enclosure) contains drive channel 2. Figure 1-2 shows the controller's input/output ports.

1. Connector not used in this configuration
2. Serial-attached SCSI (SAS) controller host ports
3. Expansion ports

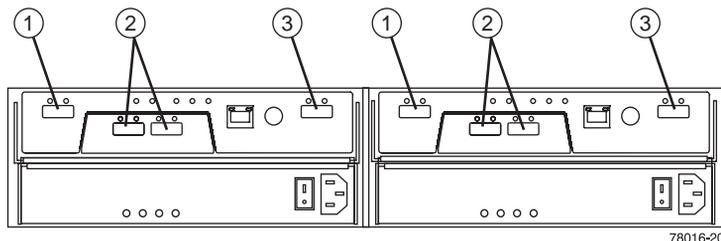


Figure 1-2 Drive Controller Enclosure Rear Panel

Drive Expansion Enclosure Rear Panel

The drive expansion enclosure connects to the drive controller enclosure(s) using serial-attached SCSI (SAS) cables. Each controller has one drive expansion connector (located on the far right of the controller). You can connect multiple optional drive expansion enclosures to each NAS controller/drive enclosure. Drive expansion modules (see Figure 1-3) use the following SAS connectors:

1. SAS in connector
2. SAS out connector

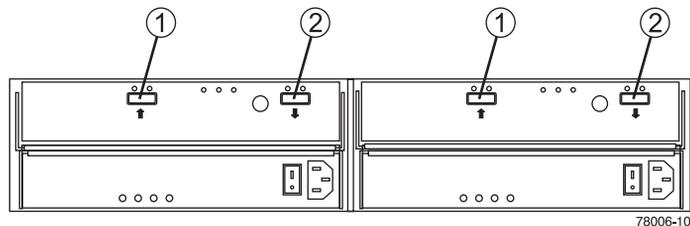


Figure 1-3 Drive Expansion Enclosure Rear Panel

Powering On an SGI InfiniteStorage NEXIS 9000 System

Plug your NAS system into a suitable power outlet(s), as in the example shown in Figure 1-4. Note that the compute appliance power connections are located at the front of the rack, while the mass storage enclosure's power connectors are at the rear of the units. Refer to the *SGI InfiniteStorage 220 Initial Setup Guide* for a more detailed power-up description. If you need detailed information on power-up procedures for the compute appliance, see the *SGI Altix 4700 System User's Guide* (P/N 007-4823-00x).

Turn on the power to all connected drive enclosures before you turn on the RAID controller enclosure, turn on the compute appliance last. This action ensures that the controllers recognize each attached drive enclosure.

Note that the power connection example shown in Figure 1-4 illustrates a configuration with power supplied to the rack from two separate sources. This type of configuration provides increased availability in the case of power loss from one circuit source.

SGI InfiniteStorage NEXIS 9000 Rack Configuration

Depending on the system ordered, your SGI NAS solution has a 10U compute/appliance, one or more RAID controller/drive enclosures (housing two RAID controllers plus 12 drives), and drive expansion enclosures.

The SGI InfiniteStorage NEXIS 9000 system with dual-RAID controllers and serial attached SCSI (SAS) drives come pre-mounted in a rack from SGI and in most cases only require booting and configuration of the NAS management software (see “Software Configuration” on page 7). You may need to refer to the rack installation manual accompanying your system for guidelines on unpacking, moving, and placing a rack.

Check with your SGI sales or service representative if you need to order additional disks or enclosures for your NAS system. The compute appliance, RAID controller and drive expansion enclosures are installed in the lower part of the rack when possible (allowing for available space):

- Compute appliance is installed in the upper position
- RAID controller enclosure(s) installs directly below the appliance
- Disk expansion enclosures are installed below the RAID controller enclosure

