

SGI® InfiniteStorage NEXIS 500
Quick Start Guide

007-5404-001

COPYRIGHT

© 2007, SGI. All rights reserved; provided portions may be copyright in third parties, as indicated elsewhere herein. No permission is granted to copy, distribute, or create derivative works from the contents of this electronic documentation in any manner, in whole or in part, without the prior written permission of SGI.

LIMITED RIGHTS LEGEND

The electronic (software) version of this document was developed at private expense; if acquired under an agreement with the USA government or any contractor thereto, it is acquired as "commercial computer software" subject to the provisions of its applicable license agreement, as specified in (a) 48 CFR 12.212 of the FAR; or, if acquired for Department of Defense units, (b) 48 CFR 227-7202 of the DoD FAR Supplement; or sections succeeding thereto. Contractor/manufacturer is SGI, 1140 East Arques Avenue, Sunnyvale, CA 94085.

TRADEMARKS AND ATTRIBUTIONS

SGI, the SGI logo and Altix are registered trademarks of SGI, in the United States and/or other countries worldwide.

Mozilla and Firefox are registered trademarks of the Mozilla Foundation.

Internet Explorer is a registered trademark of Microsoft Corporation.

All other trademarks mentioned herein are the property of their respective owners.

Contents

- 1. SGI InfiniteStorage NEXIS 500 Quick Start 1**
 - NAS Appliance Hardware Overview 2
 - NAS Appliance Rear Components 2
 - Powering On an SGI InfiniteStorage NEXIS 500 System 3
 - Software Configuration 5
 - Drive Types and Indicators 7
 - SGI InfiniteStorage NEXIS 500 System Hardware Setup 8
 - Rack Mounting Instructions 8
 - Mounting the NAS Enclosure 8
 - Resetting the Rail Pin Adapters to Use Round Mounting Holes 8
 - Preparing the Rack and NAS Enclosure 9
 - Mounting the Slide Rails 10
 - Installing the NAS Appliance on the Slide Rails 11
 - Contacting SGI 14

SGI InfiniteStorage NEXIS 500 Quick Start

This document provides basic setup information for an SGI InfiniteStorage NEXIS 500 NAS appliance. If you received your NAS system already racked and cabled you probably will use only the information in the first three sub-sections of this guide. Professional assistance with the setup of your new NAS appliance 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 4. End-users or administrators who are rack-mounting systems on site should review the information in “SGI InfiniteStorage NEXIS 500 System Hardware Setup” on page 7. Keep this document for future reference.

For more information on hardware/software used with the SGI InfiniteStorage NEXIS 500, see:

- *SGI Altix XE240 System User's Guide* (P/N 007-4873-00x)
- *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 Appliance Hardware Overview” on page 2
- “Powering On an SGI InfiniteStorage NEXIS 500 System” on page 3
- “Software Configuration” on page 4
- “Drive Types and Indicators” on page 6
- “SGI InfiniteStorage NEXIS 500 System Hardware Setup” on page 7
- “Contacting SGI” on page 13

NAS Appliance Hardware Overview

The SGI InfiniteStorage NEXIS 500 NAS uses Serial ATA (SATA) drives in a RAID 5 (4+1) configuration. The NAS gateway system is a 2U compute and I/O enclosure that also supports a DVD drive.

NAS Appliance Rear Components

Figure 1-1 shows the ports and indicators on the rear of the NAS appliance (SGI Altix XE240). Table 1-1 calls out the component specifics on the back of the unit.

