SANbox® 6142

SAN over WAN Connectivity

Features

- Optimizes SAN over WAN transfer to improve performance and lower costs. SmartWrite™ helps improve SAN over WAN performance by reducing the latency of WAN transfers. Productivity is increased by optimizing data transfers, sharing of devices, and data replication.
- Increases ROI by enabling SANs to grow and scale independently. Many other SAN extension solutions merge SAN fabrics, which limits the number of SAN switches and devices. The 6142 removes the limitations of a single name service.
- Easy to use and own, with advanced install and configuration wizards that allow set up in less than 15 minutes. The SANbox 6142 is very power efficient, using only 48W, and helps reduce power and cooling versus competitive products
- Improved Data Protection. The SANbox 6142, with Smart Write and FCIP support, has been tested and certified with leading replication and data management applications from EMC, HDS, Symantec/Veritas, IBM, Legato, HP, NetApp and many more.

Benefits

- QLogic's SANbox 6142 multi-protocol router provides low-cost bridging and routing services that connect SAN islands across the enterprise. This enables IT managers to improve the performance and lower the cost of data protection, replication, SAN extension and disaster recovery. The SANbox 6142 provides SAN connectivity over WANs by routing Fibre Channel over standard Ethernet, expanding and bridging SANs around the globe.

SAN Over WAN Replication and Data Migration. The 6142 provides SAN over WAN connection for data replication, migration, and disaster recovery. The 6142 features SmartWrite, QLogic's patent pending technology for accelerating replication over iSCSI, based on our unique Layer 3 SCSI routing capabilities. SmartWrite optimizes key data management and migration operations by increasing the amount of data within a packet and by reducing the total transfer time across the WAN. The 6142 sets a new price performance mark in the industry for SAN over WAN connection.

Key Advantages of the 6142 are:

- Lower WAN costs with SmartWrite
- Improved ROI by sharing SAN resources globally
- Improve data transfer performance

Leading Applications for the 6142 are:

- Disaster recovery for business continuance
- Data migration for applications
- Replication of data for backup
- Sharing SAN devices to improve utilization
- Connecting SAN islands over WANS and LANs

SAN Bridging for Improving SAN Utilization and ROI. The SANbox 6142 is the ideal tool to expand the reach and connectivity of SANs by bridging SAN fabrics. It enables SAN devices to be shared independently across SAN fabrics. By providing true SAN independence, the SANbox 6142 improves SAN scalability. The SANbox 6142 offers unparalleled ease of integration, based on the same proven QLogic ASIC technology that powers over 50 million storage products sold by leading storage vendors. IT managers can now connect SAN devices across any vendor's SAN infrastructure, improving utilization and improving SAN ROI.

Interface Specifications

Gigabit Ethernet
- Two ports: copper 1000 BaseT, RJ45
- Full duplex, auto negotiating 100/1000 Mbps

Fibre Channel
- Two optical ports, full duplex
- Auto negotiation: 2 Gbps or 1 Gbps
- N ports, NL ports, F ports, FL ports, E ports
- Class 2, 3 connectionless

Management port
- Ethernet 10/100 BaseT with RJ45
- RS-232 serial port with RJ45

iSCSI Initiator Support

Microsoft
- Windows 2000, 2003

Solaris
- SPARC 2.6, 8, 9, 10
- X86

Linux
- Red Hat AS 3, 4, 5
- SuSE Enterprise Server 8, 9, 10

VMware
- ESX Server v3.x

AIX
- AIXL 5

HP-UX
- HP-UX 9, 10

QLogic
- 4010, 4050

Apple
- OS-X (via ATTO driver)

Performance Features

Fibre Channel port speed
- 2-Gbps, full-duplex, auto negotiating for existing 2/1-Gbps devices

Ethernet/iSCSI port speed
- 1-Gbps, full-duplex, auto negotiating for existing 100/1000-Mbps devices

Maximum data rate
- 320 MBps aggregate

Input/output operations per second (IOPS)
- 35,000 aggregate

Ports per chassis
- Two FC, Two Ethernet/iSCSI
- FC: hot-pluggable, standard SFPs
- Ethernet/iSCSI: RJ45

Supported SFP types
- Shortwave (optical)
- Longwave (optical)

Cable types
- Optical (FCI): 50/62.5 micron multi-mode fiber
- 9 micron single-mode fiber
- Unshielded twisted pair (Ethernet/iSCSI)
- Cat 5e or better

Interoperability
- Compatible with FC-SW-2 complaint switches
- Management interoperability with leading SAN management applications

Protocols

SANbox 6142
- SmartWrite
- iSCSI to FCP
- FCIP
- CHAP security and authentication

Device Management

Management methods
- Wizard-based configuration tools
- Command line interface (CLI)
- SNMP and SMI-S

Access methods
- Dedicated out-of-band Ethernet 10/100 BaseT, RJ45

Diagnostics
- Power-on self-test (POST) of all functions except media modules

User interface
- LED indicators, CLI, and web utilities

Mechanical

Enclosure types/options
- Optional side-by-side rack mount kit

Dimensions
- Width: 177.8 mm (7.00") – half rack
- Height: 42.16 mm (1.66") (1U)
- Depth: 243.58 mm (9.59")

Power supply
- 48W maximum (optics included)
- 100 VAC to 240 VAC; 50 Hz to 60 Hz
- 0.5A at 100–125 VAC; 0.25A at 200–240 VAC

Cooling
- Two fans with back-to-front airflow

Environmental/Safety

Operating
- Temperature: +5C to +40C (41F to 104F)
- Humidity: 5% to 90% non-condensing
- Altitude: 0 to +10,000 ft
- Vibration: IEC 68-2, 5-500Hz, random, 0.21G rms, 10 minutes
- Shock: IEC 68-2, 4g, 11ms, 20 repetitions

Non-operating
- Temperature: -40C to +70C (-40F to 158F)
- Humidity: 5% to 93% non-condensing
- Altitude: 0 to +50,000 ft
- Vibration: IEC 68-2, 5-500Hz, random, 2.09G rms, 10 minutes
- Shock: IEC 68-3, 30g, 292 ips, 3 repetitions, 3 axis

Agency
- UL 60950 (USA)
- CSA 2.2 No. 60950 (Canada)
- EN 60950 (EC)
- CB Scheme-IEC 60950

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