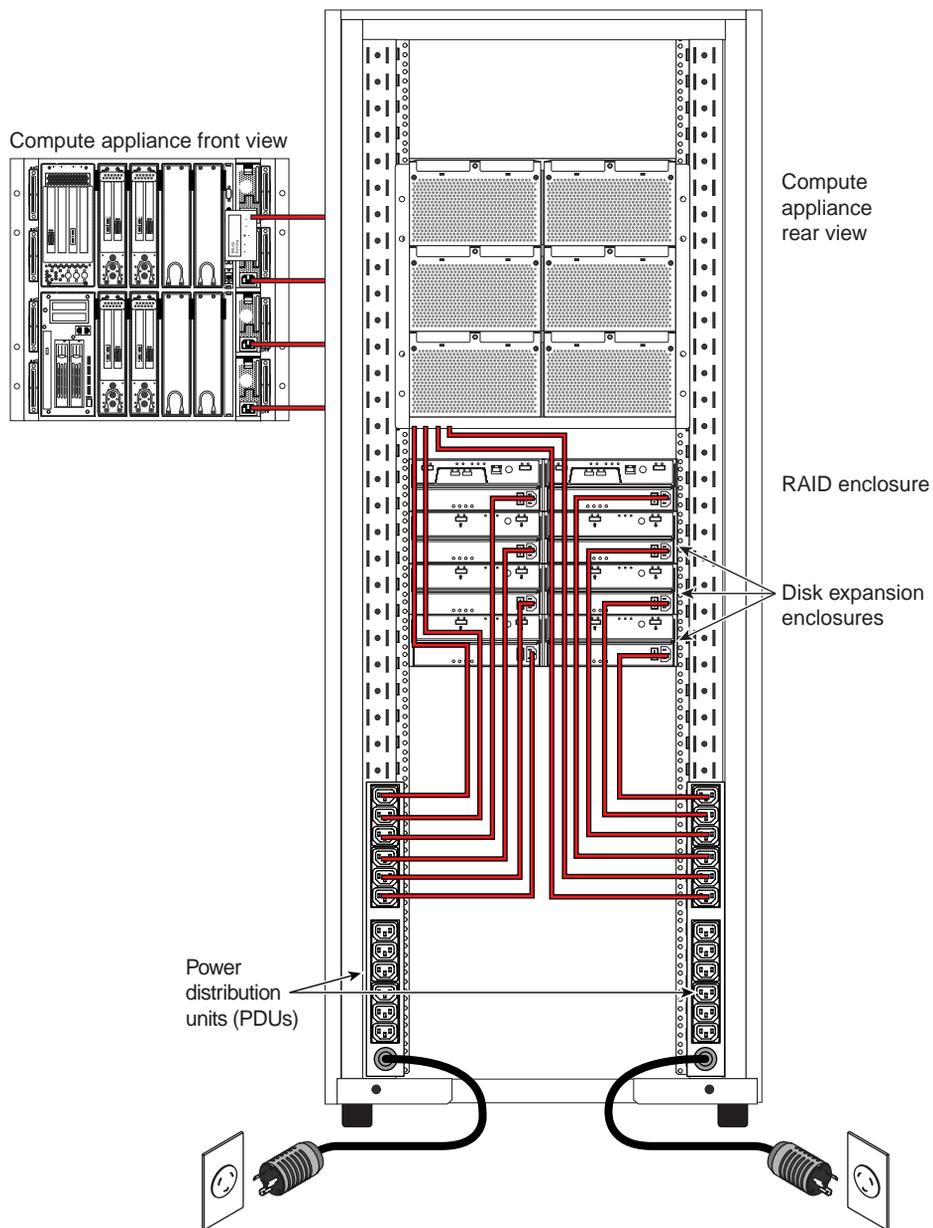


Figure 1-4 Connection Example of a Racked System to Power

Software Configuration

After your NAS system's hardware is configured and powered on, use the SGI InfiniteStorage Appliance Manager Setup Wizard to set up the initial software configuration of your SGI appliance. Web browser Internet Explorer 6.0 or Mozilla Firefox 1.0 or later are required.

It should only be run after the hardware setup instructions have been completed and verified and the machine has been powered up. To run the wizard, connect a cross-over ethernet cable from a laptop or PC to the primary ethernet port on the 10U NAS compute appliance. The cable plugs into the left-hand NIC port (NIC0) when looking at the front of the unit, see Figure 1-5.

