FalconStor®
Defining Data Protection, Again.™

Product Specs
LARGE ENTERPRISE

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

SCALABLE HA CLUSTERED GATEWAYS FOR EXISTING SAN STORAGE

The FalconStor® Virtual Tape Library (VTL) and FalconStor® Single Instance Repository (SIR) cluster gateway appliances 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 1PB of shared usable storage with seamless global deduplication across all nodes, FalconStor VTL/SIR gateway appliances 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 and compression maximize ROI
- Up to 95% data reduction
- Minimizes costs: power, cooling, floor space, IT resources
- Extends local disk retention for fast data recovery

8Gb FC and 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 1PB usable capacity
- Protects up to 20PB of original data (based on a 20:1 deduplication ratio)
- Supports certified SAN storage from Dell, EMC, HP, HDS, IBM, and others

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

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 DR

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, and scalability

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

Symantec OpenStorage (OST) integration
- Transparent data replication
- Copy-to-tape
- Catalog consistency

Specifications: FalconStor VTL/SIR Cluster Deduplication Gateway

	VTL GA700	VTL CA800	VTL CA810	VTL CA801	VTL CA811	VTL CA850	SIR CA810	SIR CA820	SIR CA830	SIR CA840	SIR CA850
Physical Characteristics											
Appliance type	VTL-S gateway	VTL cluster gateway					SIR cluster gateway				
Form factor	2U	2U	5U	2U	5U	4U	2U	2U	2U	4U	4U
CPU per node	2 x Quad Core Intel E5620 Xeon CPU 2.40GHz, 12M cache					2 x 8 Core Intel x7560 Xeon CPU 2.26GHz, 24M cache	2 Quad Core Intel E5520 Xeon CPU, 2.4 Ghz, 12M cache			2 Quad Core Intel E7520 Xeon CPU 1.86GHz, 18M cache	4 x 8 Core Intel x7560 Xeon CPU 2.26GHz, 24M cache
Memory per node	144GB	8GB				16GB	48GB	96GB	144GB	256GB	512GB
Internal OS hard drives	2 x 1TB					2 x 300 GB	2 x 1TB			2 x 1TB	
Internal OS hard drive RAID level	1						1				
Internal disk type	SATA	SATA	SATA	SATA	SATA	SAS	SATA	SATA	SATA	SATA	SATA
Licensed usable capacity per node (Requires user-provided physical storage and at least one storage capacity license per node.)	Up to 68TB	—	—	—	—	—	Up to 23TB per node	Up to 47TB per node	Up to 70TB per node	Up to 120TB per node	Up to 256TB per node
Logical storage capacity per node (based on a 20:1 dedupe ratio)	Up to 1360 TB (1.36 PB)	—	—	—	—	—	Up to 460TB per node	Up to 940TB per node	Up to 1.4 PB per node	Up to 2.4 PB per node	Up to 5.21PB per node
Power supply	2 x hot-plug auto-switching 870W		2 x hot-plug auto-switching 1100W	2 x hot-plug auto-switching 870W	2 x hot-plug auto-switching 1100W	4 x hot-plug auto-switching 1100W	2 x hot-plug auto-switching 870W			4 x hot-plug auto-switching 1100W	
Dimensions (HxWxL)	3.4x17.44x26.8" (8.64x44.31x68.07 cm)		18.4x8.6 x28.8" (46.63x21.79 x73.18 cm)	3.4x17.44 x26.8"	18.4x8.6 x28.8"	6.8x19 x29.5" (17.26 x48.24 x75 cm)	3.4x17.44x26.8"			6.8x19x29.5"	
Weight	57.54 lbs (21.1 kg)		77.82 lbs (35.3 kg)	57.54 lbs (21.1 kg)	77.82 lbs (35.3 kg)	105 lbs (47.6 kg)	57.54 (21.1 kg)			105 lbs (47.6 kg)	105 lbs (47.6 kg)
Host Connections											
iSCSI support - 1 Gb/sec	4 ports						4 ports				
iSCSI support - 10 Gb/sec	Optional						Optional				
8Gb FC ports	4 ports	4 ports	6 ports	4 ports	6 ports	6 ports	4 ports	4 ports	4 ports	4 ports	4 ports
Symantec OST (FC)	Included						Included				
Hardware compression accelerator	—	1	1	0	0	2	—				
Host expansion port interface cards: 4 x 1GbE ports; 2 x 8Gb/sec FC ports; 1 x 10GbE port	2 slots	2 slots	3 slots	2 slots	3 slots	3 slots	2 slots				
Advanced Features											
Clustered HA	—	Included					Included				
Global deduplication, replication with encryption	Included						Included				
Maximum cluster configuration	—	Up to 8 nodes (4 HA pairs)					4+1				
Additional features	Email alerts, hosted backup, import/export, NDMP backup, replication with encryption/compression, Secure Tape, tape caching, tape duplication, tape shredding, tape stacking						—				
Environmental Requirements											
Voltage	90–264 V, 47–63 Hz, auto-ranging										
BTU/hr	2969		3412	2969	3412	8407	2969			8407	
Temperature	Operating: 50° to 95°F (10° to 35°C) Storage: -40° to 149°F (-40° to 65°C)										
Relative humidity	Operating: 20% to 80% (noncondensing) with maximum gradation of 10% per hour										
Altitude	-50 to 10,000 feet (-16 to 3048 meters)										