storeway virtuo NV series

The backup of mission-critical data

Bull
atos technologies

The highway to virtualize the backup of mission-critical data

The StoreWay Virtuo NV Series of Virtual Tape Libraries (VTL) reduces the cost and streamlines the administration of data protection throughout the organisation. By consolidating and optimizing existing backup operations, StoreWay Virtuo delivers outstanding levels of performance, reliability and flexibility in both Open and Mainframe backup environments.

StoreWay Virtuo solutions integrate seamlessly into existing backup environments, protecting existing backup software investments, and delivering immediate benefits including reduced backup and restore times, improved reliability of backup and restore operations. StoreWay Virtuo provides high flexibility to implement disaster recovery, thus meeting SLAS (Service Level Agreement) requirements, in terms of data protection.

Outstanding Performance

Backing up data to disk enables high performance and more reliable data recovery than traditional magnetic tape environments.

Supporting a high number of virtual tape drives, StoreWay Virtuo enables multiple simultaneous backup and recovery operations, increasing backup & restore performance.

StoreWay Virtuo is one of the highest performing VTL on the market with a sustained performance up to 45 TB/hr through the use of innovative algorithms that reduce the number of I/O operations within the StoreWay Virtuo system. The modular architecture of StoreWay Virtuo enables scalability in both performance and capacity.

Seamless Integration

To ensure seamless integration within mainframe environments and the open world, StoreWay Virtuo is seen either as a tape library or an external drive by the backup software in the open world or as a stand-alone tape drive in the mainframe environment.

Direct access to gcos 7 and gcos 8 hosts

The Direct Access Capability to Virtuo module for gcos 7 or Tape Management System (TMS) for gcos 8 simplify the access to Virtuo since the connection between OS and Virtuo do not require any additional hardware or software.

Optimised Storage

A disk capacity optimisation feature with data reduction at a hardware level reduces storage usage.

The StoreWay Virtuo data reduction ratio can be up to 7 : 1 (7TB data stored in 1TB of disk or tape space).

The data reduction provided by StoreWay Virtuo enables more back-up data to remain on-line for fast restore and reduced storage usage. Continuous cache allocation eliminates invalid volumes from the disk cache and tape, saving storage space.

Key Points

- Outstanding Performance
- Seamless Integration with support of multiple backup environments (Open and Mainframe)
- Direct access to gcos 7 and gcos 8 hosts
- Optimised Storage Usage
- Highly Secured Backup
- Close integration with major backup applications
- Flexibility at the service of customer backup policies

Highly Secured Backup

Backup security is built into the heart of StoreWay Virtuo, operating 24x24, 365 days per year. Each component of StoreWay Virtuo is redundant allowing StoreWay Virtuo to continue to function even following disk or hardware connectivity failures.

Close integration with major backup applications

Every backup application has its own pool management, with cartridges having various statuses (eg. scratch, empty, private). StoreWay Virtuo takes it into account and backups data with maximum efficiency in terms of the backup and restores performance, as well as storage resource utilization.

An easy way to administrate your back-uped data

In order to handle and manage your data in a simple way, a powerful web interface, the Web GUI (Graphical User Interface) is provided in order to administrate and pilot all your critical data.

Flexibility at the service of your backup policies

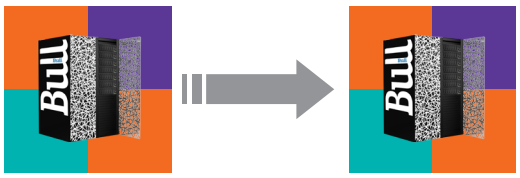
With different Disaster Recovery (DR) solutions for data protection, StoreWay Virtuo allows tape vaulting, synchronous replication over Fibre Channel for 2-site DR and asynchronous bi-directional replication over IP for multi-site DR.

1. Tape vaulting

Tape vaulting (Y copy and 3rd copy) enables StoreWay Virtuo from the production site to copy data into a remote tape library. These tapes can then be conserved in an external tape vault.

2. Synchronous replication

Standby mode using synchronous replication over Fibre Channel allows synchronized replication between StoreWay Virtuo systems at primary and secondary sites through a mirroring mechanism. If data is stored on physical tapes, it is also duplicated in two different tape libraries. Disaster Recovery contingency is supported through fail-over to either a production or secondary site. The fail-over process can be started by scripts which are tailored to the customer's DR plan.