Table 1-1 NAS appliance rear panel components

Callout	Description	Callout	Description
A	Low-profile PCI option slots	I	USB connector
B	Full-height PCI option slots	J	USB connector
C	Upper power supply module	K	Video port
D	Top power connection	L	DB-9 serial connector
E	Bottom power connection	M	NIC 2
F	Lower power supply module	N	NIC 1
G	Optional server management NIC	O	RJ45 serial connector
H	Optional I/O module	P	PS2 keyboard/mouse connectors

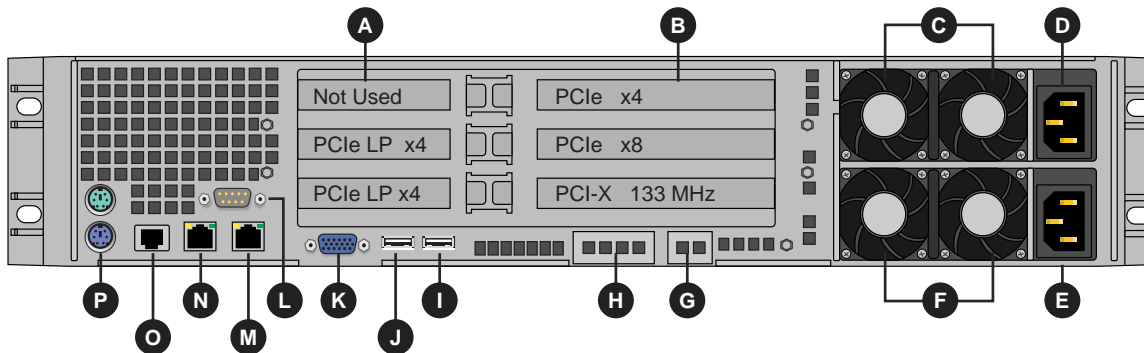


Figure 1-1 NAS Appliance Rear Panel Components

Powering On an SGI InfiniteStorage NEXIS 500 System

Plug your NAS appliance(s) into a suitable power outlet(s), as in the example shown in Figure 1-2 (for a racked chassis). Refer to the *SGI Altix XE240 System User's Guide* if you want a detailed power-up description for the unit.

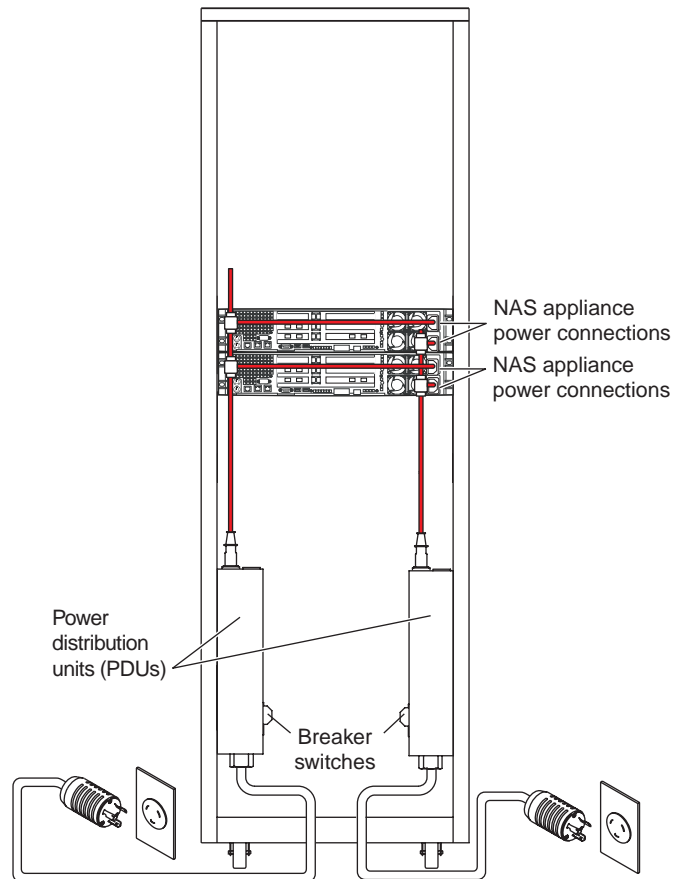


Figure 1-2 Connection Example of Racked NAS Appliances to Dual Power Outlets

Software Configuration

If your NAS appliance'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 NAS 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 2U NAS appliance. The cable plugs into the left-hand NIC port (NIC1) when looking at the rear of the unit, see Figure 1-3.

