

IBM Tape Library family and Veeam Availability Suite

Efficient, integrated, intelligent data management with streamlined tape backup and recovery to help securely meet the needs of the Hyper-Available enterprise



Highlights

- Improve total cost of ownership (TCO) for inactive and cold data
 - Address data security challenges with data encryption, write-once, read-many (WORM) and “air-gap” capabilities
 - Take advantage of storage tiering and simplified data management with Veeam and IBM® Spectrum Archive™
 - Experience streamlined management and modular system scalability with the flexibility to expand from terabytes to petabytes
 - Manage data growth and increase efficiency with a time-tested, integrated data availability solution from two industry-leading companies
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Data volumes continue to grow and are rapidly stressing today’s storage infrastructure and IT budgets. Requirements for cost-effective, reliable data backup and recovery solutions, as well as secure long-term data retention in all industries, are common and increasingly stringent.

Relying on IBM tape drives and libraries instead of disk storage for long-term data retention makes it possible to reduce the cost of storing growing amounts of data. IBM offers a full range of tape storage solutions. These solutions include drives, autoloaders, libraries, virtual tape systems and IBM Spectrum Archive software, which can make tape as simple to use as disk.

Veeam Availability Suite combines backup, restore and replication capabilities with advanced monitoring, reporting and capacity planning functions to deliver hyper availability for virtual, physical and cloud workloads from a single management console, enabling recovery of any IT service and related applications and data.

IBM TS4300 Tape Library, together with Veeam Availability Suite, featuring native tape support, delivers efficient, integrated tape archival with flexible, streamlined management to meet your data retention needs.





Figure 1: As a Veeam Alliance Partner, IBM earned Veeam Ready qualification for the IBM TS4300 Tape Library, helping ensure the solution meets prescribed Veeam standards.

Address your data growth and economic challenges

Organizations of all sizes can address today's data hypergrowth and economic challenges with IBM TS4300 Tape Library and Veeam Hyper-Availability solutions. The combined solutions help provide organizations with a scalable storage tier for backup, recovery and archive data to deliver world-class economy, high data availability and security.

Help keep your data secure

Data security is critical to any data storage infrastructure. IBM TS4300 enables sensitive data to be encrypted and helps protect it against data hacking and ransomware attacks. IBM provides a so-called "air-gap" capability when implemented with the IBM TS4300 solutions, making the data virtually invulnerable to hacking. Data stored on TS4300 is offline to the network. It becomes essentially immune to hackers and ransomware attacks.

The option to use WORM media also helps ensure content can't be overwritten. This process helps organizations comply with regulations that mandate persistent data copies. Content can also be removed from the data center and stored in a security-rich offsite location. This off-site storage helps ensure important assets remain available, even in disaster recovery scenarios.

Your always-on enterprise operates 24x7 with Veeam Availability solutions

Enterprises rely on tape storage as a critical component of their long-term data management and recovery strategy. Veeam Hyper-Availability solutions have native tape support for the IBM tape libraries that delivers efficient, integrated tape archival with streamlined management.

Scale from terabytes to petabytes

IBM TS4300 Tape Library is a high-density, highly scalable, easy-to-manage solution designed to keep data securely stored long-term, while helping reduce the costs associated with data center space and utilities. Its modular design enables you to increase cartridge and drive capacity as needed—scale vertically up to seven modules with expansion for Linear Tape-Open (LTO) Ultrium cartridges, drives and redundant power supplies.

Efficiency capabilities and streamlined management

• Native tape support

Veeam Availability Suite delivers native support for the IBM TS4300 Tape Library, enabling you to transfer entire backups, repositories and even files to tape to help you meet your needs for long-term archival and off-site storage for large data sets.

• Native GFS retention—tape management made easy

Veeam eliminates the manual work associated with long-term tape retention by using a single, dedicated, grandfather-father-son (GFS) media pool for full backups. Weekly, monthly, quarterly and yearly media sets reduce tape consumption for long-term retention policies. A typical GFS retention scheme and five-year-long retention only require 20 tapes, storing four weekly, 12 monthly and four yearly full backups.

• Virtual full backup for tape out

When you schedule a virtual full backup, Veeam synthesizes it on the fly and writes it to tape. Veeam helps you streamline the backup process and reduce the number of tapes required to perform tape out from such source backup file chains by scheduling a periodic, virtual full backup. This backup automatically compiles the individual parts of the incremental backup chain into a virtual full backup file for tape out without requiring your backup repository as a staging area.

- **Copy backups to tape**

To dramatically increase efficiency and simplify the disk-to-disk-to-tape (D2D2T) backup architecture, backup-to-tape job scheduling can be integrated with Veeam source backup jobs. When a virtual machine (VM) backup job completes, the backup files are automatically and immediately copied to tape.

- **Direct restore from tape**

Usually, if you need to restore files from tape, you first must stage the VM. With Veeam Direct Restore to Tape, VM restores move directly from tape to the primary environment, saving time and reducing the amount of intermediate storage required.

- **Media vaults**

With Veeam and IBM tape libraries you can virtually organize, track and view tape repository information, including:

- Easily track the physical location of each offline tape.
- Group offline tapes by specific criteria, such as retention periods.
- Manually or automatically move tapes to a predefined vault once they go offline.

- **Easy file management with IBM Spectrum Archive**

TS4300 leverages IBM Spectrum Archive for direct, intuitive and graphical access to data stored in IBM tape drives and libraries by incorporating the IBM Linear Tape File System™ (LTFS) format standard. LTFS compatibility allows tape-stored data to be accessed as if it were on disk or flash storage. IBM Spectrum Archive eliminates the need for additional tape management and software to access data.

Conclusion

Data storage and backup is a crucial part of enterprise IT. Access to tape and disaster recovery capabilities must be seamless, scalable and support data encryption. IBM tape storage, integrated with Veeam Availability Suite, provides full media and library sharing and an integrated management graphical user interface (GUI). See what IBM Tape Library and Veeam solutions can do for your hyper-available enterprise today.

Why IBM?

With more than 60 years of experience in delivering tape-based storage technology, IBM storage solutions are designed to deliver the scalability, security and ease-of-use that organizations need to manage the massive volumes of data that have become common today. The affordability of IBM tape storage is another factor that makes it an excellent choice to combine with Veeam Hyper-Availability solutions. IBM is also a recognized leader in the tape storage space. In the 2018 Storage Brand Leaders survey,¹ participants voted IBM the overall market leader for both midrange tape drives and tape libraries.

For more information

To learn more about IBM Tape Library solutions, please contact your IBM representative or IBM Business Partner, or visit ibm.com/storage/tape.



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¹ “IT Pros Vote 2018 Storage Brand Leaders,” IT Brand Pulse, <https://itbrandpulse.com/2018-brand-leader-survey-results>.



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