STORAGETEK ®

BROCADE
SILKWORM 7420
MULTIPROTOCOL ROUTER

Key benefits

Optimize resources
Increase storage utilization by sharing resources across multiple SANs. Improve disaster recovery and business continuance planning through long-distance connection of remote devices over IP networks.

Increase productivity
Reduce management overhead and boost staff productivity by consolidating administrative tasks and simplifying and unifying SAN infrastructures.

Reduce costs
Connect low-cost Ethernet servers to centrally managed storage within a SAN. Reduce management costs by leveraging Ethernet infrastructure and staff expertise for distance connectivity.

Migrate or consolidate data
Migrate data between SANs or connect data or resources in previously isolated SANs. Increase efficiency by consolidating data centers and tape backup operations.

As data volumes continue to grow and storage area networks (SANs) become more vital in storage management, many organizations are looking to extend the benefits of their SANs across their enterprise. To meet this need StorageTek® offers the Brocade® Silkworm® 7420 multiprotocol router, the industry's first Fibre Channel router, and the only multiple protocol router to combine Fiber Channel routing, FCIP and iSCSI on a single platform. Now you can securely and selectively share resources across multiple SANs and between geographies, data centers, departments or functional areas.

By integrating multiple services on a central platform, the SilkWorm multiprotocol router helps provide a flexible foundation for implementing a utility computing infrastructure and efficient information lifecycle management solutions within a familiar Brocade SAN environment. It seamlessly integrates into existing SAN infrastructures, providing a single point of control and management for multiprotocol routing services. As a result, it is an ideal solution for improving operational efficiency while maximizing the value of both current and future SAN investments.

Multiple ways of connecting SANs
The SilkWorm 7420 router hosts three types of multiprotocol routing services on a port-by-port basis to give you flexibility in meeting a range of business needs. You can seamlessly connect devices through Fibre Channel to Fiber Channel routing across separate SAN islands, without the need to merge SANs or to redesign the environment. If you need long-distance connectivity, you can connect through existing IP WAN networks via FCIP tunneling without redesigning or merging connected fabrics. You can also reliably extend remote replication and backup over longer distances through a single platform hosting fabric-based applications. And you can use the iSCSI gateway to enable low-cost Ethernet servers to share storage across multiple Fibre Channel SAN fabrics.

Flexible, stable SAN management
The SilkWorm 7420 router enables you to connect devices between SAN fabrics without merging those fabrics. The result is a more secure and flexible storage networking environment. The added connectivity also helps reduce or even eliminate potential disruptions from common events such as:

Data migration. You can migrate data from older 1-gigabit-per-second storage arrays to 2-gigabit-per-second SANs without taking an outage or merging fabrics. Alternatively, you can migrate data between SANs containing storage, disk and tape devices from different vendors or between logically separate environments such as test/development SANs and production SANs.

Data consolidation. You can move data between physical locations or share a tape library fabric and consolidate tape backup without merging disk fabrics. You can also create new SAN designs with central pools and hosts on edge fabrics.

Storage and application rebalancing. You can connect devices between previously isolated SANs and enable "on-demand" provisioning of inter-SAN resources without moving equipment or running cables. You can also share connectivity of remote devices for improved disaster recovery and business continuance.

Engage the storage experts

StorageTek offers complete implementation and support services to help you maximize your SAN investment and meet a wide range of technology and business requirements. StorageTek's Professional Services include installation, education and training, support service, storage optimization, data migration, and other services.

To find out more about Professional Services offerings and other Global Services solutions, contact your StorageTek representative or visit www.storagetek.com.

Brocade SilkWorm 7420 multiprotocol router specifications

Performance

Port speed	Fibre Channel: 1.063 Gbit/sec line speed, full duplex; 2.125 Gbit/sec line speed full duplex; auto-sensing of 1 Gbit/sec and 2 Gbit/sec speeds; optionally programmable to fixed port speed; speed matching between 1 Gbit/sec and 2 Gbit/sec ports. Ethernet: 1.25 Gbit/sec
Maximum frame size	2,112-byte payload for Fibre Channel
	1,518-byte payload for Gigabit Ethernet
	2,048-byte payload for routed networks
Aggregate bandwidth	64 Gbit/sec end to end
Latency	< 40 microsec per frame for routed and virtualized traffic

Capacity

Ports per chassis	16 ports, universal Fibre Channel (E, F and EX) and Gigabit Ethernet

Compatibility

Fibre Channel protocols	Fibre Channel Standards	
	Standard	Revision
	FC-FLA	Rev. 2.7
	FC-FG	Rev. 3.5
	FC-FS	Rev. 1.7
	FC-PH	Rev. 4.3
	FC-PH-3	Rev. 9.4
	FC-SW-2	Rev. 4.9
	FCP-2	
	iSCSI	Rev. 1.0 and certain draft versions
SNMP		
Port Types	FL_Port (restricted), F_Port, E_Port and EX_Port; self-discovery based on switch type (U_Port); Gigabit Ethernet	
Fibre Channel classes of service	Class 3	
Media types	Hot-pluggable, industry-standard Small Form Factor Pluggable (SFP), LC Connector; Short-Wavelength Laser (SWL) up to 500 m (1,640 ft); Long-Wavelength Laser (LWL) up to 10 km (6.2 mi); Extended Long-Wavelength Laser (ELWL) up to 80 km (49.6 mi); distance depends on fiber optic cable and port speed	
Supported optical media types/distances		
Access		

Management

Management access	10/100 Ethernet (RJ-45), serial port
Fabric services	Simple Name Server; Registered State Change Notification (RSCN); Brocade iSCSI Gateway Service; Brocade FC-FC Routing Service; Brocade FCIP Tunnelling Service; Brocade Advanced Zoning, WEB TOOLS.
Diagnostics	POST and embedded online/offline diagnostics

Mechanical

Height	3.5 in (8.8 cm)
Depth	25.0 in (63.5 cm)
Width	16.8 in (42.7 cm)
Unit height	2u
Weight	35 lb (15.9 kg) Single Power Supply
	40 lb (18.1 kg) Dual Power Supply

Environmental

Shock	105 Gs, 2.5 ms duration, half-sine
Temperature	
Operating	+50° to +104° F (+10° to +40° C)
Non-operating	-13° to +158° F (-25° to +70° C)
Relative humidity	20% to 85%
Altitude:	
Operating	9,800 ft (3 km)
Non-operating	9,800 ft (3 km)

Power

Supported power range	Nominal: 100–120 VAC nominal, 6.0 A, single-phase Operational: 200–240 VAC, 3.0A
Frequency	47 to 63 Hz

Regulatory compliance

Certification	Canada	CSA 60950/ICES 003 Class A
	United States	UL 60950/FCC Part 15 Class A
	Japan	IEC60950/VCCI Class A ITE
	European Community	EN60950/EN55022 Level ATUV, NEMKO/EN55024
	Australia/New Zealand	AS/NZS 3548 Class A
	International	IEC 60950/CISPR 22 Class A

WORLD HEADQUARTERS

Storage Technology Corporation
One StorageTek Drive
Louisville, Colorado 80028 USA
1.800.877.9220 or 01.303.673.5151