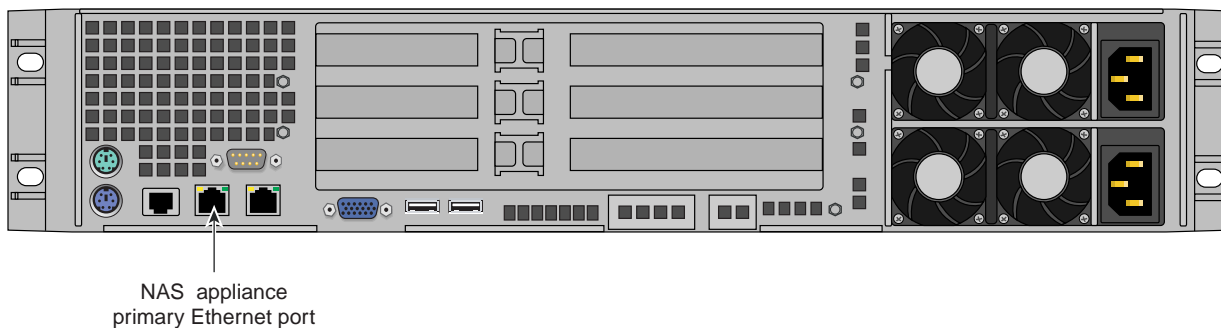


Figure 1-3 Ethernet Connection to NAS System

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 1-4 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 -005 (or later) of the document 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/>.

