FalconStor®
Defining Data Protection, Again.™

Virtual Tape Library/Single Instance Repository (VTL/SIR) Cluster Deduplication Gateways

SCALABLE HA CLUSTERED GATEWAYS FOR EXISTING SAN STORAGE

The FalconStor® Virtual Tape Library (VTL) and FalconStor® Single Instance Repository (SIR) cluster gateways enable design flexibility, scalability, high availability (HA), and integrated global deduplication for large enterprise or integrator environments with existing SAN storage. Unlike single-function grid architectures, this cluster gateway is the only solution that scales HA backup nodes and HA cluster deduplication nodes independently, offering the flexibility to add VTL gateways to handle larger data sets and tighter backup windows, or additional cluster deduplication nodes for additional performance, scalability, and data retention. Scaling to over 2PB of shared usable storage with seamless global deduplication across all nodes, FalconStor VTL/SIR gateways eliminate individual deduplication silos. This helps IT departments to meet stringent data requirements and ensure 24/7 operations and business continuity while containing the cost associated with explosive data growth.

Highlights

Global deduplication
- Integrated deduplication & compression
- Up to 95% data reduction
- Minimizes costs: power, cooling, floor space, IT resources
- Extends local disk retention for fast data recovery
- Flexible policies: Inline, post-process, concurrent, or no deduplication

8Gb FC & 1/10GbE iSCSI
- Accelerates data protection operations, reducing the backup window
- Boosts recovery performance without backup or process changes

Best-of-breed tape management
- Bridges disk and tape for physical tape creation
- Policy-based to meet retention and long-term archive requirements

Up to 2PB usable capacity
- Protects up to 40PB of original data*
- Supports certified SAN storage from Dell, EMC, HP, HDS, IBM, & others
- Scalable node expansion for growth

Mixed environments
- Enhances deduplication efficiency
- Open systems (Microsoft Windows, UNIX, Linux, NetWare)
- IBM System i (iSeries), NDMP

WAN-optimized replication
- Reduces network requirements by 90% or more
- Eliminates tape transport
- Enables tape consolidation at disaster recovery (DR) site
- Supports Fibre Channel (FC) for high-performance disaster recovery
- Optimized multi-threaded architecture for increased scalability and resilience

HA cluster architecture
- Independently scales up to 8 HA VTL nodes and 4 HA global deduplication nodes
- Deduplicates data across multiple nodes without predefined node/controller designation
- Increases performance, deduplication efficiency, & scalability

256-bit AES encryption
- Secures data in flight
- Enances corporate security through tape encryption & shredding

Symantec OpenStorage (OST) integration
- Transparent data replication
- Copy-to-tape
- Catalog consistency
- Optimized Symantec OST APIs
- Supports up to 250,000 images

Learn more about FalconStor VTL

www.falconstor.com/vtl

Specifications: FalconStor VTL/SIR Cluster Deduplication Gateways

	VTLGA700	VTLGA840	VTLCA800	VTLCA850	SIRCA830	SIRCA840	SIRCA850	SIRCA860
Physical Characteristics								
Appliance type	VTLS Gateway		VTL Cluster Gateway		SIR Cluster Gateway			
Form factor	2U	4U	2U	4U	2U	4U		
Internal hard drives	2 x 1TB NL SAS, 7.2KRPM, 3.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 2.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 3.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 2.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 3.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 2.5 in (R1)	2 x 1TB NL SAS, 7.2KRPM, 2.5 in (R1)	4 x 1TB NL SAS, 7.2KRPM, 2.5 in (R6)
Licensed usable capacity per node	Up to 68TB; upgradable to 192TB w/RAM	Up to 120TB , upgradable to 240TB w/RAM	—	—	Up to 68TB; upgradable to 192TB w/RAM	Up to 120TB	Up to 256TB	Up to 512TB
Logical storage capacity per node*	Up to 1.3PB; upgraded, up to 3.84PB	Up to 2.56PB	—	—	Up to 1.3PB; upgraded, up to 3.84PB	Up to 2.56PB	Up to 5.2PB	Up to 10.4PB
Inline sustained ingest speed*	1.6GB/s	2GB/s	1.6GB/s	2GB/s	—	—	—	—
Power supply	2 x hot-plug auto-switching 750W	4 x hot-plug auto-switching 1100W	2 x hot-plug auto-switching 750W	4 x hot-plug auto-switching 1100W	2 x hot-plug auto-switching 750W	4 x hot-plug auto-switching 1100W		
Dimensions (HxWxL)	3.4 x 17.44 x 26.8 in (8.64 x 44.31 x 68.07 cm)	6.8 x 19 x 29.5 in (17.26 x 48.24 x 75 cm)	3.4 x 17.44 x 26.8 in (8.64 x 44.31 x 68.07 cm)	6.8 x 19 x 29.5 in (17.26 x 48.24 x 75 cm)	3.4 x 17.44 x 26.8 in (8.64 x 44.31 x 68.07 cm)	6.8 x 19 x 29.5 in (17.26 x 48.24 x 75 cm)		
Weight	71.5 lb (32.5 kg)	105 lb (47.6 kg)	71.5 lb (32.5 kg)	105 lb (47.6 kg)	71.5 lb (32.5 kg)	105 lb (47.6 kg)		
Host Connections								
iSCSI support - 1 Gb/s	4 ports				—	—	—	—
iSCSI support - 10 Gb/s	Optional				—	—	—	—
8Gb FC ports	2 ports	6 ports	4 ports	6 ports	4 ports			
Symantec OST (FC)	Included				—	—	—	—
Available host expansion port interface cards: 3 x 8 Gb/s FC ports; 1 x 10 GbE port	2 full-height & 3 half-height expansion slots	4 expansion slots	1 full-height & 2 half-height expansion slots	4 expansion slots	2 full-height & 3 half-height expansion slots	5 expansion slots		
Advanced Features								
Clustered HA	—		Included		Included			
Global deduplication	Included				Included			
WAN-optimized replication w/ encryption & compression	Included				Included			
Maximum cluster configuration	—		Up to 8 nodes (4 HA pairs)		4+1 HA cluster			
Additional features	Email alerts, hosted backup, import/export, NDMP backup, Secure Tape, tape caching, tape duplication, tape shredding, tape stacking				—	—	—	—
Environmental Requirements								
Voltage	90-264 V, 47-63 Hz, autoranging							
BTU/hr	2,891	8,407	2,891	8,407	2,891	8,407		
Temperature	Operating: 50º to 95ºF (10º to 35ºC) Storage: -40º to 149ºF (-40º to 65ºC)							
Relative humidity	Operating: 20% to 80% (noncondensing) with maximum gradation of 10% per hour							
Altitude	-50 to 10,000 feet (-16 to 3,048 meters)							

All capacity and performance numbers are based on a 20:1 deduplication ratio.