

..... CISCO® PRODUCTS POWERED BY QLOGIC 5420 SN STORAGE ROUTER, 5428 SN STORAGE ROUTER

DELL™ PRODUCTS POWERED BY QLOGIC POWEREDGE™ 1650, POWEREDGE 2550, POWEREDGE 2650, POWEREDGE 1655MC, POWEREDGE 6650, POWEREDGE 7150, POWEREDGE 8450, POWERSHIELD 660F, DELL|EMC FC4500, DELL|EMC FC4700, DELL|EMC FC5300

EMC® PRODUCTS POWERED BY QLOGIC SYMMETRIX® 3000 FAMILY, SYMMETRIX 5000 FAMILY, SYMMETRIX 8000 FAMILY, CELERRA® FILE SERVER, CELERRA FILE SERVER SE5, CLARIION® CX200, CLARIION CX400, CLARIION CX600

FUJITSU PRODUCTS POWERED BY QLOGIC MA SERIES 3.5" ENTERPRISE SCSI AND FIBRE CHANNEL HARD DRIVES, HITACHI PRODUCTS POWERED BY QLOGIC DK SERIES 3.5" ENTERPRISE SCSI FIBRE CHANNEL AND HARD DRIVES

HP® PRODUCTS POWERED BY QLOGIC STORAGEWORKS™ MSA 1000, STORAGEWORKS MA8000, STORAGEWORKS EMA12000, ENTERPRISE VIRTUAL ARRAY, RAID ARRAY 4100

IBM® PRODUCTS POWERED BY QLOGIC LTO ULTRIUM TAPE DRIVE, TOTAL STORAGE™ NAS 200, TOTAL STORAGE NAS 300, ESERVER BLADE CENTER, FASTT™ 200, FASTT 500, FASTT 700, XSERIES™ SERVER 300, XSERIES SERVER 330, XSERIES SERVER 342, XSERIES SERVER 350, XSERIES SERVER 360, XSERIES SERVER 370, XSERIES SERVER 380

QUANTUM® PRODUCTS POWERED BY QLOGIC DLT 4000, DLT 7000, DLT 8000, DLT 1, SDLT 220

STORAGETEK® PRODUCTS POWERED BY QLOGIC 9840A TAPE DRIVE, 9840B TAPE DRIVE

SUN™ PRODUCTS POWERED BY QLOGIC STOREDGE™ 3900, STOREDGE 6900, STOREDGE 6900, STOREDGE T3 ARRAY, STOREDGE 9980, STOREDGE 9970, STOREDGE 9960, STOREDGE 9910, SUN FIRE™ 3800, SUN FIRE 4800, SUN FIRE 4810, SUN FIRE 6800, SUN FIRE 12K, SUN FIRE 15K, SUN ENTERPRISE™ 3500, SUN ENTERPRISE 4500, SUN ENTERPRISE 5500, SUN ENTERPRISE 6500, SUN ENTERPRISE 10000, SUNBLADE™ 100, SUNBLADE 2000, RAIDSTOR™



iSCSI

POWERED BY QLOGIC

Powered by QLogic

Last year, over 7 million products that shipped from leading storage companies like Cisco, Dell, EMC, Fujitsu, Hitachi, HP, IBM, Quantum, Sony, StorageTek and Sun were "Powered by QLogic."

That's why QLogic is widely recognized as a leader in the market for storage area networking. Recent accolades include:

<p>Member of NASDAQ 100 Index Member of S&P 500 Index <i>Barron's</i> 500 <i>Fortune's</i> 100 Fastest Growing Companies <i>Forbes</i> Best 200 Small Companies <i>Business Week</i> Hot Growth Company <i>Bloomberg</i> Top 10 High Tech Company</p>	<p><i>Business Week</i> Global 1000 <i>Business 2.0</i> 100 Fastest Growing Tech Companies <i>Network Computing</i> "Well Connected" Data Management and Storage Technology Product of the Year</p>
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Need more information on iSCSI? See our white paper at www.qlogic.com/products/iscsi_products.asp or talk to a QLogic sales representative at 800-662-4471.