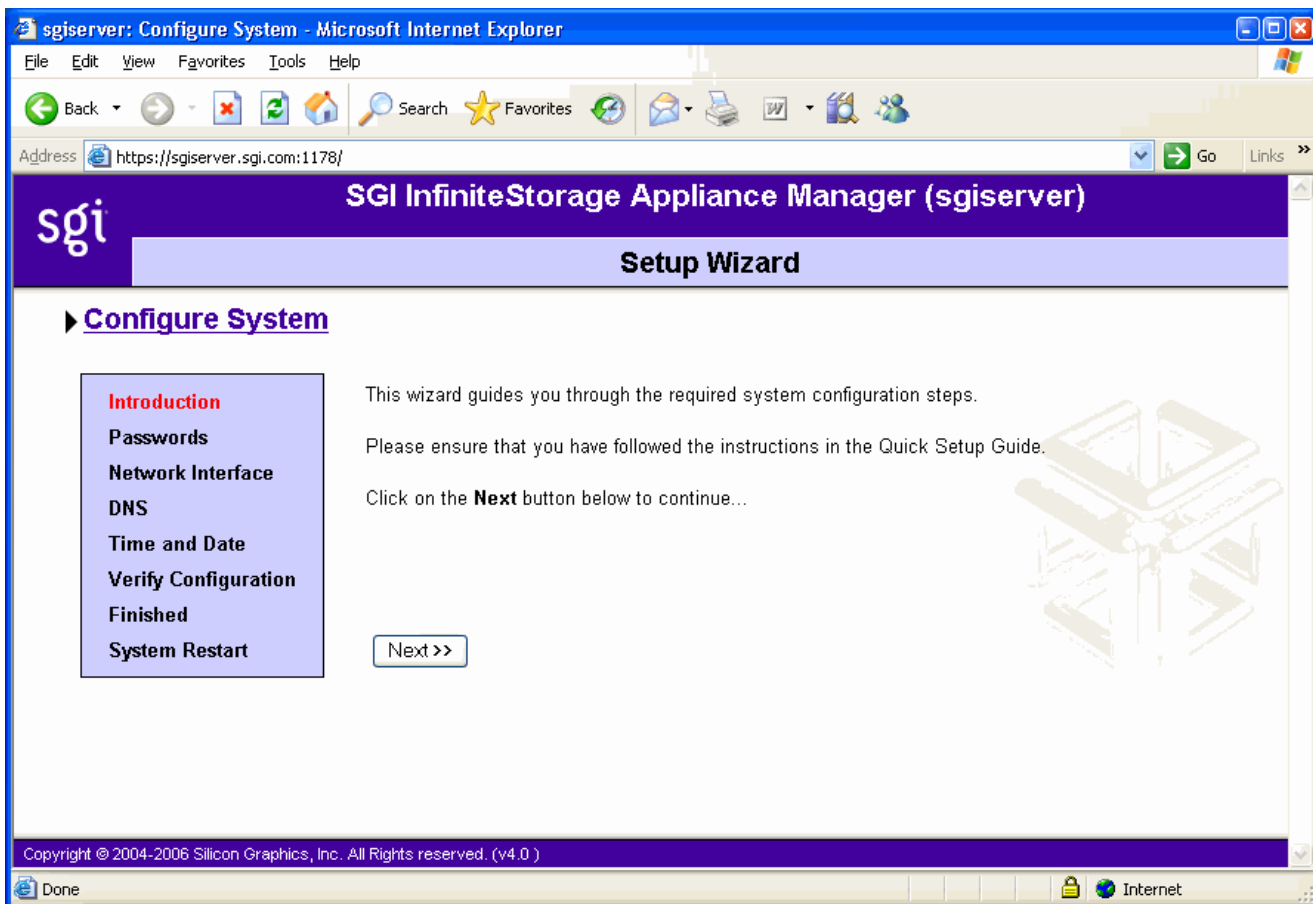


Figure 1-4 SGI InfiniteStorage Appliance Manager Start Screen Example

Drive Types and Indicators

Each NAS 2U appliance holds five sled-mounted removable Serial ATA (SATA) hard drives configured in a 4+1 RAID 5 configuration. There are different capacity SATA drives available for the system. For best overall performance, all 5 drives should have the same capacity and drive speed.

Note: The SGI InfiniteStorage NEXIS 500 system does not support all types and sizes of Serial ATA (SATA) hard drives. Contact your SGI representative for a list of compatible replacement drives.

The disk drives in each appliance are mounted on a removable sled and have a single drive activity indicator LED. See Figure 1-5 for an example.

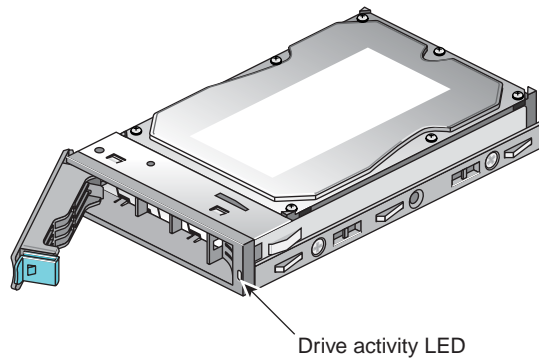


Figure 1-5 Disk Drive Sled and Indicator LED Location

SGI InfiniteStorage NEXIS 500 System Hardware Setup

Depending on the system ordered, your SGI NAS solution is installed in a rack at the SGI factory or shipped to you as a stand-alone unit. This configuration can be ordered with no rack and would need to be cabled at the operation site.

You may need to refer to the rack installation manual accompanying your system for guidelines on unpacking, moving, and placing a rack.

Important: Enclosures within a rack should always be placed in locations that keep the majority of the weight in the bottom half of the rack.

Rack Mounting Instructions

If you have purchased a NAS system that has not been pre-mounted in a rack prior to delivery, use the generic instructions in this section. Note that while this information is applicable to many industry-standard racks, the mounting rails cannot be guaranteed to fit all makes. Check with your SGI sales or service representative if you need to order additional rails. Always install the enclosures in the lowest part of the rack possible (allowing for available space).

Mounting the NAS Enclosure

Support rails used with the NAS appliance enclosure in an industry-standard rack are not the same as those used in SGI NAS racks. The mounting rails are designed for use with most industry-standard racks, but may not fit all models. Multi-pin adapters at either end of each rail allow for mounting in racks with square or round mounting holes. Note that the rack rails ship with the adapters set for mounting in square rail holes, go on to the section “Preparing the Rack and NAS Enclosure” on page 8 if your rack has this type of rail.

