

SGI® InfiniteStorage 4600

High Performance RAID Storage
for Data Intensive Applications

System Highlights

- Balance Performance
- Multi-dimensional Adaptability
- Increased Connectivity
- Robust Data Protection

The flagship of SGI's storage system product line, the SGI InfiniteStorage 4600 delivers breakthrough performance, capacity and scalability to support the escalating storage and I/O demands of today's high performance computing (HPC) environment. Success often depends on the speed at which data can be acquired, processed and distributed, especially when addressing the needs of high-bandwidth programs and complex applications.

The SGI InfiniteStorage 4600 is ideal for data-intensive applications, high I/O workloads and large scale consolidation initiatives. Part of a proven architecture built on more than 25 years of storage expertise, the SGI InfiniteStorage 4600 is ideally suited to markets with high volumes of data processing and computing demands including energy, entertainment, biosciences, supercomputing, and scientific research and development.

Performance, Capacity and Flexibility

HPC applications demand the very highest bandwidth. To provide the expanded functionality and flexibility to meet those needs, SGI InfiniteStorage 4600 relies on seventh generation technology to deliver exceptional adaptability. With a choice of InfiniBand or Fibre Channel connectivity the InfiniteStorage 4600 is an ideal fit for HPC low-latency, high performance infrastructure.

The SGI InfiniteStorage 4600 system supports up to 256 drives and is compatible with other members of the InfiniteStorage 4000 family. Because drives can be mixed, customers can achieve a tiered storage environment that accommodates RAID block storage, high capacity environments, consolidation and virtualization initiatives and a variety of data management needs.

Comprehensive Storage Management

Featuring Java-based enterprise level administration software, InfiniteStorage System Manager (ISSM-EE), SGI InfiniteStorage 4600 enables enhanced configuration flexibility, custom performance tuning and a variety of replication options. The solution allows continuous access to user data during administrative tasks including expansion and maintenance of the system. Additionally SGI InfiniteStorage 4600 lowers storage management costs through centralized management of all storage systems, run-anywhere flexibility, a common interface across all operating systems and fully integrated premium features.



SGI® InfiniteStorage 4600

Rack 40U Dimensions

- Height 78", 198.1 cm
- Width 24", 60.9cm
- Depth 40", 101.6cm
- Weight 300 lb (135 kg) empty

Drive Options

- 73 GB, 15K rpm, FC
- 146 GB 15K rpm, FC
- 300 GB, 10K and 15K rpm, FC
- 400 GB 10K rpm, FC
- 500 GB, 750 GB and 1000GB, 7200 rpm, SATA
- Drives per enclosure: Minimum 4; Maximum 16
- Drives per rack: Minimum 4; Maximum 176
- Drives per system: Minimum 4; Maximum 256

Environmental (Operating) Operating Temperature

- Minimum: 10° C (50° F)
- Maximum: 40° C (104° F)

Operating Relative Humidity

- 20% to 80% (non-condensing)

Temperature Change

- 10°C/hr

Controller Specifications

- RAID Controllers Dual, active
- Cache Size 8 GB
- Host Interface 4 Gb Fiber Channel or InfiniBand
- Host Paths 16
- Partitions 2 Standard
- SATA/FC Drive Intermix Standard

Optional Software Features

- Additional partitions 4, 16, 64, 128, 256, 512

Controller Features

- RAID 0, 1, 1+0, 3, 5, 6
- Battery backup 7-day maximum
- LUNs 256 per partition, 2048 per system
- Volume group up to 30 drives (29+1) for a RAID 5 group
- Unlimited global hot spare drives
- Rack support SGI rack options and 19" industry standard racks with mount kits
- Standard redundancy RAID controllers, power supplies, cooling fans, FC drive loops
- Controller management In-band or out-band via 2 Ethernet ports
- Diagnostic interface 2 RS-232 Ports

Operating Altitude

- Minimum: -30.5m (-100 ft)
- Maximum: 3,000m (9,840 ft)

Host Management

InfiniteStorage System Manager 10.30

- Out-Band management
 - RHEL 4, 5
 - SLES 9, 10
 - Windows 2003 Server Edition
 - Windows XP Professional
 - Windows Vista
- In-Band management
 - RHEL 4, 5
 - SLES 9, 10
 - Windows 2003 Server Edition
- Software features
 - Immediate LUN availability
 - Performance Monitoring
 - Non-disruptive firmware upgrades
 - Management window provides a comprehensive view of all Total Performance 9XXX and InfiniteStorage 4XXX systems in the management domain

Optional Host Software

CXFS

- Heterogeneous shared file system for storage area networks; eliminates the need for replication of data across a network by allowing multiple users to share one version of content at Fiber Channel speeds
- Host Attachment via CXFS- Solaris™, Windows® NT, Windows® 2000, AIX, MAC OS X, 32-bit Linux®, 64-bit Linux®

DMF

- Data Lifecycle Management (Archive) policy automation software virtualizes storage devices and automates the migration and archive of studio content throughout the virtual storage pool based upon business policies

Power (40U rack)

- 200-240 VAC, 50 to 60 Hz
- NEMA L6 30 (US), IEC 309 (Intl)
- 48A Max @ 200-240 VAC per PDU

Regulatory Compliance

- Manufactured under an ISO 9000-registered system
- UL 1950 CSA 22.2 No.950 IEC 950, EN 609
- RoHS Compliant

Warranty

- 3 years hardware repair and replacement, 5x9 on-site next business day response, upgrade options to extended years, 7x24, 2 hour response

Drive Interface

- Sixteen switched-loop back end 4 Gb/s FC ports per controller

Expansion Enclosure Dimensions

- Height 5.25", 13.1cm, 3 U
- Width 17.6", 44.7cm
- Depth 23.5", 59.7cm
- Weight 2 ESM's, no drives: 21.4 lbs. (9.7 kg)
- 2 ESM's 16 drives: 56.1 lbs. (25.4 kg)

Controller Dimensions

- Height 6.9", 17.5cm
- Width 19.0", 48.3cm
- Depth 25.6", 65.1cm
- Weight 80.5 lbs. (36.5kg)



Corporate Office
1140 E. Arques Avenue
Sunnyvale, CA 94085
(650) 960-1980
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 +61 2.9448.1463

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

© 2008 SGI. All rights reserved. Features and specifications subject to change without notice. SGI, IRIX, Origin, XFS, Altix, the SGI cube and the SGI logo are registered trademarks and Innovation for Results is a trademark of SGI in the United States and/or other countries worldwide. Linux is a registered trademark of Linus Torvalds in several countries. Windows NT and Windows 2000 are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks mentioned herein are the property of their respective owners. 4095 [03.31.2008] J15366