

Guaranteed Disaster Recovery

Solution Highlights

- Fully-automated DR testing
- Easily enforce RPOs and RTOs
- Prevent failover to corrupted data
- Push-button DR-site failover and failback
- Zero footprint in production environment
- Service and application aware
- Seamless integration with SANsymphony-V

SANsymphony-V Benefits:

- Up to 90% capacity utilization
- Fault tolerant, 100% uptime
- Up to 200% performance increase
- Up to 200% gain in administrative productivity
- Easily repurpose existing storage assets for disaster recovery
- Snapshots free up server hypervisor resources

SANsymphony-V plus ReliableDR give you Disaster Recovery Assurance

The DataCore SANsymphony-V storage hypervisor gives customers a solid foundation for business continuity. Able to virtualize and manage storage of any type or vendor, SANsymphony-V provides snapshots, synchronous mirroring for high availability, and asynchronous replication to remote disaster recovery sites, among many other features.

ReliableDR from VirtualSharp Software adds 100% automated disaster-recovery (DR) testing for guaranteed push-button failover and failback across clouds. Without any impact on your production environment, it works with SANsymphony-V to create application and service-aware snapshots at your DR site that are guaranteed to work, making it easy to enforce your recovery point objectives (RPO) and recovery time objectives (RTO).

Virtualization and business continuity

Wherever you are on your business continuity roadmap, server virtualization is making it more challenging. Your computing infrastructure is getting denser, so smaller incidents affect more of your users and applications. It's harder to track dependencies in service-oriented clouds: exactly which assets comprise your CRM?

As you build out your infrastructure, from backup and restore to high-availability mirroring to disaster recovery, exercising your DR plan to make sure it really works becomes a priority. The required DR testing is so costly that many companies can barely afford to do it once a year, and then only on a small subset of their application portfolio. Yet the agility that makes virtualization so attractive also makes it ever more difficult to keep production and disaster-recovery assets in sync.

Storage hypervisors and business continuity

Along the way, virtualization—extended to storage—can also make business continuity easier and less costly. DataCore's storage hypervisors make storage more efficient and agile for thousands of companies worldwide. The SANsymphony-V storage hypervisor manages all of your storage assets—any type, any vendor—as a single virtual pool of storage, with auto-tiering, thin provisioning, high-speed caching and much more.

“The time and resource costs of disaster recovery (DR) plan exercising, especially that which is supported by manual or semimanual processes, has become the most significant IT DR management (IT-DRM) pain point for many of Gartner’s clients.”

- John Morency,
 Research VP, Gartner, inc.
 (research paper G00215785)

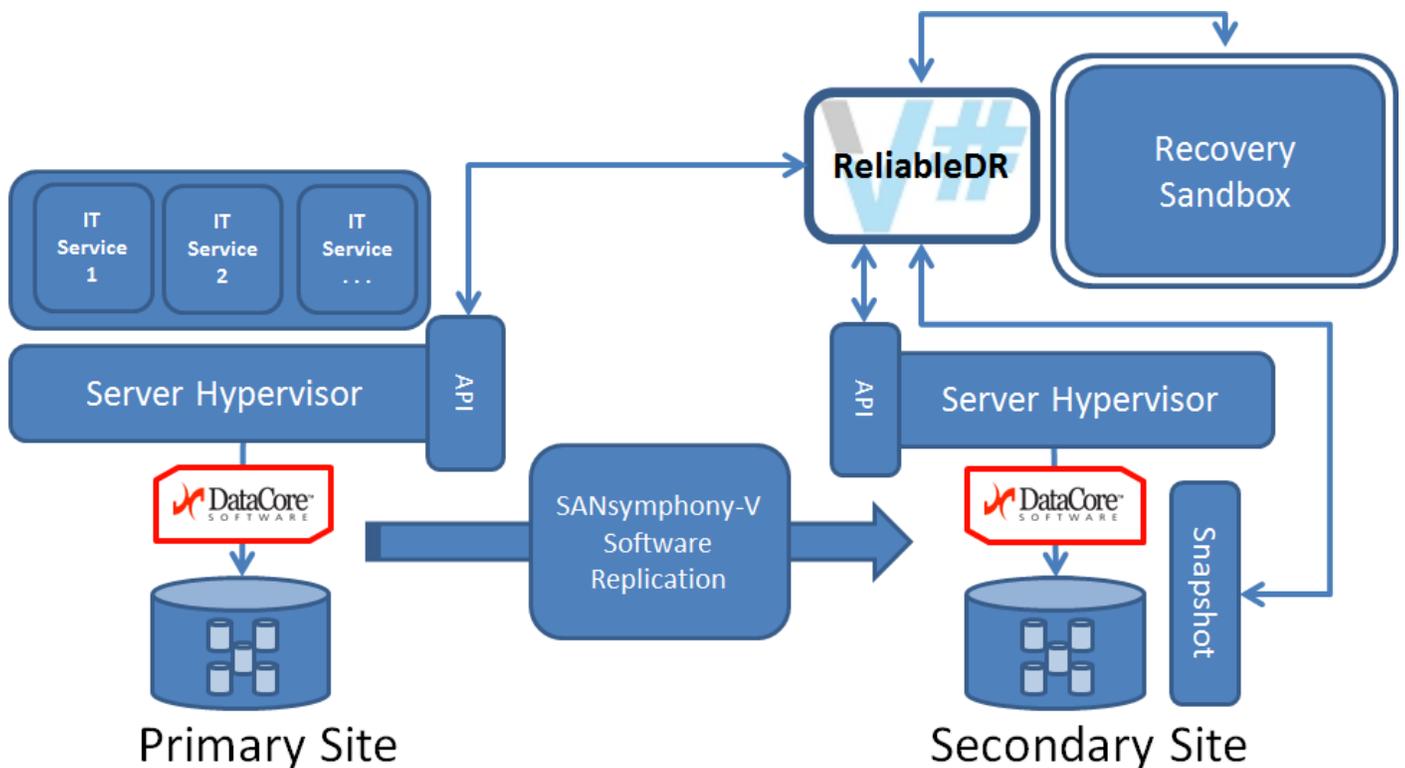
For business continuity in particular, SANsymphony-V snapshots provide recovery points, in the process freeing up server hypervisor processing power. Continuous Data Protection lets you rollback to any given I/O point within the last 48 hours. Synchronous mirroring provides local high availability with transparent failover. Asynchronous replication provides offsite duplication of snapshots for disaster recovery.