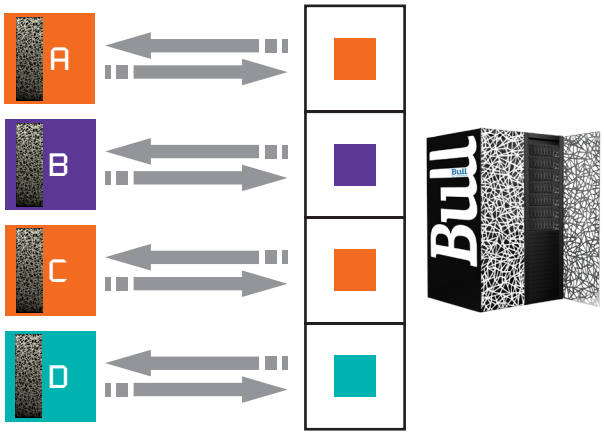
Synchronous replication of StoreWay Virtuo between primary and secondary sites

3. Asynchronous replication

Optimized Advanced DR mode (OADR) based on two-way and asynchronous replication with IP, can send to the backup site a small amount of data (after data reduction) by using the communication network between the production site and the remote backup site without the need to have a protocol converter. More, replication OADR mode is not sensitive to the communication latency between sites.

Interactive Differential Replication (IDR).

The characteristics used are the same as those of the "OADR" with the additionnal advantage of significant improvement replication performance. Indeed in this one mode of replication only non-resident data on the destination site is transferred over the network.



Asynchronous bidirectional replication between multiple sites in the OADR and IDR modes.

A comprehensive range of services

As well as its extensive product portfolio, Atos offers a complete range of services, from consultancy through system design, integration and maintenance. From the factory pre-integration of storage solution right through to project management, installation and support services, Atos provides tailored assistance to ensure rapid, well- managed implementation.

StoreWay Virtuo MODEL	R117	R110	R120	R140	A la carte
Emulated hardware	Oracle 9840 (Sun StorageTek) & LTO4 tape drives	Oracle tape drives and libraries (Sun StorageTek) 9840, L180, L700 and LTO4 tape drive			
Usable capacity (min - max.)	0.9 TB RAID 5	0.9 TB RAID 5	9.6TB - 1033 TB on 4TB NL-SAS disk drives; RAID 5 & 6	9.6TB - 1033 TB on 4TB NL-SAS disk drives; RAID 5 & 6	> 1PB
Number of virtual libraries (max.)	0	2	4	16	32
Number of virtual tape drives (max.)	10	10	128	384	512
Physical supported libraries (non restrictive list)	StorageTek L180	StorageTek L180; Overland Neo: 4000E Series and XL 80	StorageTek: L180, L700e, L1400, SL3000, SL8500, STK9310; Overland: Neo 4000E Series, Neo 8000E, Neo XL80, Quantum i2000		
Physical tape drives	STK 9840B-C-D, LTO2-LTO6	STK 9840B-C-D, LTO2-LTO6	STK 9840B-C-D, 9940B, LTO2- LTO6		
Remote library support	No	No	Optional	Optional	Yes
Hardware data reduction	Software	No	Optional: 1 - 2 boards	Optional: 2 - 4 boards	On request
Host connections, disk space and libraries	1 host 0 disk array 1 library	1 host 0 disk array 1 library	2 to 4 hosts 1 to 2 NL-SAS disk arrays, 1 to 2 libraries	2 to 8 hosts 2 to 6 NL-SAS disk arrays, 1 to 2 libraries	On request
System connectivity Open, gcos7, gcos8	gcos 7 1 FC Port (8 or 4 Gb)	1 FC port (8 or 4 Gb)	1 to 2 FC ports (8 or 4 Gb)	2 to 8 FC ports (8 or 4 Gb)	FC
Back-up software interfaces	gcos 7 « Direct Access Capability to Virtuo »	▸ **Open:** Bull StoreWay Calypso, CommVault Galaxy, CommVault Simpana, IBM iTSM, Symantec (Veritas) NetBackup ; EMC² (Legato) NetWorker, HP DataProtector, Sun (StorageTek) ACSLS, Atempo Time Navigator, other on request. ▸ **Proprietary:** Direct Access Capability to Virtuo (gcos 7), TMS (gcos 8)			
Host system connections	gcos 7	gcos 7, gcos 8, AIX, Windows, Solaris, HP-UX, Linux, Unisys			

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