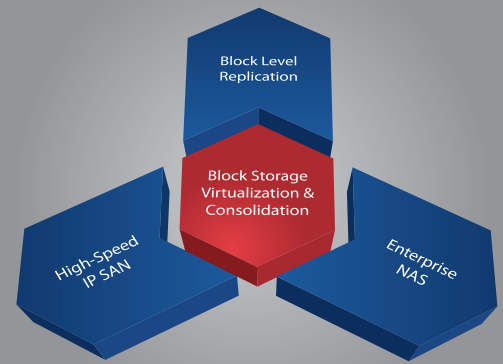


# RELvos 2.2

## RELDATA Virtualization Operating System



### SAN, NAS and WAN Replication Services from a Linearly Scalable Virtualized Storage Pool

RELDATA's Virtualization Operating System RELvos™ empowers the enterprise-class RELDATA 9000 Series of storage virtualization appliances that are used for a new generation of open, scalable and reliable unified storage solutions. Its modular architecture lets organizations easily expand both application-based (SAN) and file-based (NAS) storage capacity to meet user demand, seamlessly consolidate underused storage assets, and ensure availability of data with WAN replication. The RELvos 64-bit performance allows RELDATA Unified Storage systems to provide the performance and throughput of more expensive Fibre Channel SAN alternatives at a much lower total cost of ownership.

The RELvos Virtualization Operating System is a block-level virtualization platform that is purpose built to deliver real world unified storage services. It is designed to provide storage consolidation of NAS and SAN while virtualizing industry standard Fibre Channel, SAS, SCSI and iSCSI storage resources. RELvos provisions block data and file storage services on application requirements. It is not limited to the finite capacity of a dedicated storage system. It provides concurrent, high-speed IP SAN and NAS storage services packaged with comprehensive WAN data replication.

The RELvos embedded firmware module features SAN-level remote mirroring, incremental volume replication, unlimited SAN-level snapshots, and block based replication for complete data protection. The virtualization of Physical LUNs creates additional value with investment protection by providing unused capacity of existing Fibre Channel SAN installations as low-cost IP SAN and NAS storage towards an enterprise's distributed Ethernet infrastructure.

### RELvos High-Performance Unified Storage

Today's unified storage systems combining SAN, NAS and data protection services are based on file system virtualization technologies using a file system as the core virtualization platform. They evolved from NAS technologies enhanced with file system snapshot and replication services. Adding iSCSI SAN capability within a common management and data protection framework required the blocks to be converted to files, and block-level performance is seriously compromised. The advanced RELvos block-level storage virtualization technology does not convert iSCSI blocks to files. This means RELvos unified storage SAN performance is uniquely unlimited.

### RELvos BENEFITS:

- Highly efficient SAN storage virtualization and software RAIDs allow leveraging inexpensive and vendor-agnostic disk arrays
- Dramatic reduction of future storage extension via higher capacity utilization
- Drastic decrease in storage administration via centralized storage networking management
- Ethernet centric storage consolidation significantly reduces infrastructure cost while eliminating change management headaches
- Easy management of fast-growing, mixed file and application/block storage volumes
- High-performance iSCSI storage access bypassing file system
- Enterprise-wide file sharing based on open storage clustering
- Boot-over-IP eliminates need for direct attached storage disks
- Online storage system expansion and rapid recovery services radically reduces scheduled application downtime
- Incremental WAN data replication on SAN-level increases system reliability and data availability

## RELVOS V 2.2 HIGHLIGHTS

### Core Block-level Virtualization Services

- 64-bit, block-level virtualization platform with SAN-level volume manager
- Open, industry-standard FC, SAS, SCSI and iSCSI storage integration and consolidation
- Support for software RAID-1, -4, -5 and -6
- Striping of Virtual Volumes across multiple physical LUNs
- Auto-discovery of connected LUNs
- Unlimited point-in-time writable and read-only snapshots of volumes
- Support of snapshot clones
- Synchronized snapshots of multiple volumes
- Block-level rollback to any snapshot
- Active/active clustering with storage multipathing and fast services failover
- Integrity-protected firmware stored in a solid-state memory
- Easy-to-use web GUI provides centralized control over volumes, shares, disks, users
- Powerful intelligent Adaptive Storage Wizards and RELbot task automation provide easy way of managing Volumes, SAN and NAS

### High-Performance IP SAN Services

- Block-level iSCSI target and initiator
- Seamlessly scalable iSCSI volume provisioning up to 9 Exabyte
- Near wire-speed I/O processing of iSCSI data
- Rapid recovery by provisioning snapshots as iSCSI targets
- Disruptive and Non-Disruptive Data Migration from one set of physical LUNs to another
- Boot-over-IP-SAN enables diskless servers and workstations
- Microsoft® iSNS support for easy iSCSI LUN discovery and management
- iSCSI Multipathing (MPIO) support
- Optional IPsec encryption & CHAP authentication
- Interoperability with industry standard iSCSI HBAs, initiators and targets
- Support for iSCSI tapes and libraries

### Enterprise NAS Services

- High-performance, scalable, unlimited CIFS and NFS file shares
- Seamless resizing of mounted, on-line file systems up to 9 Exabyte
- Support of Microsoft® Active Directory and NIS/Yellow Pages
- Rapid recovery by mounting and sharing snapshots as file systems
- Quota management on group and user levels
- Support of most Microsoft® Windows® and Unix (Posix) ACL(s)
- Simultaneous access and file locking by Windows® and Linux/Unix clients
- Server-less file backup to local or remote tape or library (NDMP support)
- Share migration services for filesystem-level data migration

### High-Availability WAN Replication Services

- One-to-many incremental replication of active, online volumes over iSCSI
- Replication of file systems containing an unlimited number of files and folders
- Quick resynchronization after network outages
- Instant access to online replica volumes via clones
- One-to-many remote mirroring over iSCSI
- Vendor – agnostic file replication and migration for NAS content

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REAL UNIFIED STORAGE

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