Disaster Recovery Assurance

Add ReliableDR from VirtualSharp Software to take the next step in disaster recovery management: Disaster Recovery Assurance. ReliableDR fully automates your disaster-recovery testing. Able to test standard applications and IT

services out of the box (e.g., Exchange, SharePoint, Oracle Database), ReliableDR is easily customized to test and certify any application or service, no matter how complex.

ReliableDR is a zero-footprint solution, imposing no load at all on your production site. It creates a recovery sandbox in your disaster recovery site or cloud. There, leveraging SANsymphony-V’s business continuity capabilities, ReliableDR creates Certified Recovery Points (CRP). These are fully-tested application or IT service recovery points that are known to operate correctly. If ReliableDR cannot create a CRP, it notifies administrators of the failure. Data corruption or infection can’t sneak past, and configuration drift is detected immediately.



Easy RPO/RTO enforcement, with pushbutton control

Instead of testing once a year at great expense, with ReliableDR you can enforce recovery point objectives (RPO) on the order of hours. Its testing also measures how long it takes the application or service to come back up, enforcing recovery time objectives (RTO) as well. A web-based dashboard makes compliance monitoring and reporting easy and can be integrated with other IT governance systems.

ReliableDR also manages failover and failback as well. Any application or IT service can be rolled back to a Certified Recovery Point at the DR site, or restored to production, at the push of a button.

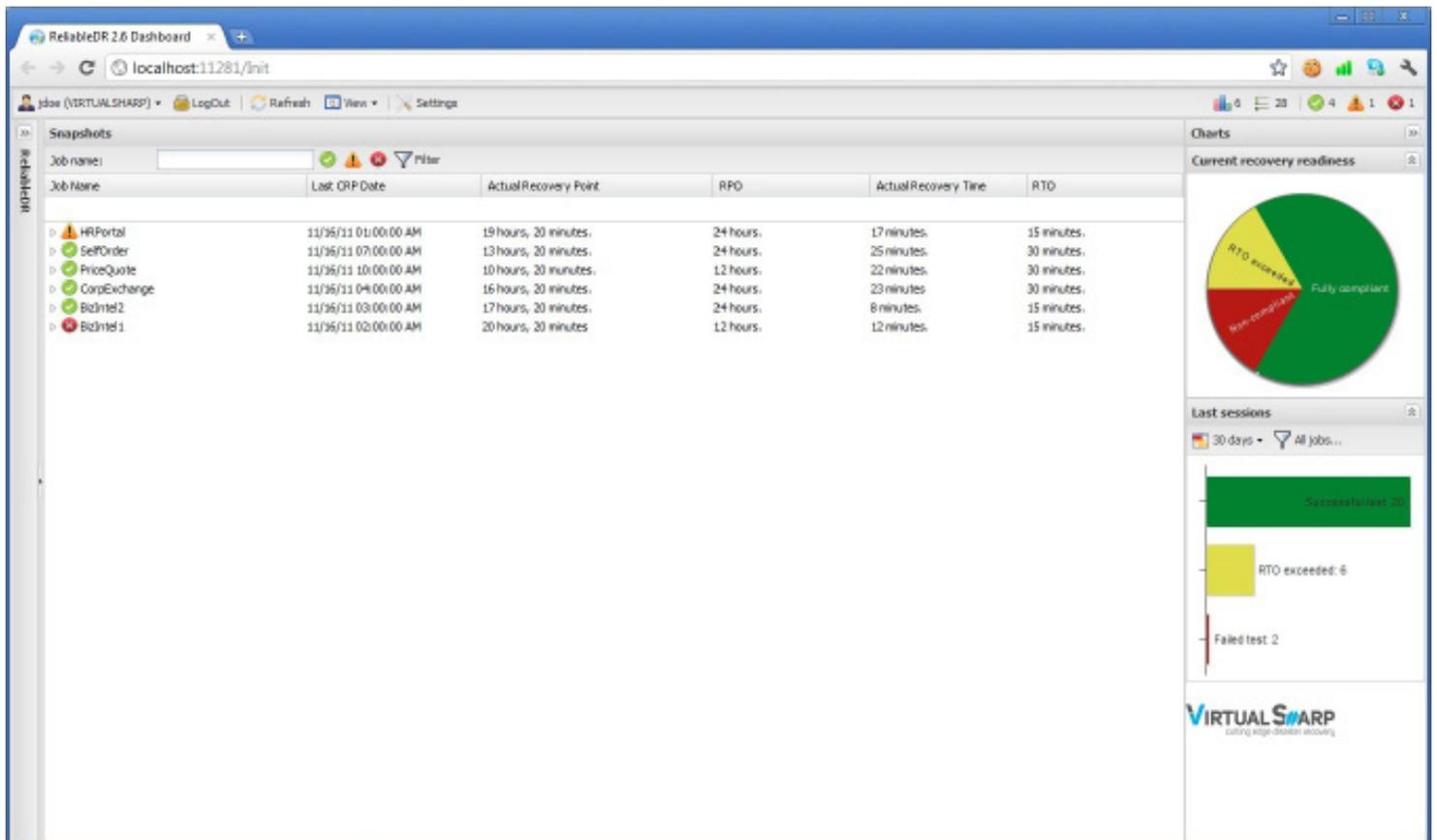
ReliableDR's operator dashboard provides an at-a-glance overview of your RPO and RTO compliance status. A service-owner dashboard accessible through mobile devices or any web browser eliminates the need to IT to generate manual reports for line of business managers, risk officers, and auditors.

