

WAN-optimized Replication for Disaster Recovery

RepliGrid™



At a Glance

- WAN-optimized asynchronous replication
- Secure long-term data solution for DR
- Remote backup image copy services
- Hands-free management

Overview

The NEC HYDRAsstor RepliGrid™ delivers highly efficient and reliable WAN-optimized data replication for HYDRAsstor storage platform. RepliGrid enables disaster recovery between data centers, as well as backup system consolidation between the data center and remote offices. HYDRAsstor RepliGrid reduces network traffic and maximizes data reliability by transferring only unique compressed data chunks to the remote location for a speedy synchronization. RepliGrid supports replication across both HYDRAsstor HS8 grid system and HYDRAsstor HS-SMB Appliances, ensuring maximum flexibility and a comprehensive DR solution. It also offers in-flight encryption capability to protect data from unauthorized access during transfer across remote sites.

Solution

WAN-optimized Asynchronous Replication

HYDRAsstor RepliGrid delivers cost-effective DR solution with optimized data transfer between HYDRAsstor systems. Leveraging HYDRAsstor DataRedux™ inline deduplication technology, RepliGrid sends only unique compressed deduplicated data chunks across the network. RepliGrid supports the ability to establish multiple independent HYDRAsstor systems that can share information with one another via asynchronous replication. Combining HYDRAsstor HS8 grid system and HS-SMB Appliances across the network, RepliGrid ensures maximum flexibility and a comprehensive DR solution and backup system consolidation between primary data center and secondary data centre, remote offices and Cloud.

Secure Long-term Data Solution for DR

RepliGrid WAN-optimized replication maintains the attributes of underlying data, as well as offers the ability to protect the data from unauthorized access during transfer. With in-flight encryption, RepliGrid offers the ability to automatically encrypt the data at originating site, and

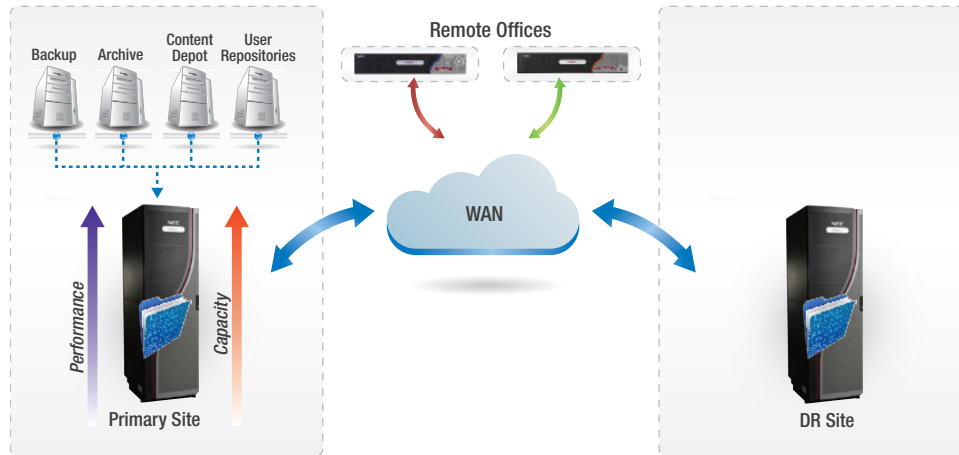
decrypt it at the destination site. In addition, all replica data retains the attributes of the source data, so data that is encrypted with HYDRAsstor Encryption at Rest or protected with HYDRALock™ WORM retains those attributes and protection levels for the replica. Leveraging Distributed Resilient Data™ (DRD) erasure-coding technology, RepliGrid supports different data protection levels between source and replica filesystems.

Remote Backup Image Copy Services

Using HYDRAsstor OpenStorage Optimized Copy in conjunction with RepliGrid, HYDRAsstor simplifies backup image copy services between the primary site, DR site and Cloud. Leveraging the WAN-optimized replication features of RepliGrid, Optimized Copy automates the copy process and updates the backup software catalog, while minimizing required bandwidth and simplifying administration workflows. Multiple HYDRAsstor systems can leverage the Optimized Copy capability to aggregate disaster recovery protection to create a single scalable system that improves overall productivity and efficiency. OptimizedCopy functionality is available via HYDRAsstor OpenStorage Suite.

Hands-free Simplified Management

RepliGrid offers hands-free management of replication. The replication process can be scheduled for the most opportune time to ensure data availability and maximum performance while minimizing disruption to normal operations. HYDRAsstor provides web-based GUI administration console and Command Line Interface via SSH and RSH to maintain the system and replication easily. RepliGrid supports short cycle replication synchronization schedule, delivering near-synchronous replication.



HYDRAsstor RepliGrid Features and Benefits

| | Features | Benefits |
|---|---|--|
| WAN-Optimized Asynchronous Replication | Transfers only unique compressed deduplicated data chunks across the unified platform. | Reduces network and storage costs with inline global deduplication technology. |
| Secure long-term data solution for DR | Encrypts transferred data and retains attributes and protection level for the replica. | Protects transferred data from unauthorized access and assures policy compliance at remote site. |
| Remote Backup Image Copy Services | Automates the copy process and updates the backup catalog, using HYDRAsstor OpenStorage Optimized Copy. | Simplifies data management between the primary site and DR site with automatic copy services and DR. |
| Hands-Free Simplified Management | Schedules replication jobs and starts automatically, based on Client's configuration. | Provides hands-free management to streamline DR and reduce administrative overhead. |

HYDRAsstor: Scale-out Global Deduplication Storage for Backup and Archive

HYDRAsstor is NEC's massively scalable distributed grid storage platform, built to modernize storage infrastructure to support longterm data retention. HYDRAsstor has been architected to maximize capacity optimization and modular scalability, without the complexity and inherent limitations of legacy storage solutions such as expensive inefficient primary storage, limited scale-up NAS, virtual or physical tape, or specialized single-purpose backup or archive appliances. Pioneered by NEC, a Global 500 company and worldwide technology leader, HYDRAsstor provides user configurable, integrated data management services to streamline storage management.

HYDRAsstor Features and Benefits

- Lower storage capacity consumption by up to 95% or more with inline global data deduplication.
- Reduce network bandwidth by up to 250:1 or greater, enabling cost-effective disaster recovery
- Shrink backup windows by aggregating data protection resources
- Minimize storage management costs by automating tasks and provisioning



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