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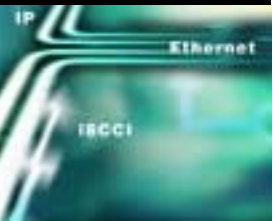
[iSCSI]



NOW YOU HAVE A CHOICE



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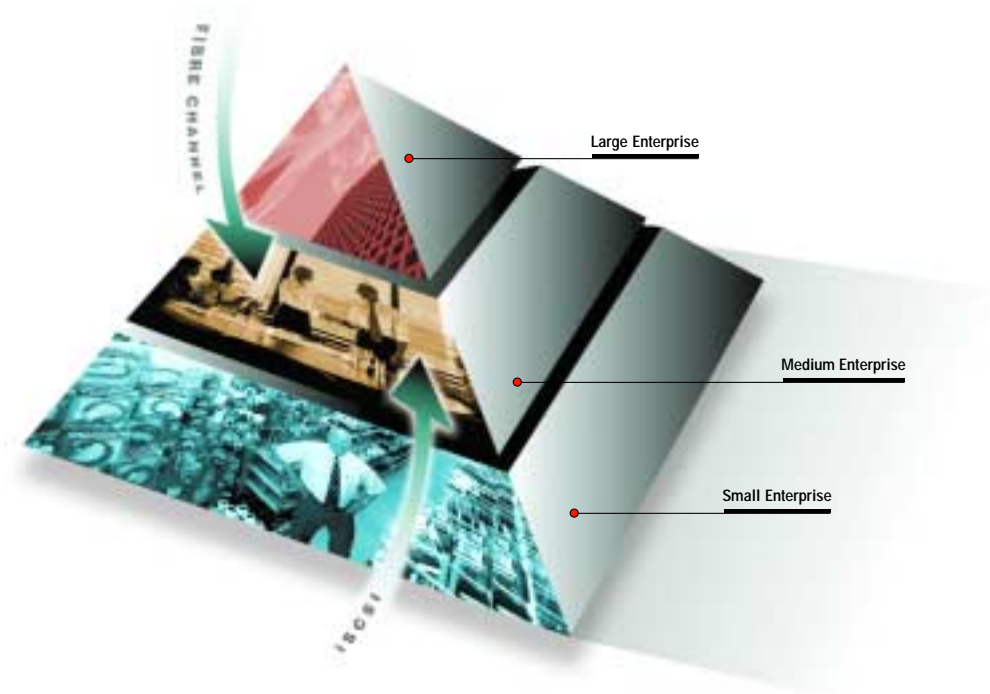
NOW YOU HAVE A CHOICE

For over 20 years networks have been used as a highly efficient way to move file-oriented data across Ethernet via the Internet Protocol (IP). In the last decade, high-bandwidth "storage area networks" (SANs) have evolved as the best way to move block data using the SCSI protocol with Fibre Channel.

iSCSI is a new protocol that enables block-oriented storage data to be carried by Ethernet networks. The promise of iSCSI is to simplify networking by merging block and file data traffic onto a single Ethernet infrastructure.

So now you have a choice of SANs. A Fibre Channel SAN, an iSCSI SAN, or a combination of both.

FC | iSCSI
SANs



iSCSI WILL EXPAND THE SAN MARKET

Both iSCSI and Fibre Channel technologies will co-exist in the foreseeable future, addressing different markets and user requirements. iSCSI will expand the SAN market by lowering the total cost of entry and management for enterprises that have not adopted Fibre Channel.