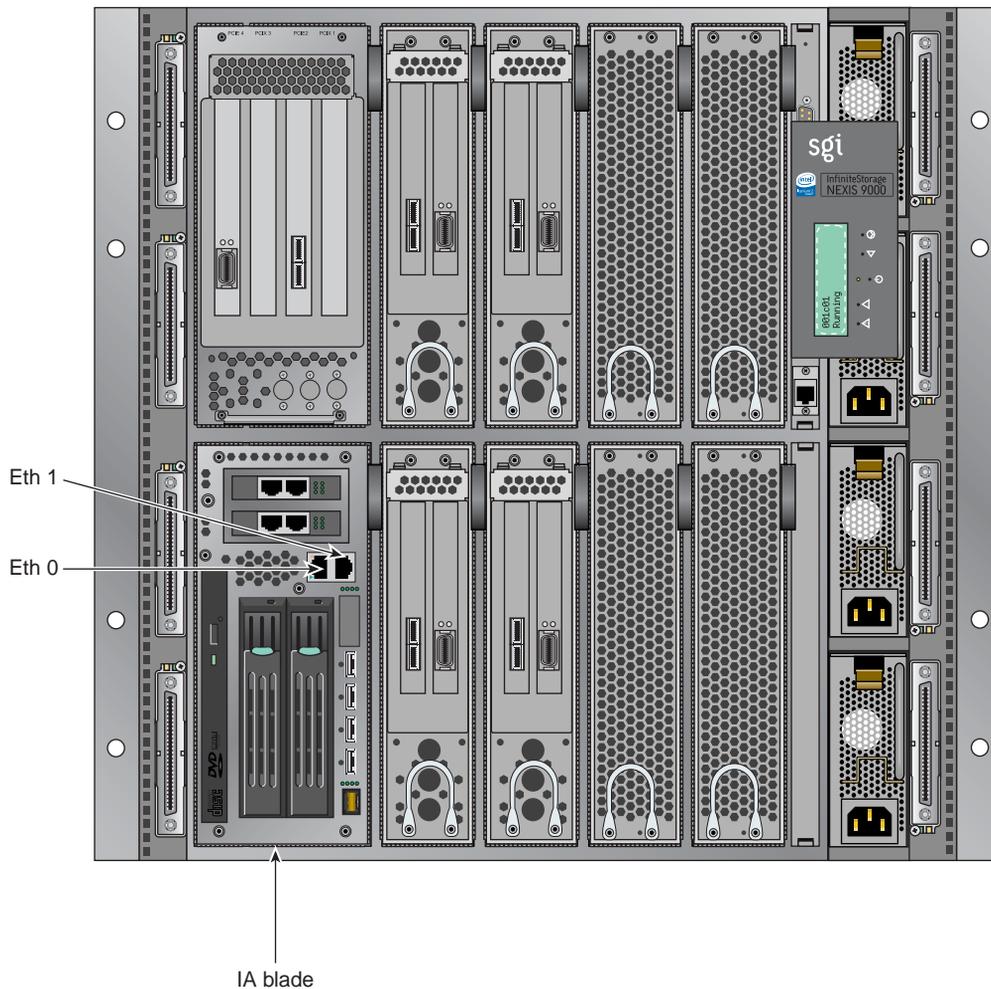


Figure 1-5 Ethernet Connection to Compute Appliance

Then launch a web browser to the following URL:

<https://192.168.9.9:1178>

Note: You may need to temporarily reset the IP address of the laptop or PC to 192.168.9.1 for this to work correctly.

The setup wizard is intended to be easy to use and leads you through the initial system configuration steps. Figure 1-6 shows an example start screen. For more details, see the *SGI InfiniteStorage Appliance Manager User's Guide*, (P/N 007-4699-005 or later). Note that only revision five or later will have the applicable information for this NAS product. Once the software setup phase has completed, you must restart the SGI NAS system. Afterwards, you should remove the cross-over cable and plug the system into the local area network. Note that once the system has been restarted, you can monitor its performance, or change the software configuration by going to <https://your.server:1178/>.

