

Optica's zVT with NEC HYDRAstor for IBM z Systems Customers

Mainframe Virtual Tape with Optimized Disk Backup



At a Glance

- Improves performance for backup and recovery
- Easy to install, implement and manage
- Transparent to the backup application and the host
- Reduces operational expenses associated with physical tape
- Minimizes errors inherent with physical tape

Overview

Optica Technologies and NEC have partnered to offer a high performance mainframe virtual tape solution combining zVT, Optica's mainframe virtual tape appliance, with HYDRAstor, NEC's scalable deduplication storage technology. zVT with HYDRAstor is perfect for customers looking to replace 3490/3590 physical tape or older virtual tape products. zVT with HYDRAstor is available with high-availability and high data resiliency features like multi-node support that mainframe users require along with WAN-optimized replication that reduces network bandwidth requirements and operational costs for disaster recovery.

Solution

Improves performance for backup and recovery

zVT with HYDRAstor is built on a scalable architecture that eliminates storage side bottlenecks for backup and restore by parallelizing I/O for multiple streams. In addition, zVT with HYDRAstor eliminates the need to rewind or unload physical tape cartridges after completing read/write operations, thereby saving time and resources.

Easy to install, implement and manage

zVT with HYDRAstor is easy to install, implement and manage. Use the zVT graphical user interface (GUI) to define each virtual tape device and establish a mount point for HYDRAstor. Then begin applying policies. Policies can be managed flexibly from the zVT GUI or the

mainframe itself. zVT with HYDRAstor is compatible with all major backup applications and supports z/OS, z/VM and z/VSE operating systems.

zVT's policy manager makes it easy to assign virtual tape characteristics once they are assigned to a mount point on HYDRAstor. The policy manager allows the user to set VOLSER ranges, segment tapes by group and define label and media types for the tapes being emulated. zVT can also be managed directly from the mainframe via a command line interface.

Transparent to the backup application and the host

zVT with HYDRAstor customers can use the same backup applications and processes that are currently utilized, so there is no operational impact. This makes the transition from physical tape to a capacity-optimized disk based solution easy. In addition, customers gain the benefits of high-speed disk for improved performance, efficiency and flexibility to adapt to a changing business environment.

Reduces operational expenses associated with physical tape

Traditional tape systems consume large amounts of floor space and power. They utilize thousands of physical tape cartridges that require manual operations that are expensive and error-prone. zVT with HYDRAstor virtualizes your physical tape environment while reducing the footprint, power consumption and operational costs.

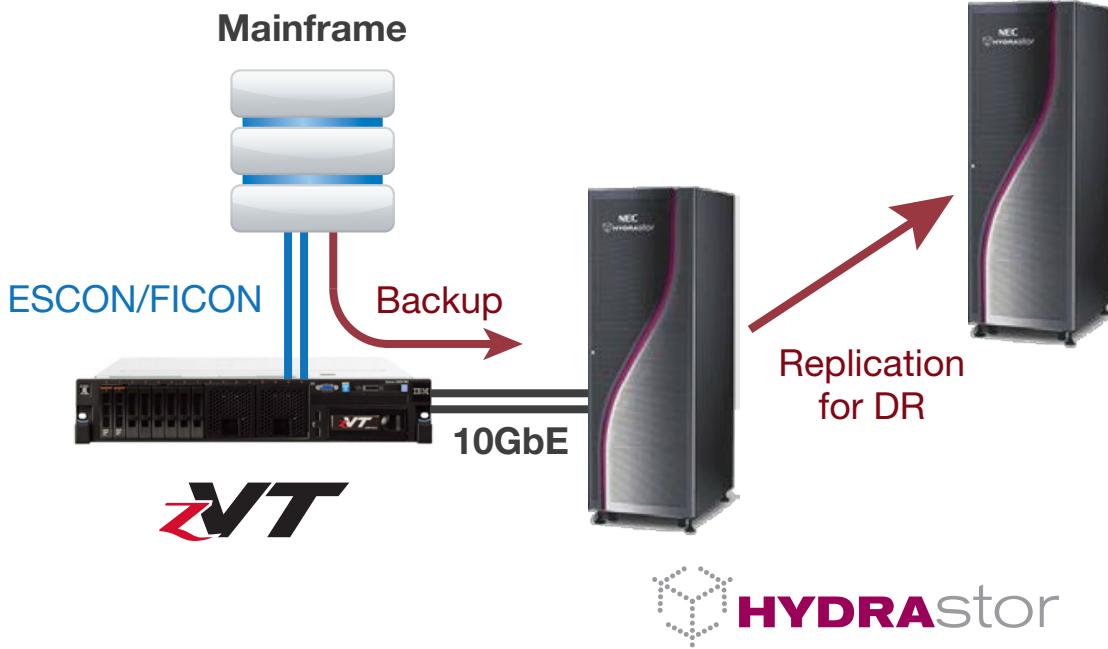
zVT can scale from 16 to 256 virtual tape drives per appliance with support for an unlimited number of virtual tape volumes and backend storage for maximum flexibility. zVT can also be deployed with multi-node support (active/active failover) for additional resiliency and scalability.

HYDRAstor can be deployed in a single node configuration and expand modularly up to 165 nodes, while offering inline global deduplication and compression across the entire system, regardless of size. In addition, HYDRAstor offers WAN-optimized replication support to reduce network cost while eliminating the physical security risk of manual packaging and shipping of physical tape media with automated offsite data backup for DR.

Minimizes Errors Inherent with Physical Tape

Physical tape operations generate more backup/restore failures than disk based storage due to mechanical errors and lack of data redundancy. zVT with HYDRAstor protects user data across the entire system with block level CRC checking and Distributed Resilient Data™ (DRD) erasure-coded data protection. DRD can tolerate up to 6 concurrent disk or node failures, while maintaining normal I/O and minimizing operational impact. HYDRAstor's grid architecture delivers high availability with no single point of failure, including front-end failover, back-end node level resiliency, and dual-switch interconnect.

HYDRAstor / zVT Backup & DR Solution



Corporate Headquarters (Japan)
NEC Corporation
nec.com

North America (USA & Canada)
NEC Corporation of America
necam.com

NEC Enterprise Solutions
NEC Europe Ltd
nec-enterprise.com

APAC
NEC Asia Pacific Pte Ltd
sg.nec.com

Latin America
NEC Latin America
lasc.necam.com

About NEC Corporation of America: Headquartered in Irving, Texas, NEC Corporation of America is a leading technology integrator providing solutions that improve the way people work and communicate. NEC delivers integrated Solutions for Society that are aligned with our customers' priorities to create new value for people, businesses and society, with a special focus on safety, security and efficiency. We deliver one of the industry's strongest and most innovative portfolios of communications, analytics, security, biometrics and technology solutions that unleash customers' productivity potential. Through these solutions, NEC combines its best-in-class solutions and technology, and leverages a robust partner ecosystem to solve today's most complex business problems. NEC Corporation of America is a wholly-owned subsidiary of NEC Corporation, a global technology leader with a presence in 140 countries and \$29.5 billion in revenues. For more information, visit necam.com.