



OceanStor VTL6900

OceanStor VTL6900 is a brand new virtual tape library (VTL) product from Huawei. It provides users a rich set of cutting-edge, reliable, and flexible data protection functions.

The VTL6900 features a powerful emulation capability, which can virtualize all mainstream physical tape libraries and tape drives. It seamlessly integrates high-speed disk backup technologies with traditional tape backup policies, ensuring the smooth transition from tape-based to disk-based. Additionally, it provides users various value-added functions including data deduplication and remote replication, meeting users' data backup requirements while significantly narrowing the disk scale, implementing remote disaster recovery, and decreasing the requirement of network.

Highlights

Leading Performance

- Supports a maximum of 2304 TB of raw capacity (with 1690 TB of available capacity) and 31 TB/hour of backup performance.
- Be able to emulate a maximum of 256 tape libraries, 2048 tape drives, and 500,000 tapes, and is compatible with mainstream tape libraries and tape drives.
- Supports mainstream backup software.
- Supports global deduplication, eliminating cross-site redundant data and decreasing the requirement of intranet.

Flexible Configuration

- Offers multiple architectures, namely the integrated, single-node, and multi-node architectures, for different application scenarios.
- Provides diverse deduplication modes, namely the inline deduplication, post process deduplication, and non-deduplication modes, to meet customers' different requirements.
- Supports NAS, OST, and VTL interface protocols for different backup scenarios.
- Supports the Host Backup technology, eliminating the necessity of deploying backup servers and reducing space consumption and power consumption.
- Supports the disk spin-down technology to automatically spin down idle disks, dramatically reducing overall power consumption.

Overall Reliability

- In the multi-node architecture, VTL engines support the active-active mode and SIR engines support the 2+1 cluster mode for overall system reliability.
- Uses dedicated dual-controller disk arrays on the back end for data access reliability.
- Introduces RAID 6 and hot spare disks for data storage security.
- Employs the 256-bit Advanced Encryption Standard (AES) algorithm to protect data security of physical tapes.

Easy Management

- Smoothly replace physical tape libraries or tape drives without changing existing backup software and backup policies.
- Supports centralized device management using the Integrated Storage Manager (ISM).
- Supports the global topological view to monitor any engine units.
- Supports device alerting by email, ensuring that maintenance personnel can be promptly notified of device alarms.

Specifications

	Integrated		Single-Node		Multi-Node	
	VTL6900-IS	VTL6900-I	VTL6900-AIO	VTL6900-SOLO	VTL 6900-HAS	VTL6900-HA
Hardware Features						
Disk type	2 TB/4 TB SATA		4 TB NL-SAS		4 TB NL-SAS	
Max. disk slots	12		288		288	576
Max. host ports	10 x 8 Gbit/s Fibre Channel or 4 x 10GE iSCSI		10 x 8 Gbit/s Fibre Channel or 4 x 10GE iSCSI		20 x 8 Gbit/s Fibre Channel or 8 x 10GE iSCSI	
RAID Features						
RAID	RAID 0, 1, 5, 6					
Software Features						
Max. backup rate*	2.34TB/hour	1.18TB/hour	9 TB/hour	7.9 TB/hour	31 TB/hour	31 TB/hour
failover	No		No		Yes and optional	
Deduplication mode	Inline or post process	No	Inline or post process	No	Inline or post process	No
Deduplication ratio	20:1					
NAS interface	NFS/CIFS	Not supported	NFS/CIFS	Not supported	Not supported	
Max. number of virtualizable tape libraries	128		128		256	
Max. number of virtualizable tape drives	1024		1024		2048	
Max. number of virtualizable tapes	250,000		250,000		500,000	
Data compression ratio	2:1					
Optional function	IP remote replication, tape caching, tape encryption, Open Storage, Host Backup, NDMP					
Virtualizable tape library*	ADIC, Quantum, HP, IBM, SONY CSM-200, StorageTek, Spectra Logic					
Virtualizable tape drive	HP LTO-4 (compatible with the LTO-1/2/3), LTO-5; IBM LTO-4 (compatible with the LTO-1/2/3), LTO-5 Quantum SuperDLT1, SDLT320; SONY SDX-700C, SDZ-130; StorageTek T10000A, T10000B, 9840D					
Supported backup software	Symantec NetBackup, Backup Exec; CommVault Galaxy; EMC Networker; IBM TSM; BakBone NetVault; CA BrightStor Enterprise Backup Server; Atempo Time Navigator					
Physical features						
Power supply	Engine unit: AC, 90 V to 264 V, 47 Hz to 63 Hz Storage unit: AC, 100 V to 240 V, 47 Hz to 63 Hz					
Power consumption	Engine unit: < 630 W; Storage controller unit: < 650 W; Storage expansion unit: < 480 W					
Dimensions (H x W x D)	Engine unit: 2 U, 86 mm x 446 mm x 585 mm; Storage controller unit: 2 U, 86 mm x 446 mm x 582 mm; Storage expansion unit: 4 U, 175 mm x 446 mm x 412 mm					
Weight (in full configuration)	Engine unit: 32 kg; Storage controller unit: 42.48 kg; Storage expansion unit: 44.1 kg					
Operating ambient temperature	10°C to 35°C with an altitude less than 1800 meters; 10°C to 30°C with an altitude from 1800 meters to 3000 meters					
Operating ambient humidity	20% RH to 80% RH					

* Backup performance is based on the formula 1 TB = 1,000,000 MB, the number of disks used in the max performance dual node configuration > 300, and the number of disks used in a single node configuration > 80.

* The maximum backup performance of no-deduplication is inline deduplication, Maximum backup performance of VTL HAS requires two sets of clusters.

* For the full list of virtualizable tape libraries, refer to the VTL6900 Compatibility List.

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