

VERITAS Volume Replicator

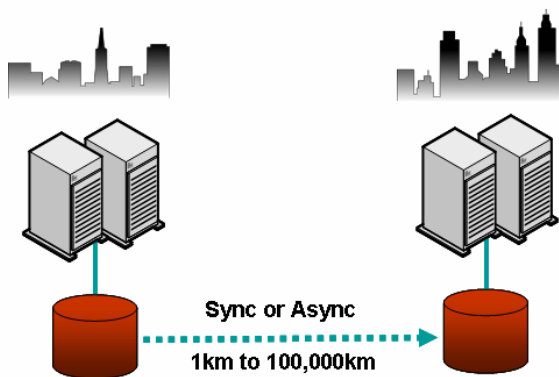
DISASTER RECOVERY FOR CRITICAL ENVIRONMENTS

Key Benefits:

- Quick recovery of databases and applications
- Uncompromised data integrity
- Scalable to multiple replication sites over any distance
- Replication of heterogeneous storage environments
- Efficient utilization of network resources
- Protection against network failures
- High availability integration for complete disaster recovery
- Easy planning and testing for reliable recovery

While causes of downtime may vary from simple network outages to catastrophic disasters, results almost always include lost revenue, productivity and user satisfaction. As an integral component of disaster recovery, real-time data replication provides data protection and availability to facilitate quick recovery of critical applications during planned or unplanned downtime.

VERITAS Volume Replicator provides robust storage-independent disaster recovery capabilities when data loss and prolonged downtime cannot be tolerated. Efficient replication of application data over IP networks enables quick, reliable recovery of critical data at remote locations for maximum business continuity. As an integral component of a complete disaster recovery framework, Volume Replicator provides the foundation for seamless application availability across sites, whether downtime is a result of disaster, site failure or scheduled maintenance.



DECREASE DOWNTIME AND DATA LOSS WITH VERITAS VOLUME REPLICATOR AND VERITAS HIGH AVAILABILITY SOLUTIONS

RELIABLE RECOVERY OF CRITICAL APPLICATIONS

Volume Replicator provides the foundation for quick recovery of critical applications and databases. Enabling block level replication over IP networks, Volume Replicator replicates data efficiently while maintaining consistency at an application transactional level for uncompromised data integrity. Organizations can be confident of data consistency from an application perspective for reliable recovery of critical applications at remote locations.

UNCOMPROMISED DATA INTEGRITY

Volume Replicator maintains data consistency whether operating in synchronous or asynchronous modes of replication. By faithfully maintaining write order fidelity within and among volumes, Volume Replicator ensures data integrity in any mode for any application environment, including all major database management platforms. Additionally, the replicated data at the secondary location can be easily accessed for data processing and disaster recovery testing to ensure that the data is always protected.

SCALABLE REPLICATION OVER ANY DISTANCE

Volume Replicator enables one-to-many and many-to-one replication over IP networks to provide disaster recovery capabilities over any distance. With support for up to 32 secondary sites per application or server, Volume Replicator offers the flexibility to implement any number of disaster recovery configurations. Volume Replicator can be used to replicate a single critical application to a single remote site or to replicate entire datacenters to multiple locations around the globe. Additionally, when using the Volume Replicator in asynchronous mode, local systems can be replicated efficiently over any distance without any performance impact to local applications.

STORAGE INDEPENDENT REPLICATION

Unlike proprietary inflexible hardware approaches, the software-based replication of Volume Replicator provides a reliable, efficient and cost-effective solution for geographically replicating data sets. Organizations can replicate their data between any major hardware platforms to eliminate vendor-specific storage limitations. For example, using Volume Replicator organizations can replicate between like arrays from the same vendor, between dissimilar arrays from the same vendor or even between storage arrays from different vendors.

EFFICIENT UTILIZATION OF NETWORK RESOURCES

Network resource constraints and bandwidth utilization can represent a major source of contention for many IT operations. Volume Replicator includes controls to reduce the impact that replication can have on network resources. Volume Replicator makes efficient use of network resources and keeps WAN traffic to a minimum by replicating only the data blocks that actually change. Through efficient asynchronous replication with robust logging capabilities, Volume Replicator allows organizations to drastically reduce the impact replication has on overall bandwidth utilization. Additionally, Volume Replicator includes bandwidth throttling capabilities on a per application basis to reduce application contention for limited network resources within an environment. Volume Replicator also provides a free tool, Volume Replicator Advisor, to assess and analyze the environment before implementing replication to ensure that the bandwidth requirements are met.

PROTECTION AGAINST NETWORK FAILURES

Volume Replicator gracefully handles temporary network outages and failures and includes robust error-handling capabilities — which is an absolute requirement for long-distance replication over wide area networks. For example, Volume Replicator can switch from synchronous to asynchronous mode on the fly to eliminate downtime under network failure scenarios. In addition, Volume Replicator provides rapid resynchronization in the event of a migration from a primary to a secondary site. This rapid, delta-based, logging and resynchronization capability means that failover and fallback can occur under all shutdown scenarios (graceful and non-graceful) without having to resend entire data sets over the network.

INTEGRATION FOR COMPLETE DISASTER RECOVERY

The full integration of Volume Replicator and VERITAS Cluster Server provides a powerful high availability and disaster recovery solution. VERITAS Cluster Server handles local availability issues. VERITAS Volume Replicator replicates critical data to a remote site, and the Global Cluster Option of Cluster Server monitors and manages the replication jobs and clusters at each site. In the event of a site failure or complete failure of applications at the primary site, Cluster Server will control the shift of replication roles to the secondary site, bring up the critical applications and redirect client traffic with a single command or mouse click.

EASY DISASTER RECOVERY TESTING

When combined with the Fire Drill capabilities of VERITAS Cluster Server, Volume Replicator enables easy disaster recovery testing for proven application recoverability. This gives organizations the ability to configure, implement and test the high availability and disaster recovery environment without disrupting users. Fire Drill capabilities allow

organizations to clone their production environment, in a space saving manner, and allow the disaster recovery solution to be fully tested. These new features reduce the need to invest in additional hardware for testing and configuration purposes while ensuring resources will remain available in the production environment.

Product Highlights

- Simple Configuration:** Easy setup of synchronous and asynchronous replication with online mode changes
- Extensive Scalability:** Scales up to 32 secondary sites
- Flexible Management** — Intuitive web, Java, or command line interface options for local or remote management
- Solution Integration:** VERITAS Cluster Server™ integration for global disaster recovery
- Replication of Database Systems:** Supports database management systems such as Oracle, DB2 and Sybase
- Heterogeneous Hardware Support:** Replicates between any major hardware platforms
- Plan and Test:** Analyze data to determine appropriate bandwidth requirements and simulate recovery scenarios
- Access to Replicated Data:** Quickly access data at remote sites for DR, backups, reporting or other purposes
- Network Outage Protection:** Persistent replication logs ensure seamless handling of network outages

SUPPORTED PLATFORMS

- AIX 5.2, 5.3
- HP-UX 11iv2
- Solaris 8, 9, 10
- Linux Red Hat, SUSE
- Also available on Windows

RELATED INFORMATION

- VERITAS Volume Replicator for *Windows* Datasheet
- VERITAS Storage Foundation Datasheet
- VERITAS Cluster Server Datasheet
- VERITAS Services Datasheet
- VERITAS Disaster Recovery Services Datasheet
- VERITAS Supported Clustering Architectures Datasheet

For more information visit:

<http://www.veritas.com/volumereplicator>