StorTrends 2511i

2U IP-SAN Storage Appliance

Highlights

- 2U IP-SAN & NAS storage appliance with StorTrends iTX 6.0 Data Storage Software
- 12 Hot-swappable NL-SAS Drives for a variety of capacity configurations.
- Enterprise NL-SAS drives from 2TB to 20TB capacity each.
- Advanced Snapshot
- Redirect on Write (ROW)
- Up to 1022 snapshots (R/O and R/W) per volume
- Up to 16384 snapshots per box (R/O & R/W)
- Snapshot scheduling for SAN & NAS
- Rollback from any snapshot
- Random snapshot deletion
- Volume Replication
- Asynchronous
- Snapshot-assisted
- WAN-Optimization Data Services (WDS) featuring Deduplication, Encryption, and Link Acceleration
- Software RAID support: RAID levels 5, 6, 50, 60 & 10
- Network Teaming
- Storage Resource Management (SRM) with detailed reporting on usage and performance
- Enhanced Reliability with 550W Redundant Power

The StorTrends 2511i is an affordable 2U, rack-mount storage appliance that offers support for both block and file data. It merges Ethernet-based Storage Area Networks (IP-SAN) and Network Attached Storage (NAS) on a single storage platform.

The StorTrends 2511i supports iSCSI, enabling block applications like Microsoft® Exchange and Oracle® to be deployed or stored on the same server as traditional file services and storage. This system is designed with performance in mind, and includes features for enterprise-level storage management such as Advanced Snapshots, Volume Replication, Failover, WAN optimization and much more.

StorTrends block application true enterprise-level features to departmental and SMB users. The StorTrends 2511i offers twelve hot-swappable drive bays with advanced NL-SAS support, as well as highly distinguishing software features. Dual-dialect StorTrends® iTX software enables transfer of both block and file data over the existing Ethernet network, along with a host of advanced features that until now only existed in systems costing many times more than the StorTrends 2511i.

The Volume replication feature of the StorTrends 2511i allows data to be stored on multiple StorTrends appliances at multiple sites, for high availability and disaster recovery in the event of a catastrophe.

StorTrends' Advanced Snapshot capability features Redirect-on-Write(ROW) technology with near-zero performance degradation when writing or rolling back snapshots. Administrators can schedule up to 1,022 read-write and 1,022 read-only snapshots per volume, and up to 16,384 snapshots per box. A maximum of 256 volumes per appliance is supported.

Asynchronous replication bundles I/Os within snapshots and sends them to the remote server, boosting network utilization efficiency and reducing bandwidth cost. When combined with the revolutionary WAN Data Services (WDS) feature included in the Asynchronous Replication module, the system employs data deduplication, compression and link optimization to reduce data transmission and bandwidth usage by several factors over conventional replication speeds.

For improved reliability and disaster prevention, the StorTrends 2511i features a redundant power supply, as well as Smart UPS support, which allows the appliance to seamlessly switch over to UPS power in the event of a power failure and initiate a graceful shutdown.

StorTrends appliances can be managed by the integrated ManageTrends™ web-based GUI, which provides discovery and management of multiple StorTrends appliances deployed across the network.

IP-SAN 2U Storage Appliance with StorTrends® iTX Data Storage Software

System Features & Highlights:

Transfer block and file data over existing Ethernet network
Sturdy 2U rack mountable chassis
Redundant Power Supply Modules
Supports major file transfer protocols
WAN-optimization Data Service (WDS)
Network Teaming
Advanced Snapshot Capability
Volume Replication
Storage Alerts
Support for 256 volumes per appliance
Enterprise NL-SAS HDD support with hot swap
UPS Support
ADS/NIS Support

Hardware Specifications:

Form Factor
2U Chassis with 550W Redundant Power Supply
On-Board CPU
Intel Xeon Silver 4116 12-Core 2.10 GHz Processor
Memory
16GB RAM
Drive Interface
Drive & Storage Capacity
Twelve 3.5" Hot-swappable NL-SAS Drive Bays
Enterprise NL-SAS drives from 2TB to 20TB capacity each to support up to 256TB raw physical storage capacity per appliance.
Status LEDs
6 LED Indicators (Power, Unit Identification (UID), Overheat /Fan Failure, Network Activity (x2), HDD Activity)
Hard Drive LED Indicators: Green (for drive activity), Red (for drive failure)
Expansion Slots
Two PCI-Express Expansion Slots
Data Management Ports
4x Single-port Gigabit PCI-Express Ethernet Controller
Optional Dual-port 10 G Ethernet (SFP+ or Copper)
Other Connectors
4x USB 3.0 Ports
Power Specifications
550W Redundant Power Supply
AC Voltage (100 - 240V, 60-50Hz, 6.3 - 3.2 Amp)
Cooling Specifications
Three Cooling Fans with status & tachometer monitoring
Cooling Air Shroud included
Operating Environment
Operating Temperature: 10°C to 40°C
Operating Relative Humidity: 8% to 80% (non-cond.)
Physical Characteristics
Dimensions: 3.5" (89 mm) H x 17.2" (437 mm) W x 25.5" (647 mm) D
Weight: 52 lbs. (23.6 kg)

StorTrends® iTX Software Specifications:

Volume Replication
Asynchronous Snapshot-assisted
- WAN Data Services (WDS) featuring Deduplication, Encryption, and Link Acceleration
One-to-Many / Many-to-One Replication
Advanced Snapshots
Up to 1,022 read-only and 1, 022 writeable snapshots per volume with near-zero performance degradation
Redirect on Write (ROW) Snapshot Technology
Random Snapshot Deletion
Snapshot mounting for file recovery
Snapshot Scheduling
Instantaneous rollback to any snapshot
Backup
VSS-based backup support for Windows® Servers
iSCSI Tape Backup Support SQL single line recovery
Exchange single mailbox recovery
Networking
Windows® (CIFS) and Linux (NFS) file protocols
TCP/IP, FTP, HTTP, NIC teaming – Round Robin, Transmit Load
Balancing, Adaptive Load Balancing and 802.3AD link aggregation
iSNS Configuration
Up to 16 iSNS servers are supported
Compatible with MS iSNS Server v3.0 and later
iSNS client supporting Draft 22 of iSNS specification
Security
ACL security implementation supports: Local users,
iSCSI Target Configurations
iSCSI Qualified Name (iqn) format
Enable/Disable individual network ports for iSCSI traffic
iSCSI target supporting iSCSI RFC 3720
Tight iSCSI and iSNS integration
Multiple levels of authentication: Mutual CHAP, user
name/password CHAP authentication & iSCSI initiator
iSCSI Portal Tag configuration from UI
View iSCSI data and error statistics
Management
Command line interface through RS232 & SSH
Integrated web-based management
Tool for easy customization and themes
Event Management
Detailed Event Log
SNMP, SNMP Traps (up to 4 destinations)
Email Alerts
Storage Data Management
Storage Resource Management / Storage Reports
LUN (Logical Unit Number) creation & management
LUN dynamic volume expansion
Dynamic NAS volume expansion
Software RAID levels 5, 6, 50, 60 & 10
Remote Management
CLI (SSH)
UPS Support
Universal UPS Support; Supports Windows® OS/ iTX/ Linux as UPS slaves and many UPS makes & models
Applications Supported
Oracle®, SQL, Microsoft® Exchange, VMware®, etc.

Advanced Features

Advanced Snapshot Technology

AmZetta's Advanced Snapshot technology enables up to 16, 384 snapshots (R/O and R/W) at the block or file level.

It also allows for rapid creation and deletion of a snapshot, permitting faster, more secure back-ups than ever before.

Advanced Snapshot technology is focused on performance, enabling customers to mount, review and instantaneously roll back to a snapshot with near-zero performance degradation.

Snapshot-assisted Replication

This technology allows chronological replication of snapshots on a remote machine, with the ability to organize by application-based consistency groups.

In fail-over to a secondary appliance, StorTrends iTX will automatically rollback to the latest consistent snapshot.

WAN Optimization Data Services (WDS)

StorTrends utilizes several sophisticated techniques to optimize the speed of long distance WAN connections.

It uses an intelligent mix of standards-based transport protocols to overcome the inefficiencies and high latencies of TCP protocols in WANs and provide excellent bandwidth utilization. Additional performance gains are made through data reduction technologies such as compression, data deduplication and bandwidth throttling.