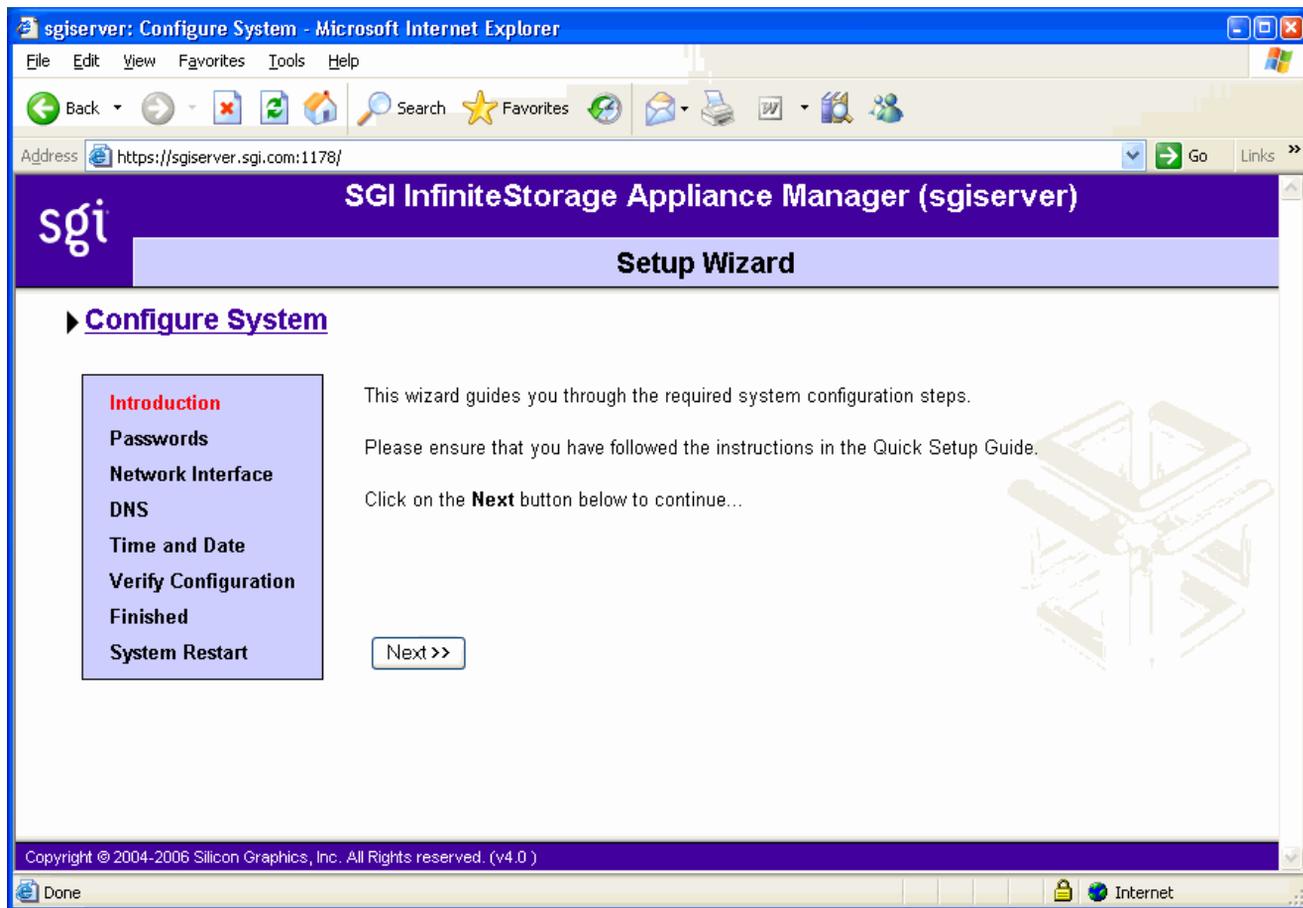
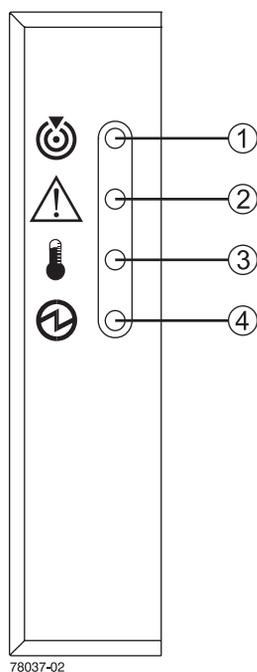


Figure 1-6 SGI InfiniteStorage Appliance Manager Start Screen Example

Drive Module Indicators

Expansion drive enclosures cable to the primary disk enclosure. The RAID controller/drive enclosure has a set of indicators on the front-left side that help you determine the operational status of the unit, see Figure 1-7.

