

FUJIFILM

Object Archive

Optimize Object Storage with Fujifilm's New Tape Archiving Software

Powerful new software archives massive amounts of data in this era of object storage. Take control of current and future cloud storage costs.

Object Storage Solution Purpose-Built for Onsite Data Archival and Protection.

Overview

Few tape storage devices in existence can work seamlessly with object storage. Fujifilm, the world's largest manufacturer of data tape, has a new tape format for object storage called OTFormat. OTFormat allows for objects and metadata to be efficiently written and read to and from tape in native form.

The Challenge

Data is quickly becoming a critical asset to more and more companies. Companies are looking for ways to store massive amounts of data for long periods of time to help them make better business decisions, serve as a repository for research, and to facilitate the identification of revenue opportunities. IT departments are challenged with keeping up with massive volumes of data while simultaneously reducing the organization's storage costs and allowing for quick data access. Cloud-based data storage quickly became the norm, but emerging concerns are driving cloud data repatriation:

- Is my data safe? Where do I store mission-sensitive data that cannot be stored in the cloud?
- What if I need to change cloud service providers? How will I transfer my data or store this data in my data center? Am I locked-in with this vendor?
- What happens if my requirements change? Will I be charged egress fees for data retrievals?
- Can I meet security needs with data that lives in the cloud?
- How do I anticipate future storage costs?
- Is there a way to plan for the unknown future capacity and easily scale my environment in a managed way?

The FUJIFILM OBJECT ARCHIVE Solution

To combat today's storage challenges, Fujifilm has developed FUJIFILM *Object Archive* software, which seamlessly allows object storage to be written and read to and from modern tape. FUJIFILM *Object Archive* software uses the industry-standard Amazon S3-compatible API. So, on-premises object storage can be used at minimal cost, with the same operability as cloud storage. FUJIFILM *Object Archive* software allows for easy long-term retention of data similar to AMAZON GLACIER. By utilizing FUJIFILM *Object Archive* software to optimize existing storage, organizations can eliminate egress fees, offload colder data to tape, maintain chain of custody, utilize the lowest-cost tier of storage, and minimize cyber threats by providing a physical air-gap to data.

FUJIFILM *Object Archive* software was developed to help organizations like yours store data with maximum effectiveness and efficiency across a single data center or multiple data center locations.

S3 INTERFACE TO COMPLIMENT EXISTING WORKFLOWS

Automatically read and write to tape through S3-compatible API applications. Data is stored directly on tape in "object" format, just like object storage. Tapes can then be read efficiently by S3-compatible API.

Optimize Object Storage With Tape Archiving Software.

Key Benefits

Reduce Costs

By leveraging the latest advances in tape technology and object storage, organizations can reduce costs for object storage by up to 80%.¹ By creating an archive for long-term data, organizations can also free up valuable space on expensive primary storage.

Air-Gap Protection

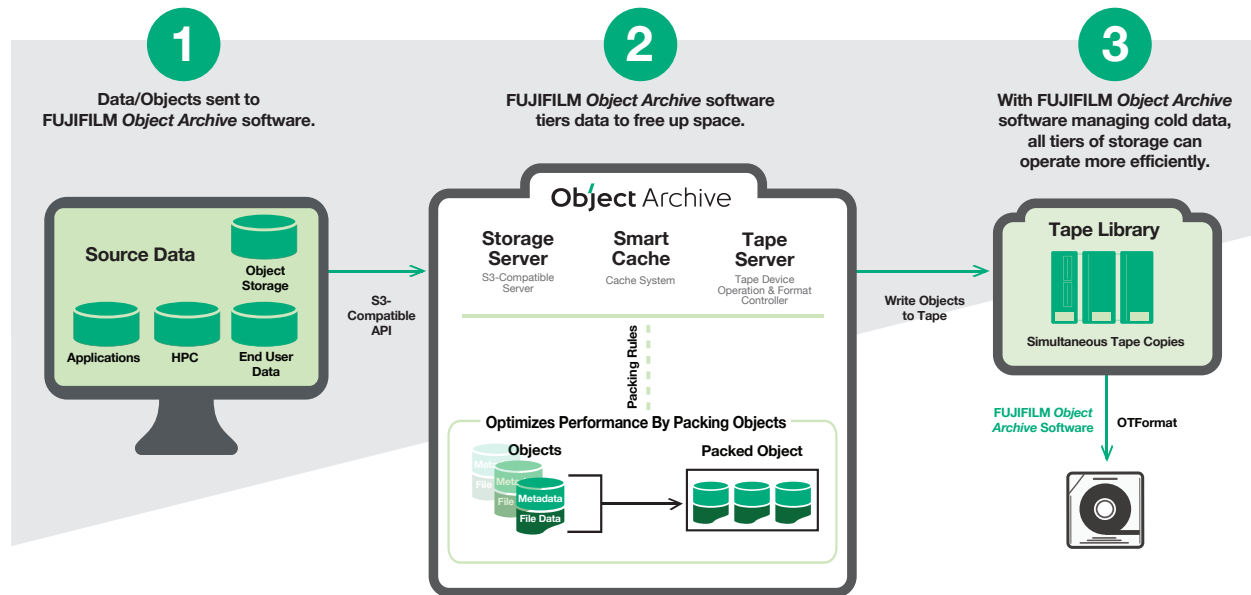
By storing your object storage on tape, you can create offline or offsite copies of your data, which is vital for disaster recovery and combating ransomware attacks. When data is stored offline, it is protected by an air-gap, making it inaccessible to unauthorized users.