iSCSI

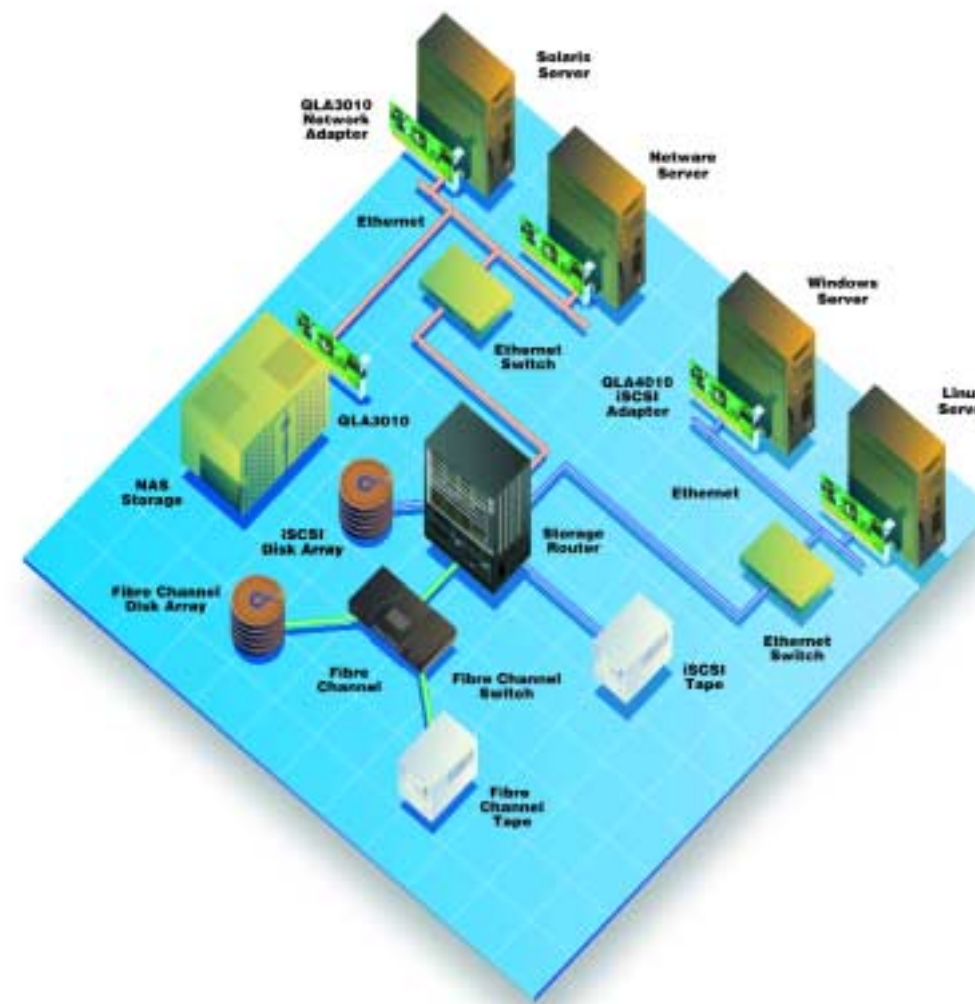
ANATOMY OF AN iSCSI SAN

Ethernet Switches Without modification, installed Ethernet switches move iSCSI data between servers with iSCSI HBAs and storage.

Storage Routers By converting Fibre Channel to iSCSI, storage routers bridge Fibre Channel servers and storage to Ethernet networks.

iSCSI Host Bus Adapters (HBAs) PCI-X adapters provide servers with a connection to iSCSI storage directly or via an Ethernet network.

iSCSI Storage Disk and tape subsystems include embedded iSCSI interfaces to a host or network.



iSCSI
Anatomy

TECHNOLOGIES AND PRODUCTS BUILT TO LAST

The Right Technologies - Offload Engines and Security

Network, iSCSI and security protocol processing are most often accomplished with a software stack that runs on a server. Burdening the host system with this protocol processing will result in starving both application performance and I/O performance. Offloading precious CPU cycles to silicon is therefore essential for a reliable, fast and cost-effective iSCSI SAN.

iSCSI SANs can use existing IP infrastructure including the Internet. However, with the ever present threat of Internet spying, security is essential for the development of global storage networks.

The most important offload engine technologies are:

- **TCP Offload Engine (TOE)** TCP offload engines accelerate the performance of TCP/IP traffic.
- **iSCSI Offload Engine (iSOE™)** iSCSI offload engines accelerate the performance of TCP/IP "plus" iSCSI traffic.
- **Security Offload Engine (SOE™)** Security offload engines accelerate the performance of IP Security (IPSec) traffic.

The Right Products - Hardware, Software & Support

IT professionals are asking for products that form complete SAN solutions including hardware, software and most importantly...expert support. A complete line of iSCSI products are available from QLogic including:



ISP™ Single Chip Processors Single-chip TOEs, iSOEs and SOEs are available to designers of servers, storage and networking systems.

SANblade™ HBAs High performance PCI-X-to-iSCSI HBAs are available for general-purpose networking and storage networking. Versions of both HBAs are available with a security processor on-board.

SANsurfer™ Software A complete suite of software for iSCSI chips and adapters including device drivers, management utilities and on-line documentation.

QLogic Support Available 24x7, expert iSCSI support is available from authorized QLogic service providers, the QLogic help desk and QLogic.com