IBM TS7650G ProtecTIER Deduplication Gateway

Powerful data deduplication for improved backup and disaster-recovery operations

IBM® TS7650G ProtecTIER® Deduplication Gateway is designed to meet the disk-based data protection needs of the enterprise data center while enabling significant infrastructure cost reductions. The solution offers industry-leading inline deduplication performance and scalability up to 1 petabyte (PB) of physical storage capacity per system, and can provide up to 25 PB or more backup storage capacity. Combined with IBM or third-party storage, TS7650G ProtecTIER Deduplication Gateway provides a powerful disk-based repository to improve the performance, retention and availability of backup and archive data in a small footprint for energy and cost efficiency.

TS7650G ProtecTIER Deduplication Gateway provides:

- Up to 2,950 megabytes per second (MB/s) or more—10.6 terabytes per hour (TB/hr.)—virtual tape library (VTL) sustained inline deduplication backup performance
- Up to 3,800 MB/s or more (13.6 TB/hr.) VTL sustained recovery performance
- Capacity that easily scales to provide up to 25 PB or more backup storage
- Non-hash-based approach that supports data integrity by avoiding the possibility of data loss due to a hash collision
- Inline approach that ensures that backup windows are met and existing operations are not disrupted
- Small (2U) footprint to minimize energy costs

Highlights

- Improve backup and recovery and simplify disaster-recovery operations
- Lower operational costs and energy usage
- Manage more data with less infrastructure
- Minimize deployment and management time
• File System Interface (FSI) for network-attached storage (NAS)-based backup environments, support for both Network File System (NFS) v3 interface for UNIX clients and Common Internet File System (CIFS) for Microsoft Windows-based environments
• Tested and proven performance in thousands of production environments around the globe since 2005

The ProtecTIER native replication technology enables the automated electronic replication of backup data between one or more data centers, remote office and off-site storage locations for enhanced disaster recovery and business continuity. By eliminating the need to transport actual tape cartridges, data can be recovered faster and more reliably, enabling systems to get back online quicker in the event of a disaster or major system outage. It also lowers the total cost of ownership of backup and recovery by eliminating the costs associated with moving and storing physical tape cartridges.

ProtecTIER deduplication with native replication technology provides:
• One-to-one replication for enhanced disaster-recovery operations
• Many-to-one replication for improved remote-office data protection
• Many-to-many replication for multiple data center environments
• Enterprise-class data integrity level at all sites
• Ability for a remote site to become a primary site during disaster recovery
• Replication that can occur concurrently with backup and inline deduplication
• Easy-to-use graphical user interface (GUI)-based management and monitoring tools

Deploying a TS7650G ProtecTIER Deduplication Gateway solution can help organizations protect their corporate data on disk-based storage more efficiently while helping them manage the exponential growth of new data through the reduction or elimination of duplicate data in their backups.
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For more information
To learn more about IBM TS7650G ProtecTIER Deduplication Gateway, please contact your IBM representative or IBM Business Partner, or visit the following website:
ibm.com/systems/storage/tape/ts7650g

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