Resetting the Rail Pin Adapters to Use Round Mounting Holes

Use the following instructions if you need to reset the rails for use with round mounting holes:

1. Remove the multi-pin adapter by first rotating the swivel lock into the “up” position.
2. Squeeze the adapter’s pins together and extract it from the end of the rail, see Figure 1-6 on page 8.

3. Reinsert the adapter with the round pins facing out and rotate the swivel lock back down.

Important: When resetting the rail pin adapters do not reverse the top and bottom of the adapter, otherwise the “swivel lock” will not have enough room to rotate back into place. This is because the bottom part of the rail pin adapter is larger (not the same thickness).

4. Repeat for all additional rail ends that need to be used with round mounting holes.

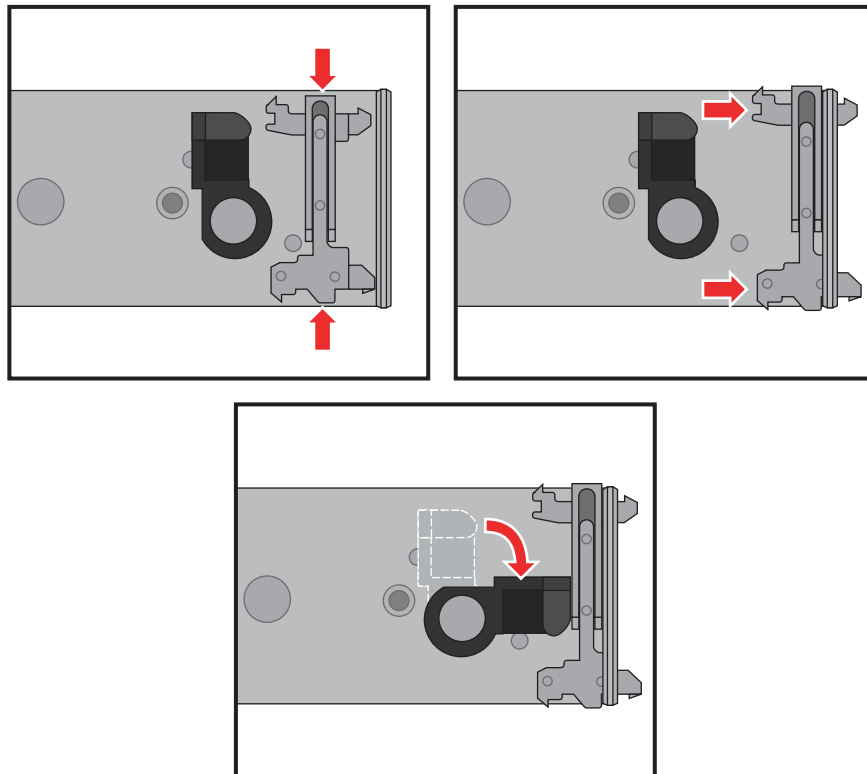


Figure 1-6 Reversing the Rail Pin Adapter

Preparing the Rack and NAS Enclosure

The following procedures and figures explain how to install the NAS appliance support rails into an industry-standard rack:

1. Make sure that the rack is in the final (operating) location and that it meets the following clearance requirements:
 - 76-cm (30 in) clearance in front of the cabinet
 - 61-cm (24 in) clearance behind the cabinet
2. Lower the stabilization feet on the rack so it does not move. Use any anti-tip extensions or other stabilization hardware available with the rack.
3. Remove the 2U NAS appliance and all contents from the shipping carton.

Mounting the Slide Rails

Position and secure the support rails in the rack using the information in the following steps and Figure 1-8 on page 12.

1. Determine the vertical position within the rack where the rails will be mounted taking into consideration the NAS appliance uses 2U of vertical space on the rack rail. The top-most mounting hole for each 1U of space is often marked by a small hole or other mark on the rail.

Important: If the rails are not mounted in holes that are vertically aligned from front to back, the rail may be damaged and the mounting will not be secure.

