

Virtual Tape Library Solutions by Hitachi Data Systems

Demands for data availability are on the rise, and increasing data volume is pushing enterprise data center infrastructures beyond their capabilities. Virtual Tape Library Solutions by Hitachi Data Systems, now with clustering capabilities, make it easier to push back.

The Benefits of Tape. The Performance and Reliability of Disk.

Disk-based data protection has emerged as a sure way to improve backup and recovery operations. But adding disk to the data protection infrastructure can be expensive. As data volumes expand, the required capital expenditures grow dramatically. In just three years, most organizations will need over 12 times their current data protection capacity in their production environments.

Virtual Tape Library Solutions by Hitachi Data Systems comprise high-performance, high availability Hitachi storage systems; the Hitachi Data Systems edition of IBM ProtecTIER®, the industry leading data de-duplication software; plus planning and implementation services. The enterprise-class Virtual Tape Library Solutions deliver the speed, reliability and availability of disk-to-disk backup operations, which emulate tape libraries, but enable existing backup applications to use disk as their backup medium. Employ these solutions to:

- Increase capacity with less risk to data integrity.
- Obtain the benefits of disk without altering existing operations.

- Dramatically improve backup and recovery times.
- Increase backup reliability.
- Improve data center productivity.

Powered by the Hitachi Data Systems Edition of IBM ProtecTIER®

Working seamlessly with major computer platforms and operating systems, including UNIX and Microsoft® Windows, the Virtual Tape Library Solutions feature industry leading data de-duplication that can provide up to a 25 times reduction in storage capacity demands. IBM ProtecTIER enables a Virtual Tape Library Solution for open systems, powered by HyperFactor® advanced data de-duplication technology for capacity optimization. And, with added clustering capabilities, the Hitachi Data Systems edition of IBM ProtecTIER supports double the protection and throughput up to 1000MB/sec.

The Hitachi Data Systems edition of IBM ProtecTIER is the first enterprise-class disk-based data protection technology that enables you to increase the capacity of disk systems by up to 25 times or more. Powered by the breakthrough HyperFactor technology, the Hitachi Data Systems edition of IBM

How Does a Virtual Tape Library Solution Work?

The combination of software, server and storage creates a Virtual Tape Library Solution that appears to the backup application as one or many real tape libraries. There is no need to change existing backup policies, practices or procedures. The backup application accesses drives, robotics and cartridges just as it would a physical tape library.

Reducing Storage Needs

- Typical virtual tape library solutions: 2-to-1 data compression
- Virtual Tape Library Solutions by Hitachi Data Systems, powered by the Hitachi Data Systems edition of IBM ProtecTIER: up to 25-to-1 (or better) data compression

ProtecTIER eliminates redundant data, radically reducing the amount and cost of physical storage required. This disk-based solution costs less than a tape-based solution, without compromising performance, capacity or data integrity.

An industry proven platform, the Hitachi Data Systems edition of IBM ProtecTIER data de-duplication VTL platform is available as a single- or dual-node cluster. When configured as a dual-node cluster, the Hitachi Data Systems edition of IBM ProtecTIER software offers enterprise-class in-line data de-duplication performance and scalability while providing high availability options. Both clustered nodes share one repository and are powered by the patented HyperFactor technology — enabling high performance regardless of repository size.

Need Help Meeting Your Backup and Recovery Objectives? We're at Your Service.

The Hitachi Data Systems Global Solution Services team combines advanced virtual tape library technology with assessment, planning, design and implementation services in custom solutions that allow you to balance increasing volumes of data with shrinking IT budgets and meet recovery point and recovery time objectives.

The Hitachi Data Systems Edition of IBM ProtecTIER™ — Server Specifications and Requirements

The Hitachi Data Systems edition of IBM ProtecTIER runs on a standard Linux server with the following minimum configuration:

- Four 64-bit hex core CPU
- Minimum of 32GB memory
- Two Emulex front end host bus adapters (HBAs): LPe110002
- Two QLogic back end HBAs: QLE2462
- Six Ethernet NIC
- Two internal hard disk 146GB (SAS or Fibre Channel)
- Two power supplies
- Maximum number of total ports: 16
- Maximum number of virtual tape libraries: 32
- Maximum number of virtual tape drives: 512
- Maximum number of virtual cartridges: 16,384

Note: Please consult your Hitachi Data Systems Sales Representative or your Reseller Representative for the latest Hitachi Data Systems edition of IBM ProtecTIER specifications and requirements.

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