

SGI® InfiniteStorage NEXIS 9000 Network-Attached Storage

Advanced NFS with IP over IB Enables the Ultimate Consolidation and Performance for Data Center Storage

Features

- Fully Integrated, preconfigured and performance tuned NEXIS 9000 delivers SAN-like performance
- Expansive Scale-up or Scale-out Solution Flexibility
- Optimized for SGI High-Performance-Computing Servers
- IP over Infiniband (IB), 10 Gigabit Ethernet (GigE), or GigE
- Fully integrated SGI InfiniteStorage Appliance Manager and administrative toolset for quick implementation
- High-performance, low-latency, and scalable file system
- Highly reliable with built-in data path redundancy
- NFS, CIFS., FTP and iSCSI protocols

SGI® InfiniteStorage NEXIS 9000 Network-Attached Storage (NAS) uses InfiniBand networking to provide the ultimate platform for extracting maximum performance from file-based storage and achieving the efficiencies of storage consolidation. The SGI InfiniteStorage NEXIS 9000 provides SAN-like performance without the cost, complexity, and management challenges.

The newest addition to the SGI InfiniteStorage NEXIS NAS family reduces CPU overhead and uses an expanded cache architecture to meet the most stringent demands for performance. With balanced throughput from disk to application, this solution allows large scientific, education, or enterprise teams to consolidate multiple departments on a single NAS platform or maximize bandwidth for demanding high-performance challenges.

The Power Boost from IPoIB

With its IP over InfiniBand (IPoIB) transport, SGI InfiniteStorage NEXIS 9000 NAS dramatically increase data throughput and enable more memory and disks to be configured into a single NAS solution. The boosted performance meets the needs of large-scale consolidation projects and greatly increases the upward scalability for any shared storage environment.

Multi-Protocol Connections

Each SGI InfiniteStorage NEXIS 9000 NAS platform can integrate multiple protocols—GigE, 10 GigE, and InfiniBand. By replacing Fibre Channel SANs with standard Ethernet NAS, SGI helps businesses and organizations lower total cost of ownership. Components are more affordable, and the networking protocols eliminate the need for expensive and scarce Fibre Channel experts in house. Any IT administrator with networking experience can now efficiently manage high-performance shared storage.

Integrated SGI Appliance Manager and Toolset

SGI NAS solutions give customers complete, ready-to-go platforms for information management. The SGI InfiniteStorage NEXIS 9000 solutions, like the other SGI NEXIS platforms, include the pre-installed SGI InfiniteStorage Appliance Manager. The common software environment eliminates the need for incremental training, and gives storage managers the tools they need for fast and easy configuration setup, granular discovery, and resolution guidance. The intuitive graphical user interface speeds day-to-day tasks, helping to reduce manageability costs.

Using the SGI InfiniteStorage Appliance Manager, administrators can perform storage setup in less than 20 minutes. Network address and file system information can be rapidly initialized and other built-in functions give administrators a convenient Web-accessible interface to monitor and manage performance, disk utilization, file system quotas, usage statistics, and other storage parameters.



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Industry-Leading File System Performance

The SGI InfiniteStorage NEXIS 9000 NAS solution benefits from the industry-leading SGI filesystem technology. Architected to scale performance and capacity of up to exabytes of addressable space, the exceptional SGI file can be applied to a wide range of hardware platforms and configurations. Both NFS and CIFS yield exceptionally competitive application performance including demanding write-to-disk operations. This value is further enhanced with SGI advancements that yield highly efficient and low-latency file system operation.

Users gain more performance while lowering CPU utilization, resulting in reductions in both power and cooling costs.

Help from the Storage Experts

SGI provides worldwide support from a team with in-depth storage expertise. For those IT organizations that prefer to support their own systems, SGI provides phone support and next-business day advanced parts exchange. SGI's highly rated onsite hardware support is also available, with a choice of response times that can meet each site's requirements.

NAS Server

- CPU Type
- System Memory
- Host Network I/O Connectivity Options

- Host Backend

InfiniteStorage NEXIS 9000

4 to 8 Intel® Itanium® Dual Core
Up to 192GB
6 Ports 1 GbE copper plus the choice of 2 to 5 total of the following cards:
1 Port DDR InfiniBand (IB), or 1 Port 10GbE optical or 4port 1 GigE (copper or optical) cards
4 to 10 ports of 4 channel SAS

Storage

- Hardware RAID
 - Maximum number of Disk Drives
 - Minimum Disk Drive Configuration
 - Disk Tray Expansion
 - System Expansion

 - RAID Setting
 - Maximum Raw Capacity
 - Maximum Usable Capacity
- 4 to 10 RAID arrays with dual redundant RAID controllers
48 to 480 SAS Drives (146GB, 300GB, 400GB or 450GB)
48 drives in 4 arrays
Up to 12 trays of 12 identical SAS drives in Base System
Up to 6 additional arrays in 2 arrays increment including 12 identical drives in each array and up to 18 expansion trays for a total of 480 drives
RAID 5
216 TB
450GB SAS: 144TB with two 4+1 RAID5 Group + 1 Hot Spare per Tray
300GB SAS: 96TB with two 4+1 RAID5Groups+ 1 Hot Spare per Tray

System and Network Protocol Support

- Management Interface
 - Operating System
 - Standard Software Features
 - Licensed Software Products
 - File Access Protocols
 - Block Access Protocols
- Appliance Manager Graphical User Interface (GUI)
Novell SUSE Linux Enterprise Server 10 • SGI Foundation Software for Linux®
NFS, XFS, Volume Manager, Appliance Manager, NDMP Agent
Data Migration Facility, Snapshot, Replicator, NDMP Backup
NFS v2, v3, CIFS, FTP, SFTP, SCP
iSCSI target

System Software

- Appliance Manager 4
 - Setup Wizard for initial system setup
 - Dynamic capacity & volume expansion
 - Management GUI presents real time resource, performance, and system alerts
 - Historical data for trending analysis
- XFS 64-bit journaled file systems

Services

- SGI offers professional storage services.
For more information, please see www.sgi.com/products/services/professional/storage

Optional Software

- SGI XVM Snapshot
 - Copy-On-Write copy at volume level
 - Up to 256 snapshots per file system
 - Fully integrated with Appliance Manager 4
- SGI Data Migration Facility (DMF)
 - Policy-based data migration utility

Dimensions

- NAS Server
- Storage Controller Tray
- Storage Expansion Tray
- Rack

Height

10U (17.38"H x 17.5"W x 32.5"D)
2U (3.43"H x 18.97"W x 21.21"D)
2U (3.43"H x 18.97"W x 21.21"D)
39U (75.8"H x 29.1"W x 43.2"D)
or Mount into SGI Server Rack (order as attached storage)

Support and Warranty

- 3 years on-site hardware repair and replacement with next business day response time
- 90 Software Warranty
- 24 X 7 support available

Temperature (Operating)

- +5°C to +35°C, altitude 5000'
- +5°C to +30°C, altitude 10000'

Electrical Power

- Input Voltage 250 VAC (187 to 257 VAC) frequency 50/60 Hz
- Rack AC Distribution 250 VAC 16A
- Receptacles Required
 - US NEMA L6-30P, 250 VAC, 30A
 - International IEC 309, 220 VAC 32A



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For more information, go to: www.sgi.com/storage

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