2. Noting the proper hole positions, squeeze the multi-pin adapter mounting pins together at one end of the slide rail and insert them into the holes in the rack's mounting rail.

Tip: When installing the rail mount into the rack, it is much easier to first insert the lower pin of the rail pin adapter in the selected hole. Then squeeze the adapter pin by pushing it down from the top to insert it in the upper selected rack rail hole.

3. Ensure that the slide rail is level and repeat the procedure at the opposite end.
4. Fully extend the rail assembly until the extension lock is revealed.
5. Press the slide extension release levers and move the slide rail in and out to check for proper functionality; if any binding is noted recheck the mounting positions of the rail.
6. Repeat these steps for the slide rail on the opposite side of the rack while ensuring that it is aligned exactly with the existing slide rail.

Installing the NAS Appliance on the Slide Rails

Use the following instructions to mount the NAS appliance on the slide rails and install it in the rack:

1. Extend both slide rails into the fully extended (locked) position.
2. The rail system is now ready to receive the NAS appliance chassis.

Important: Lifting and placing the NAS appliance chassis onto the rails is a two-person job. If needed, use an appropriate lifting device.

3. Using two people, align and insert the NAS appliance's mounting studs into the component mounting channels on the two slide rails, see Figure 1-7 for an example.

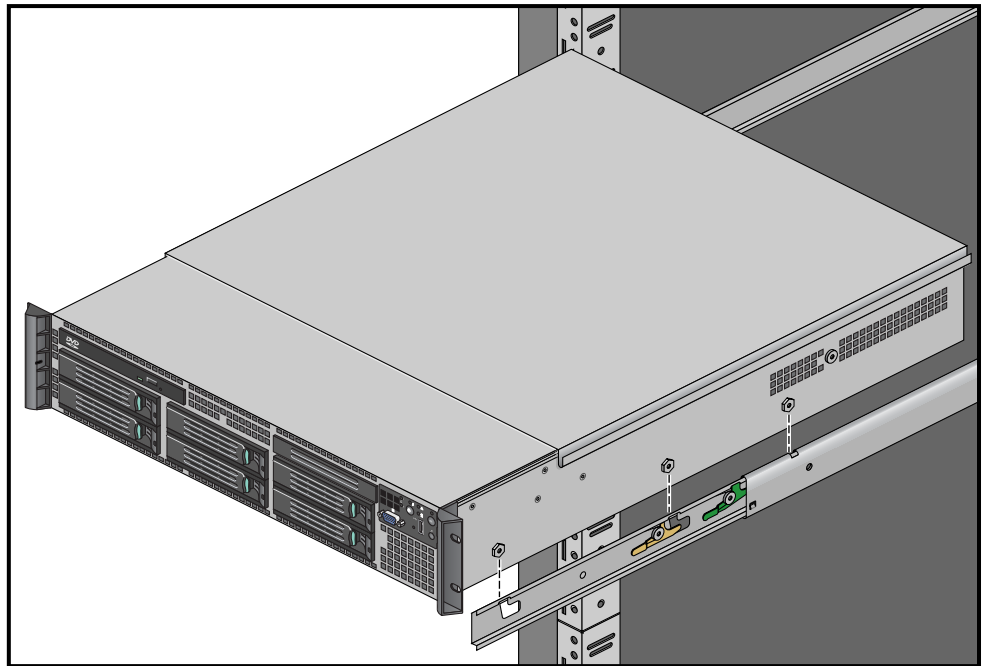


Figure 1-7 NAS Appliance Slide Rail Mounting Stud Positions

4. Place the NAS appliance's mounting studs in the mounting channels of both rails until they are fully seated.

Note: The release levers on each slide rail should pivot out of the way and then snap back into place when the mounting studs are fully seated.

5. Confirm that all the NAS appliance's mounting studs are correctly in place on the slide rails (see Figure 1-8 on page 12 for an example), before sliding the unit into the rack.
6. Press in both the left and right slide extension release levers and slowly push the NAS appliance inward until the unit is fully locked in place and the chassis handles are against the front posts.

