BROCADE iSCSI GATEWAY

STORAGE AREA NETWORK

Significantly Higher SAN Efficiency

HIGHLIGHTS

- Provides a cost-effective iSCSI gateway that combines two Gigabit Ethernet ports and two 2 Gbit/sec Fibre Channel ports in a single device
- Standardizes connectivity across Ethernet environments, linking servers with a wider range of storage systems
- Improves data availability with dual gateway, active/active clustered failover, failback, and multipathing capabilities
- Provides high performance with 135 MB/sec of throughput, 9500 IOPS, and up to 100 simultaneous iSCSI connections
- Increases application deployment flexibility with compatibility for Windows, AIX, HP-UX, Linux, NetWare, and Solaris iSCSI initiators
- Enables Web-based management for rapid deployment and simplified management
- Provides traffic statistics on each storage and network interface to help identify bandwidth usage by host and target pairs

The Brocade® iSCSI Gateway enables cost-effective, easy-to-manage server connectivity to Fibre Channel storage devices—enabling remote user and interdepartmental access to these valuable resources. As a result, even the lowest-cost servers can connect to existing Storage Area Networks (SANs) and take advantage of high-performance, reliable Fibre Channel storage devices.

REDUCED OPERATIONAL COSTS

By extending the benefits of networked storage to IP-connected servers, the Brocade iSCSI Gateway helps organizations grow and consolidate their current Fibre Channel SAN infrastructures in a simple and cost-effective manner, thereby reducing operational costs.

For instance, attaching IP-connected servers to new or existing Fibre Channel SANs can significantly improve resource utilization for strategic SAN solutions such as backup, data replication, storage allocation, provisioning, and disaster recovery. In turn, storage consolidation and centralized management enable organizations to manage more storage and applications with fewer administrative resources.

The Brocade iSCSI Gateway also enables rapid deployment with minimal configuration, supporting easier growth and integration into existing Fibre Channel SAN environments. It supports a wide range of native iSCSI initiators for Windows, AIX, HP-UX, Linux, NetWare, and Solaris.

The Brocade iSCSI Gateway features a compact 1U half-rack-width design (full-rack-width design for clustered configurations). Each device provides two iSCSI ports for connecting to IP networks supporting iSCSI servers, and two 2 Gbit/sec Fibre Channel ports for connecting to Fibre Channel SANs or storage. By enabling block-based access to business-critical information, the Brocade iSCSI Gateway helps organizations rapidly add new servers and clients to their existing Fibre Channel SANs as business needs dictate.

INTELLIGENT MANAGEMENT AND MONITORING

Organizations can easily manage one or more Brocade iSCSI Gateways through a browser-based GUI that can also monitor traffic statistics on each storage and network interface to help ensure high

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performance. A secure command line interface is available with Secure Shell (SSH) for customizing or automating operations to synchronize with server applications. In addition, Simple Network Management Protocol (SNMP) support is available for configuration and health monitoring.

HIGH AVAILABILITY

The Brocade iSCSI Gateway provides two-way active/active clustering with failover and failback capabilities for business-critical environments. In addition, multiple iSCSI connections provide multipathing support from a single gateway to as many as 100 servers.

MAXIMIZING SAN INVESTMENTS

Brocade and its partners offer complete SAN solutions to meet a wide range of technology and business requirements. These solutions include education and training, support, service, and professional services to help optimize SAN investments. For more information, contact an authorized Brocade sales partner or visit www.brocade.com.

BROCADE iSCSI GATEWAY SPECIFICATIONS

Systems Architecture	
Fibre Channel ports	Two ports, 1 or 2 Gbit/sec auto-sensing speed detection
Fibre Channel port types	L_Port, N_Port, or NL_Port
Fibre Channel media types	Hot-pluggable, industry-standard Small Form-factor Pluggable (SFP), LC connector; Short-Wavelength Laser (SWL) up to 500 meters (1,640 feet); two SWL SFPs included
Gigabit Ethernet ports	Two ports, 10/100/1000 Mbit/sec auto-sensing speed detection
Gigabit media type	RJ-45, 1000BaseT
Maximum servers (iSCSI sessions/connections) per gateway	100
Maximum aggregate performance	135 MB/sec; 9500 IOPS
Management	
Management software supported	CLI (by Telnet, SSH, or console); iSCSI Gateway Manager, SNMP
Management access	Serial port (RS-232), female DB9 In-band through Gigabit Ethernet ports
Monitoring	Health monitoring and statistics (TCP/IP, SCSI, and iSCSI MIBs)
iSCSI Gateway clustering	Automatic and included
Mechanicals	
Enclosure	1U, 19-inch EIA-compliant
Size	Width: 8.4 in (21.4 cm) Height: 1.8 in (4.4 cm) Depth: 17.8 in (45.4 cm)
System weight	7.0 lb (3.2 kg)

Environmentals	
Temperature	Operating: 32° to 122°F (0° to 50°C) Non-operating: –40° to 167°F (–40° to 75°C)
Humidity	Operating: 10 to 95% non-condensing at 40° C (104° F)
Altitude	–500 ft to 10,000 ft; (–152 m to 3050 m)
Power	
Supported power range	Nominal: 100 to 250 VAC nominal, 75 Watts
Frequency	50 to 60 Hz

Regulatory Compliance		
Country/Region	**Safety**	**EMI/EMC**
Canada	CSA 60950	CISPR22 Class A
United States	UL 60950	FCC Part 15 Class A
Japan	IEC 60950	VCCI Class A ITE
European Community	EN 60950 TUV, NEMKO	EN55022 Level A EN55024
Korea	—	RRL MIC Mark
Russia	GOST	GOST
Australia/New Zealand	—	AS/NZS 3548 Class A
International	IEC 60950	CISPR 22 Class A

Standards	
Ethernet standards	IEEE 802.3.ab
Internet standards	RFC791 IP v4, RFC 793 TCP, RFC 894, IP/Ethernet, RFC 1042, IP/802, RFC 1517, RFC 792 ICMP, 950 ISSP, RFC 3720 - iSCSI, RFC 854 Telnet, SSH-2
Fibre Channel ANSI standards	FC-AL-2, FC-PLDA, FC-FLA, FC-PH-3, FCP
Management	SNMP V2, RFC 2863, RFC 2011, RFC 2012, RFC 2013, ID SCSI MIB 05, ID iSCSI MIB 09
SCSI standards	SCSI 3, SAM-2, SPC-3, SBC-2

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