

IBM Storage Archive

Enable access to your tape storage, from single archives to those managing explosive growth



Highlights

Enable cost-effective tape storage for hybrid cloud infrastructures

Expand storage capacity for future growth and new use cases

Deploy active, long-term storage technology with file system content access

Decrease the cost of your preferred storage tier

Traditionally, digitized information has always been stored on long ribbons of tape. Over the past few decades, as new storage technologies like hard disk drives and flash solid-state drives have appeared, many industry analysts have logged predictions that tape storage would soon go extinct. But it hasn't.

Thanks to software-defined storage (SDS) solutions like IBM Storage Archive, tape storage remains a cornerstone of storage architectures for many organizations. Even today, it is a critical tool for emerging business solutions where cloud and analytics workloads are common.

IBM Storage Archive is a modern tape storage solution designed to address data storage inefficiencies by changing the economics of storage with a layer of intelligent software. It creates an efficient data footprint and offers dynamic storage at an optimal price point, helping to maximize performance and support greater security. IBM Storage Archive also features IBM Linear Tape File System (LTFS) technology and provides direct, graphical data access to data stored on Linear Tape-Open (LTO) and IBM 3592 tape cartridges used in IBM tape drives and libraries. It eliminates the need for additional tape management and data-access software.

IBM Storage Archive sets a new standard for ease of use and portability for open-systems tape storage. Users can run any application designed for disk files against tape data without concern for the fact that the data is physically stored on tape.

One of the strongest ways to protect data is to make a copy and store that copy physically isolated from unsecured networks or servers where cyberattacks could start. This approach is often called an air gap because no electronic connection exists between servers and data copies. Removing a tape from a tape drive is one example of an air gap. Sometimes experts also speak of virtual air gaps as points where data copies are separated from servers not by a physical gap but by secure software or logical separation.

Enable cost-effective tape storage for hybrid cloud infrastructures

IBM Storage Archive simplifies data movement between flash or disk and tape, helping to lower costs and provide air gap capabilities without the need for proprietary tape applications. This can help organizations:



Create operational storage tiers with tape rather than storing static, unchanging files on costly disk storage



Archive digital assets for the long term while providing access to the assets through standard file system interfaces



Create copies of data from operational storage, improving the efficiency and cost effectiveness of a tiered storage infrastructure



Utilize the inherent air gap potential of tape cartridges to increase organizational cyber resilience

Expand storage capacity for future growth and new use cases

IBM Storage Archive Enterprise Edition enables clients to add capacity simply by adding tape media. This scalability helps lower media, floor space and power costs. With policy-based migration, archive capacity can be further expanded without impacting data availability. Regardless of the state of the data as secondary copies or replicas, long-term digital asset storage can be monetized and referenced for years to come.

Deploy active, long-term storage technology with file system content access

IBM LTFS technology enables files to be read by any system. Each cartridge is self-describing, providing the necessary metadata structure to access assets without special decoding. Long-term assets are stored for years in the tape media and only accessed when needed. Any LTFS software can read the open format data, reducing the overhead burden of long-term storage.

Decrease the cost of your preferred storage tier

IBM Storage Archive Enterprise Edition enables you to improve the cost-effectiveness of your cloud and analytics infrastructures. In conjunction with the Storage Scale policy engine, IBM Storage Archive Enterprise Edition provides automated movement and transparent retrieval. This solution benefits efficiency by both lowering costs and facilitating automation.

**IBM Storage Archive
Enterprise Edition**

Hardware Requirements	Single Drive Edition	Library Edition	Enterprise Edition
Supported tape systems*	–	IBM Diamondback Tape Library IBM TS4500 Tape Library IBM TS4300 Tape Library	Up to two libraries supported per IBM Storage Archive cluster
Supported tape drives*	IBM LTO Ultrium tape drives (Generation 5 or later) IBM 3592 Enterprise tape drives (IBM TS1140 or later)		
Supported tape media*	Tape cartridge, which is compatible with the supported tape drive and features tape partitioning		
Software prerequisites	–	–	IBM Storage Scale
Supported operating systems*	RedHat enterprise Linux (x86-64 or ppc641e)	RedHat enterprise Linux (x86-64 or ppc641e)	RedHat enterprise Linux (x86-64 or ppc641e)
Optional software	–	IBM Storage Protect	IBM Storage Protect IBM Storage Discover OpenStack SwiftHL MinIO
Warranty	Free download Linux software from IBM Fix Central without warranty or support	Multi-year warranty agreement <hr/> Object-code-only license under International Program License Agreement (IPLA)	
	–	–	No-cost trial virtual machine (VM) image is available from IBM website

*For details on supported hardware and operating systems, see the Planning section of the product documentation available at [IBM Knowledge Center website](#). For information on the connectivity of IBM tape drives, see the information available at the [IBM Systems Storage Interoperation Center \(SSIC\) website](#).



Conclusion

IBM Storage Archive stands out as an excellent choice for business environments due to its cost-effective tape storage management for hybrid infrastructures and support for seamless storage capacity expansion. It allows lower storage tier costs in an IBM Storage Scale solution.

Why IBM?

IBM Storage solutions deliver the scalability, security and ease of use that organizations need to manage the massive volumes of data that have become common today. IBM Storage Archive provides cost-effective and reliable data storage and air gap protection with simplified tape access. SDS technology also helps to facilitate rapid deployment.

The IBM Storage Archive family—featuring IBM LTFS technology—provides direct, intuitive and graphical access to data stored on tape cartridges. As a continuous innovator, IBM® invented the LTFS format and was first to market the open file system for single LTO Ultrium tape drives. LTFS is the result of a decade of IBM leadership as a founding member of the LTO Consortium and a market-leading supplier of LTO Ultrium tape drives, libraries and cartridges.

With 65 years in the marketplace, IBM Storage continues to create innovative data storage products to help organizations back up and restore data for business continuity, recover data in times of disaster and archive data for long-term protection retention. IBM continually upgrades IBM file system technologies to offer more solutions to today's business challenges.

Select your IBM Storage Archive edition and support growth at the pace your business demands.

For more information

For more information about the IBM Storage Archive family, [visit our solutions page](#), or contact your IBM representative or IBM Business Partner. If you don't yet have an IBM representative or business partner, [fill out this form](#) to schedule a consultation with IBM data storage experts.

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