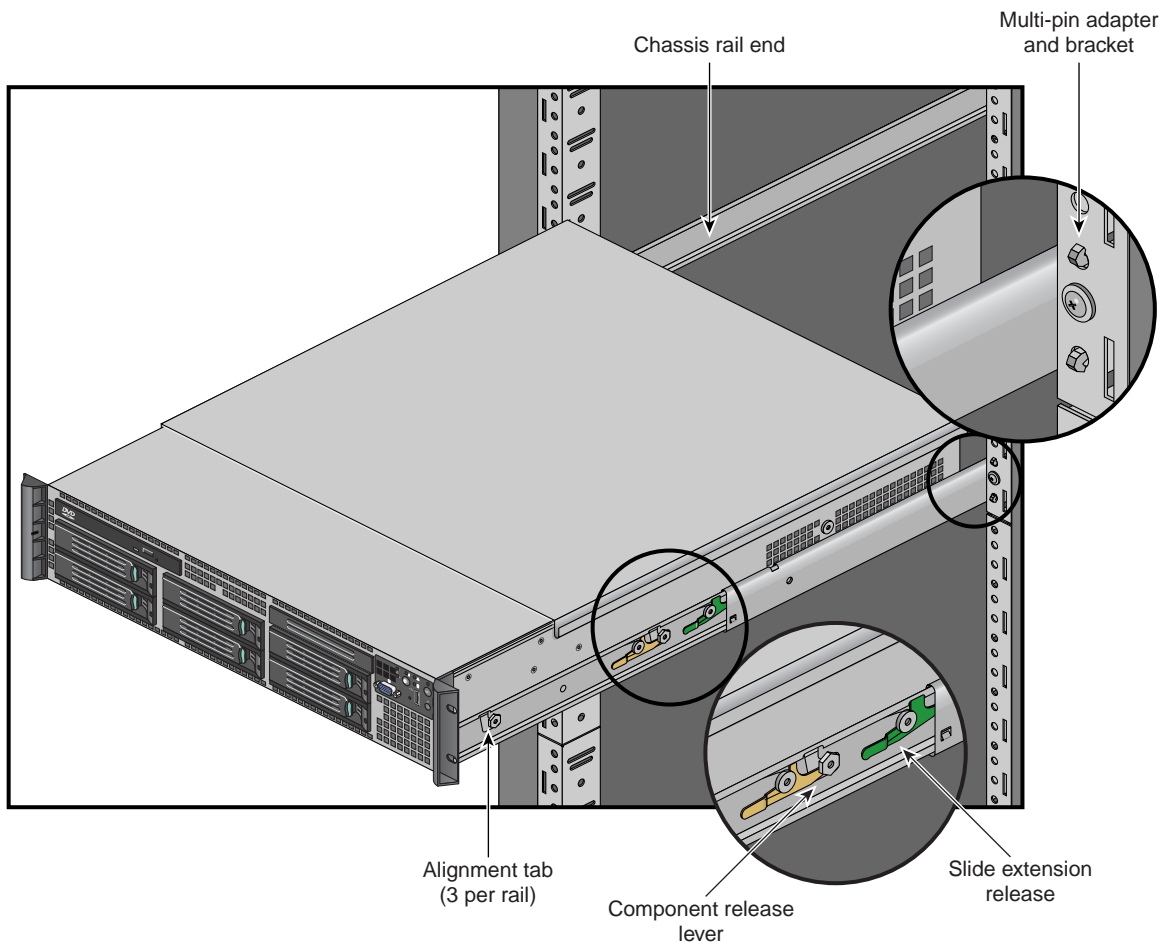


Figure 1-8 NAS Appliance Slide Rails

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:

SGI Corporate Office

1140 E. Arques Avenue

Sunnyvale, CA 94085

(650) 960-1980

<http://www.sgi.com>

North America +1 800.800.7441

Latin America +55 11.5185.2860

Europe +44 118.912.7500

Japan +81 3.5488.1811

Asia Pacific +1 650.933.3000

