# Reduce the Cost of Archiving Data, Without Impacting Data Access

IBM Deep Archive on IBM Diamondback provides S3 Glacier storage class access at up to 85% savings compared to AWS S3 Glacier hosted storage.

**Highlights**

Interoperable with all S3 Glacier Flexible Retrieval storage class supporting applications

No tape skills required

Flexible Retrieval performance at a fraction the cost of S3 Deep Archive storage classes.

The rising costs of storing data continues to be a challenge. According to Furthur Market Research many data center managers will be forced to use tape as an ultra-low-cost, sustainable storage alternative[1]. Some data center managers resist tape as difficult to deploy and operate due to the need for specific tape software and skills. IBM® Deep Archive flips the rhetoric with simple deployment and a standardized interoperable interface, without sacrificing the ultra-low-cost storage position.

IBM Deep Archive brings S3 Glacier Deep Archive Flexible retrieval classes on-premises at a fraction of the cost of even AWS® S3 Glacier Deep Archive. Approximately 80% of organizations have S3 skills[2].

IBM Deep Archive is delivered configured and ready for deployment as an S3 target for all deep archive data.

- S3 low-cost, secure, durable availability zone
- No supporting application modifications
- Subscription like capacity, without the monthly charges
- Zero egress fees

The hybrid cloud approach provides data storage placement optimization with ultra-low-cost storage that results in up to 94% savings over AWS S3 Glacier Flexible Retrieval[3]. Even greater savings is recognized after including egress charges.

| | IBM Deep Archive | | |
| --- | --- | --- | --- |
| | **9PB** | **27PB** | **45PB** |
| Total acquisition cost per PB | $22.56 | $11.89 | $11.55 |
| 5 year $/TB year | $4.51 | $2.37 | $2.31 |
| AWS S3 glacier flexible retrieval $/TB year | | $43.20 | |
| Savings compared to AWS | 89% | 94% | 94% |

# Economic benefits of hybrid cloud storage with IBM Deep Archive

**S3 Glacier Flexible Retrieval storage class interoperability**
Deployment of tape no longer requires third party software integration. Any applications that support the S3 Glacier Flexible Retrieval storage class now support storage of data on tape. Data movement applications for backup and recovery (BaR) and storage tiering no longer require tape operational control. All tape interfaces are fully contained within the IBM Deep Archive solution.

- Utilize existing S3 resources
- Free up valuable IT administration time
- Consolidate application deep archive data storage
- Orchestration of "like-data" for second and third copies

**No tape specific skills required**
Deployment of tape has traditionally required deployment of Storage Area Networks (SAN), assigning resources with specific skills in SAN. Then there were the burdens of configuring and managing the tape infrastructure.
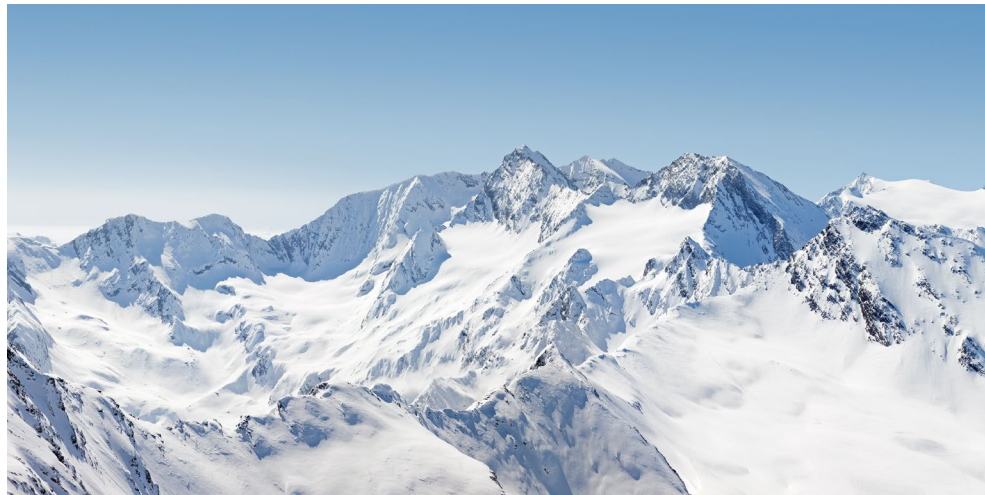- Eliminate the SAN for tape requirement with all ethernet interface.
- Eliminate the costly overhead of tape specific servers.
- "Install-and-Go" solution eliminates tape setup

**Improve data archiving performance at a fraction of the cost**
IBM Deep Archive provides fully automated tape management and control behind the standard S3 Glacier Flexible Retrieval storage class interface. The inherent design of interface is optimized for deep archives, and tape offers ultra-low-cost storage for archive objects, without unexpected egress and command charges.
- Reduce costs by up to 85% compared to AWS S3 Glacier Deep Archive
- Up to 94% savings when compared to AWS S3 Glacier Flexible Retrieval

| | |
|---|---|
| IBM Deep Archive | $.00013/GB month |
| | *No egress fees |
| AWS Glacier Deep Archive | $0.00099 |
| AWS Glacier Flexible Retrieval | $0.00363 |
| | + Egress charges |

**IBM Deep Archive, simple deployment, durable storage, ultra-low-cost**
By leveraging IBM Deep Archive, you reduce TCO , eliminate egress fees and additional external network costs. S3 skilled resources can configure, operate and control data without tape specific knowledge. Deploy over 45 PetaBytes of deep archive storage infrastructure fully configured as an on-premises cloud deep archive. IBM Deep Archive utilizes existing application capability and administration skills to reduce IT burden for long-term data protection

**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-archiv

1. The Sustainable Preservation of Enterprise Data, Furthur Market Research, February 2024.
2. Enterprise Strategy Group interview 2024.
3. https://aws.amazon.com/s3/pricing/