 The DR exercise was successful. A Certified Recovery Point has been created, guaranteeing that this application or set of services can be rolled back to this point (RPO met) without data corruption within the recovery time specified (RTO met).

 The DR exercise was successful, so there is a valid recovery point (RPO met), but the required recovery time could not be met (RTO not met). An SNMP trap is generated and an email sent to the DR administrator.

 The DR exercise was not successful. No valid recovery point could be generated. An SNMP trap is generated and an email sent to the DR administrator.

Reliable DR also features a service owner dashboard that supports mobile devices, eliminating the need for IT to generate manual reports for line of business managers, risk officers, and auditors.



“The annual costs of DR testing can reach or exceed \$150,000 for many Gartner clients.”

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Disaster recovery that pays for itself.

When you build your ReliableDR solution on top of DataCore SANsymphony-V, you may find that Disaster Recovery Assurance pays for itself very quickly, especially given that the annual cost of disaster recovery testing can range from about \$20,000 to over \$150,000. But beyond that, by giving you maximum value from your storage assets, SANsymphony-V can cut the cost of your basic DR infrastructure. Because it's hardware and vendor-agnostic, SANsymphony-V cuts you free from vendor dependence, and its extensive feature set is available to all your storage assets.

Highlights Include:

Auto-tiering. SANsymphony-V automatically discovers other storage assets—direct-attached, NAS, and SAN—and lets you assign them to appropriate tiers. Auto-tiering then monitors I/O behavior and makes sure the most demanding applications get the best-performing storage. As storage ages, it can be moved down-tier (e.g., for snapshot storage) to make room for more advanced hardware, extending its ROI.

High-speed RAM cache. Provide a performance boost for existing storage by using up to a terabyte of RAM on the host server as a cache for all your storage assets. Get more from existing storage assets.

Thin provisioning. Dramatically boost utilization by avoiding the need for physical over-provisioning, so storage goes farther.

Often, DataCore customers discover that with these efficiencies, they need purchase far less new storage hardware to make the leap to full disaster recovery. Combined with ReliableDR, DataCore SANsymphony-V can give you enterprise-class disaster recovery for ten servers, or thousands.

More Information

For more information on ReliableDR from VirtualSharp Software, visit: www.virtualsharp.com

For more information on the DataCore SANsymphony-V storage hypervisor, visit www.datacore.com

About VirtualSharp Software

Recently named a Cool Vendor in Business Continuity and IT Disaster Recovery Management by Gartner, VirtualSharp Software was founded in 2010 to address the new Disaster Recovery needs of the cloud era. An elite-level VMware Technology Alliance Partner, VirtualSharp develops next generation Disaster Recovery software for private and public clouds that continuously and automatically certifies the recoverability of services running in the cloud. VirtualSharp's software enables unparalleled levels of resiliency for virtual IT infrastructures and full alignment between IT Disaster Recovery and Corporate Business Continuity Planning. For more information, visit: <http://www.virtualsharp.com>.

About DataCore Software

DataCore Software develops storage virtualization software leveraged in virtual and physical IT environments to obtain high availability, fast performance and maximum utilization from storage. DataCore's SANsymphony-V storage hypervisor is a comprehensive, yet hardware-independent solution which fundamentally changes the economics of provisioning, replicating and protecting storage for large enterprises and small to midsize businesses.