1. Module locate LED
2. Service required LED
3. Module over temperature LED
4. Power good LED



Left

Figure 1-7 NAS Drive Module Status LEDs

The RAID Controller Module

Figure 1-8 identifies the indicators on the rear of a RAID controller module.

1. Link service action required (fault)
2. Link up
3. Battery service action required (fault)
4. Cache active
5. Service action allowed
6. Service action required
7. Controller power
8. Ethernet activity
9. Ethernet speed
10. Host channel speed
11. Host channel speed
12. Not used in this configuration

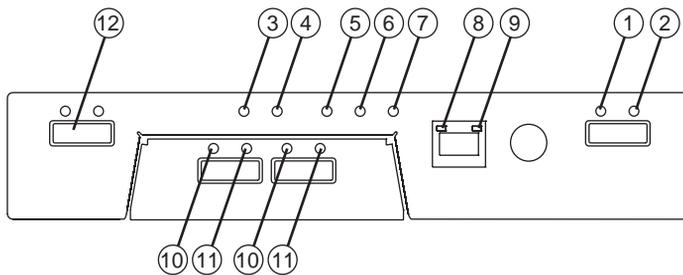


Figure 1-8 RAID Controller Rear Panel Indicators

Drive Locations and Indicators

Each RAID enclosure or drive expansion enclosure holds up to 12 sled-mounted removable hard drives. At least two drives must be installed in the enclosure for it to operate.

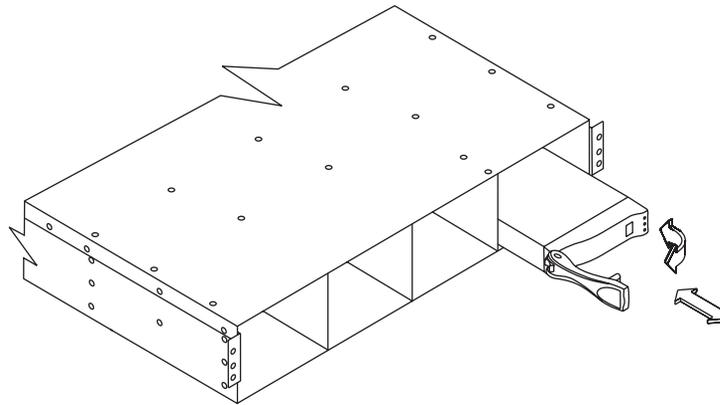


Figure 1-9 Drive Extraction (Front) From the Enclosure

The disk drive indicator LEDs have the following meanings:

1. Service action allowed (blue)
2. Service action required (yellow)
3. Disk drive active (green)

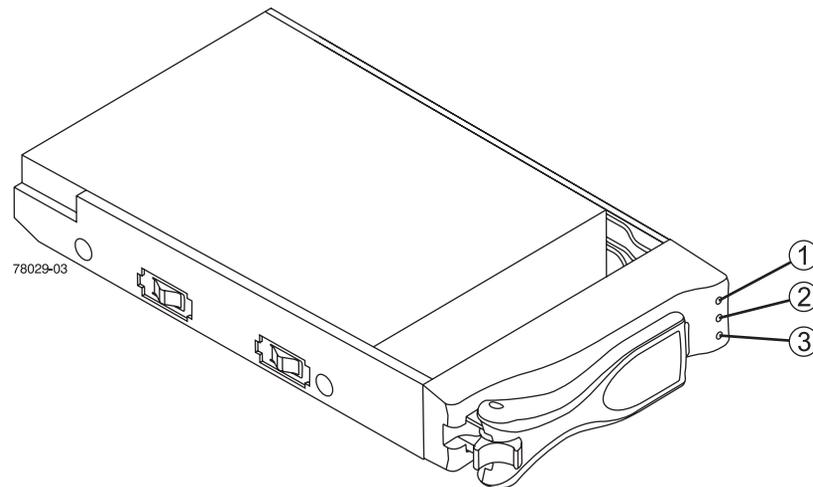


Figure 1-10 Disk Drive Indicator LEDs

Contacting SGI

To contact the SGI Customer Service Center, call 1-800-800-4SGI, or visit <http://www.sgi.com/support/customerservice.html>.

From outside the United States contact your local SGI sales office.

For more information on SGI's available storage products, see: <http://www.sgi.com/storage>

To reach SGI for other purposes, use the following contact information:

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