Highly Scalable

Unlike file or block storage, object storage allows for scalability to Exabyte and beyond. Traditional file storage has limitations in scale and management, providing complexity and challenges for future data growth. With FUJIFILM *Object Archive* software, adding more capacity to your object storage can be as simple as adding a tape library.

Hybrid Cloud Storage

Tape now speaks the language of “the cloud.” Allow hybrid (tape/cloud) environments to leverage object storage together with tape. Additionally, if data needs to be shared, object storage is known for its compatibility in the cloud.



Easily Create Hybrid Cloud Storage

Enable storage cost optimization and avoid egress fees by keeping an onsite copy of your data on tape.

Maximum Ransomware Protection

Ensure the security of your archive by storing your data offline or off-site with air-gap protection.

True Cold Data Archiving

By creating a cold archive, you can free up valuable space on expensive primary storage and benefit from tape’s lowest total cost of ownership.

Works like an on-premise AMAZON GLACIER

FUJIFILM *Object Archive* software operates like AMAZON GLACIER in your data center with an S3-compatible API gateway to tape but with no egress fees.

Tape Media Included

Tape media is included in the FUJIFILM *Object Archive* subscription for predictable storage spend. Take advantage of Fujifilm’s tiered pricing model based on capacity and term.

Tier Data for Long-term Retention

Moving cold data to an archive allows you to balance speed and frequency of data access with the cost of storage.

FUJIFILM *Object Archive* Software Seamlessly Allows Object Data to be Stored on Modern Tape.

With numerous software subscription options, FUJIFILM *Object Archive* software empowers businesses to regain control of their data without the hassle, expense, or frustrations of traditional storage solutions.

Tape Format for Object Storage: Fujifilm's OTFormat

Fujifilm's OTFormat, is designed to optimize performance by packing objects. Unlike LTFS, which results in tape capacity going unused, Fujifilm's OTFormat packs the index (metadata) and the data together for efficient, cost effective performance. Without FUJIFILM *Object Archive*, LTFS writes data to tape and updates the index every single time, which can compromise performance at high file counts and with smaller sized files.

Agnostic All-Around

FUJIFILM *Object Archive* software is open to work with any platform, avoiding vendor lock-in and protecting investments. Unlike other services, FUJIFILM *Object Archive* software is designed to work with multiple tape libraries or storage.

File Versioning

With FUJIFILM *Object Archive* software, files are automatically versioned when data is edited, increasing the likelihood of file recovery in the event of a cyber-attack. For example, when a file is infected with malware, it is possible to restore it to the previous version stored on the tape.

Built-in Data Protection

Tape is considered the best solution for creating an air gap to keep business-critical data available even in the case of ransomware and other cyberattacks. FUJIFILM *Object Archive* software enables the creation of offline and/or offsite copies of your data, which can greatly reduce the risk of being hacked because your data is inaccessible to unauthorized access when protected by an air gap.

Primary and Secondary Copies of Data

FUJIFILM *Object Archive* subscription includes double tape media capacity (2 copies), meaning that users can automatically store their data on a primary and secondary copy for the ultimate, future-proof protection.

Tape Media

FUJIFILM *Object Archive* software supports the current LTO-8 generation, as well as LTO-7.

Use Examples.



Media/Entertainment



Healthcare/Research



Surveillance/Security



Government/Legal



Transportation/Logistics



In the **Media and Entertainment industry**, a company's digital content is its greatest asset. FUJIFILM *Object Archive* software empowers companies to archive long-term content while providing air-gap data protection at minimal costs. With FUJIFILM *Object Archive*, M&E companies can turn their attention to creating beautiful assets rather than to managing their data.



For **Healthcare and Research** facilities, patient and/or research data is typically stored for many years. Hospitals are generally required to keep images for seven years, but many keep them much longer.² FUJIFILM *Object Archive* software future-proofs your highly confidential data with reliable, open-format tape so that healthcare facilities can focus on treating patients, and researchers can focus on their primary operations.



Government and Legal institutions have sensitive and confidential information that require stringent data protection, regulation, and compliance. With features such as multi-copies to tape, file versioning, and air gap FUJIFILM *Object Archive* software provides effective data security and a secure chain-of-custody to meet regulatory requirements and avoid ransomware attacks.



Video Surveillance and Security companies capture massive amounts of content on a daily basis, and using traditional disk storage alone can cost enormously more than LTO-8 technology. FUJIFILM *Object Archive* software can reduce video storage TCO up to 86% by using cost-efficient LTO media.¹ Video Surveillance and Security companies may now leverage the advantages of tape storage and explore allocating more towards business expansion.



Transportation and Logistics companies handle enormous amounts of data that keep operations running smoothly. FUJIFILM *Object Archive* software empowers businesses to remain in control of their data without the hassle, expense, or frustrations of storing in the cloud. FUJIFILM *Object Archive* software operates similarly to AMAZON GLACIER but on-premise. By keeping an onsite copy of data, organizations can avoid high egress fees, avoid scaling complications and focus on creating solutions.