

IBM Storage Deep Archive

Secure and durable object data storage for archiving and online backup



Highlights

Store any object on tape with Deep Archive

Deep Archive on-premises without additional software

IBM Storage Deep Archive is the next generation long-term archival solution optimized for Deep-but-Accessible data. It delivers the benefits of tape storage, in an easy-to-use, easy to integrate solution.

Leveraging the standard S3 Glacier storage class, this integrated solution simplifies data management and provides up to 17-nines of archive state durability. Additionally, it reduces carbon footprint by up to 85% and energy consumption by up to 93% compared to traditional HDD archive solutions.

IBM Storage Deep Archive offers a cost-effective and secure way to store and manage archived data, while providing full observability and control to the information security team.

No tape-specific knowledge required, and no cloud provider egress fees.



- Standard Interface
- Simple Administration
- Simplified Ecosystem
- Data Durability

IBM Storage Deep Archive on Diamondback

85%

TCO compared to managed service provider deep archives

The IBM Storage Deep Archive delivers:

- Standard Interface
- Simple Administration
- Simplified Ecosystem
- Data Durability

IBM Storage Deep Archive Features

Simplified Management: Standardized S3 interface eliminates tape -specific skills.

Administrators can easily manage and integrate the storage system into their existing infrastructure without requiring specialized knowledge of tape storage. Standard formats ensure that data is stored in a consistent way, making it easy to access and retrieve data across different systems and applications. Additionally, automated object copy management enables multiple copies from a single “put” command, enhancing data availability and durability. This built-in capability streamlines data protection by reducing manual intervention and ensuring that redundant copies are created automatically, supporting compliance, high availability, and disaster recovery strategies with minimal administrative overhead.

Standard S3 API: Industry standard interface to tape allows you to easily leverage your existing data movers or software compatible with the S3 Glacier Flexible Retrieval storage class.

Flexible Storage Capacity: Scale up based on capacity needs.

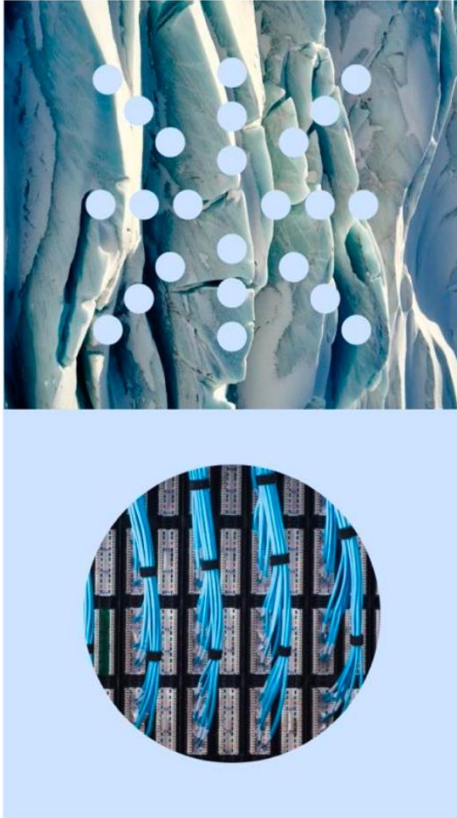
The IBM Storage Deep Archive provides flexible capacity, allowing administrators to easily add storage capacity as needed. This eliminates the need for costly hardware upgrades and ensures that the storage system can adapt to changing data growth and storage requirements. By scaling up capacity, administrators can meet the needs of their organization without incurring unnecessary costs or complexity.

Cost-Effective: Up to 85% lower Total Cost of Ownership (TCO) compared to comparable cloud storage.

The storage system provides a cost-effective solution for archived data storage, with a significantly lower TCO compared to comparable cloud storage solutions. This reduces the financial burden of storing and managing archived data and provides a more affordable solution for organizations of all sizes.

With a lower TCO, organizations can redirect their budget to more strategic initiatives and improve their overall return on investment.

- The storage system eliminates recall and egress fees, which represents 100% cost savings over other cloud storage solutions.
- With on-premises data control, organizations can access their archived data without incurring additional fees and reduce their overall storage costs.
- This provides a more predictable and cost-effective solution for archived data storage and helps organizations better manage their storage expenses.



Easy deployment: IBM installation in your datacenter or co location facility in less than a day with no tuning required.

Sustainability: Object storage energy consumption reduced by up to 97% with an 85% lower carbon footprint than comparable hard disk solutions.

Control and Security: On-premises data control.

The storage system provides on-premises data control, giving organizations full ownership and control of their archived data. Storage administrators can easily monitor and manage their storage system and ensure that their data is secure and protected. This provides a more secure and reliable solution for archived data storage, and helps organizations meet their data protection and compliance Requirements.

IBM Storage Deep Archive on Diamondback Tape Library

The IBM Storage Deep Archive is offered in conjunction with the IBM Diamondback Library and the 9273-S31 (IBM Storage Deep Archive).

Leverage Tape Libraries benefits:

- Scalability
- Energy efficiency
- Reliability
- High-Speed Data Transfer
- Advanced Robotics

	Diamondback Deep Archive Entry Configuration	Diamondback Deep Archive Standard Configuration
Deep Archive Nodes	1	2
Tape Drives (LTO-9 or LTO-10)	4	14
Performance	3.9 TB/hour	13.7 TB/hour
Energy Consumption	As low as 23.34 watts/PB	As low as 81.69 watts/PB
Max Storage Capacity	45PB (LTO-10)	45PB (LTO-10)
Object Limit		2.25B
Maximum number of buckets		2250
Maximum objects per bucket		1 million
Maximum object size		5TB

Conclusion

The IBM Storage Deep Archive storage system offers a unique combination of simplicity, sustainability, and cost-effectiveness for archived data storage. With its standardized interface to tape, converged infrastructure, and flexible capacity, it simplifies data management and reduces complexity.

By choosing the IBM Storage Deep Archive storage system, organizations can confidently store and manage their archived data, while reducing costs, complexity, and environmental impact.

Why IBM?

The performance and availability of your storage environment can either enhance or hamper your business processes. IBM, a market leader in the storage industry, can help you handle these and other challenges—no matter the size of your organization.

Innovative technology, open standards, excellent performance and a broad portfolio of tested storage software, hardware and solutions are just a few of the reasons you should consider partnering with IBM to meet your storage needs.

For more information

To learn more about IBM Storage Deep Archive contact your IBM representative or IBM Business Partner or visit ibm.com/products/deep-archive

1. IBM Physical Tape Carbon impact Report 2024
2. The Sustainable Preservation of Enterprise Data, Further Market Research, February 2024.
3. <https://aws.amazon.com/s3/pricing/>

© Copyright IBM Corporation 2025
IBM Corporation
New Orchard Road
Armonk, NY 10504

Produced in the
United States of America
November 2025

IBM, the IBM logo, are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on ibm.com/trademark.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

