

# Lower storage complexity and cost by moving archive data to tape



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## Highlights

- Address the need for a cost-effective approach to long-term, large-scale storage as data volumes and archive requirements grow
  - Bring a software-defined approach to storage to simplify and streamline management
  - Accommodate different levels of storage performance with support for flash, disk and tape technologies
  - Rely on software-defined storage to make it easier to access stored data from the cloud
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*IBM Spectrum Archive is part of the easy-to-manage software-defined storage infrastructure from IBM*

One of the greatest data storage challenges is the growing need to store larger volumes of data for longer periods of time. Not only are there more sources of data than ever—including social and mobile platforms, and the Internet of Things—there are also more stringent regulatory requirements for retaining data. As the amount of data and the length of time it must be stored both continue to grow, organizations are increasingly finding that relying purely on disk-based storage is becoming too complex and costly.

Tape offers a cost-effective alternative to disk for large-scale, long-term storage. As part of a blended storage strategy that also includes disk and flash, tape can play an important role in lowering storage costs. And as part of a software-defined storage environment that reduces overall storage complexity, tape can be remarkably easy to deploy and manage. Tape is also well suited to cloud environments, which are increasingly part of the storage landscape.

IBM® Spectrum Archive™ Enterprise Edition (EE) is the software-defined solution that speeds and simplifies moving data from disk to tape. A member of the IBM Spectrum Storage™ family, it works with the IBM Spectrum Scale™ storage management platform for migrating data to provide different access levels based on specific needs. The results include easier storage management, lower storage costs and anywhere-anytime data access to support cloud storage.



## Reduced complexity

IBM Spectrum Archive EE is designed to work in concert with the full complement of IBM Spectrum Storage solutions, which rely on a software-defined approach to simplify and streamline enterprise storage management. Integrated with other types of storage that accommodate different levels of access, IBM Spectrum Archive EE addresses tape archive requirements for long-term storage. To minimize management complexity, it employs file-based IBM Linear Tape File System™ (LTFS) technology to make tape look and work like any other removable media. It also applies information lifecycle management (ILM) capabilities to easily migrate data between access levels as storage requirements change.



### Performing arts: Preserving and providing access to performances

A national performing arts organization in the US chose IBM to ensure the preservation, protection and accessibility of an archive of recorded performances to which thousands of new assets are added every year. IBM Spectrum Archive EE and IBM Spectrum Scale together provide the transparent architecture and high availability necessary to fulfill the organization's goal of protecting these assets while still keeping them accessible to applications and geographically dispersed users. As a result, the organization achieved a 90 percent reduction in its data storage needs.

## Lower costs

IBM Spectrum Archive EE helps reduce the total cost of ownership (TCO) for storage by enabling enterprises to store infrequently accessed data on low-cost tape libraries in IBM Spectrum Scale-based storage environments. This helps control storage costs for data that does not need the access performance of disk or flash storage. It also automates the movement of data across access levels as access requirements evolve, helping reduce the administrative burden associated with managing the storage environment. By optimizing storage tiers for cost and performance, IBM Spectrum Archive can reduce TCO for archive data by up to 90 percent.<sup>1</sup>



### Oil and gas: Long-term archiving in a highly regulated environment

A Latin American state-run oil and gas utility chose IBM for the migration of data on a legacy tape system to a newer solution for long-term data retention. IBM Spectrum Archive simplified the migration by providing network availability of tape in a global namespace. It also reduced management requirements by providing data copies without the need for administrative intervention and facilitated ongoing data accessibility by enabling network access to linear storage through standard network interfaces.

### Support for cloud

As a software-defined storage solution, IBM Spectrum Archive EE separates the software that provides the intelligence for storage from the actual storage hardware platform, making stored data easier to access from the cloud. This eases integration with the cloud and lowers the cost of creating scalable, secure cloud-based storage environments—qualities that grow in importance as IT organizations increasingly look to integrate with cloud services to improve business flexibility and lower costs.



### Scientific research: Easy access to large volumes of stored data

A research institute in Western Europe chose IBM to provide a cost-effective archiving solution that would allow long-term storage of, as well as transparent user access to, large research data volumes. The institute deployed IBM Spectrum Archive EE and IBM Spectrum Scale to store and manage data in its user file system and migrate files to a tape library at the end of each day.

### Why IBM?

Decades of IBM experience in storage technologies, coupled with a strong systems approach, is key to reducing complexity and costs in today's growing storage infrastructures. IBM Spectrum Archive is part of the IBM Spectrum Storage family of software-defined storage products designed to help overcome issues associated with traditional storage environments today—including the challenge of easily and cost-effectively retaining large-scale data over the long term.



### Higher education: Cloud access to stored data

A university in Western Europe chose IBM System Storage® technology to serve as the foundation of an open-standards infrastructure for storing vast amounts of data. The infrastructure features IBM tape and disk systems with a capacity of 10 petabytes. In addition to IBM FlashSystem® storage systems to support fast metadata access, the infrastructure includes IBM Spectrum Archive EE to support an additional tier for automatic tiering for long-term storage and to facilitate access to data from the managed storage cloud when needed.

### For more information

To learn more about IBM Spectrum Archive Enterprise Edition, please contact your IBM representative or IBM Business Partner, or visit the following website: [ibm.com/storage](http://ibm.com/storage)

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<sup>1</sup> Three-year total cost of ownership comparison of IBM TS3500 tape library/IBM Spectrum Archive solution to IBM DS5100 disk storage solution using IBM Spectrum Control™ for data management.



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