Fujifilm Object Archive

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Fujiflim Recording Media U.S.A, Inc.

Object Archive

FUJIFILM
Value from Innovation

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Over 85 Years of Innovation

Imaging Solutions

1934
Photographic film
Motion picture film

1948
Color reversal film, still cameras

1976 World First
Fuji Color 400

1986 World First
QuickSnap, one-time-use recyclable camera

1988 World First
Digital still camera

1996 World First
Digital Minilab

2009 World First
3D digital camera

Information Solutions

1934
plate-making film

1936
X-ray film

1958
FUJITAC (TAC film)

1959
Video tape

1965
PS plates / tapes for computers

1986 World First
Digital diagnostic X-ray imaging system: FCR

1996 World First
WV film

1996
CTP plate

2004 World First
Full Digital endoscope, double-balloon endoscope

Document Solutions

1962 Japan First
Copy machine

1975
Color copy machine

1989
Digital multi function devices

1993 World First
DocuTech, high-speed printing / publishing system

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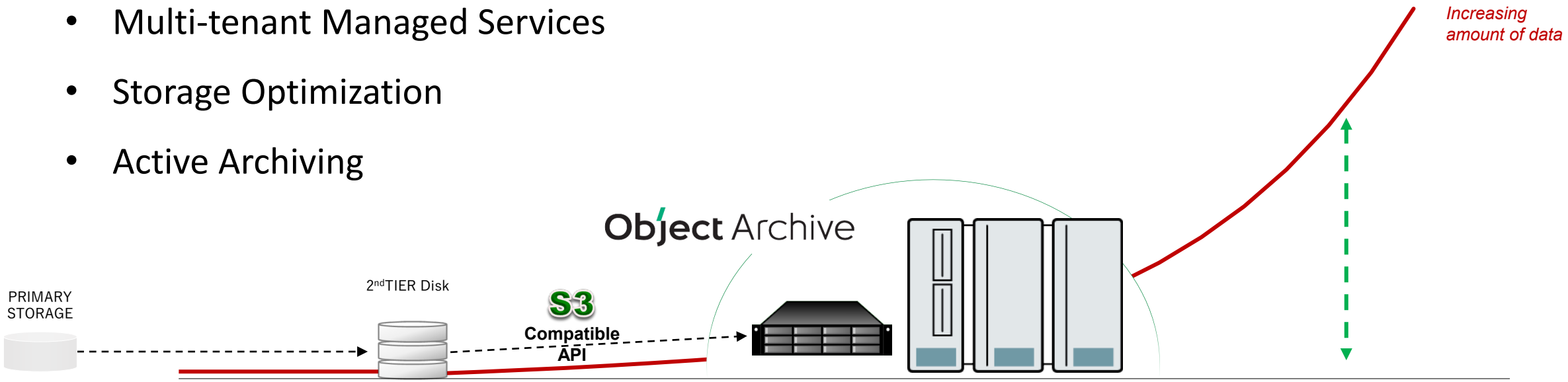
Fujifilm Object Archive

Object Archive is an archival tier designed to reduce cost, increase protection and provide the highest level of security for long-term digital assets.

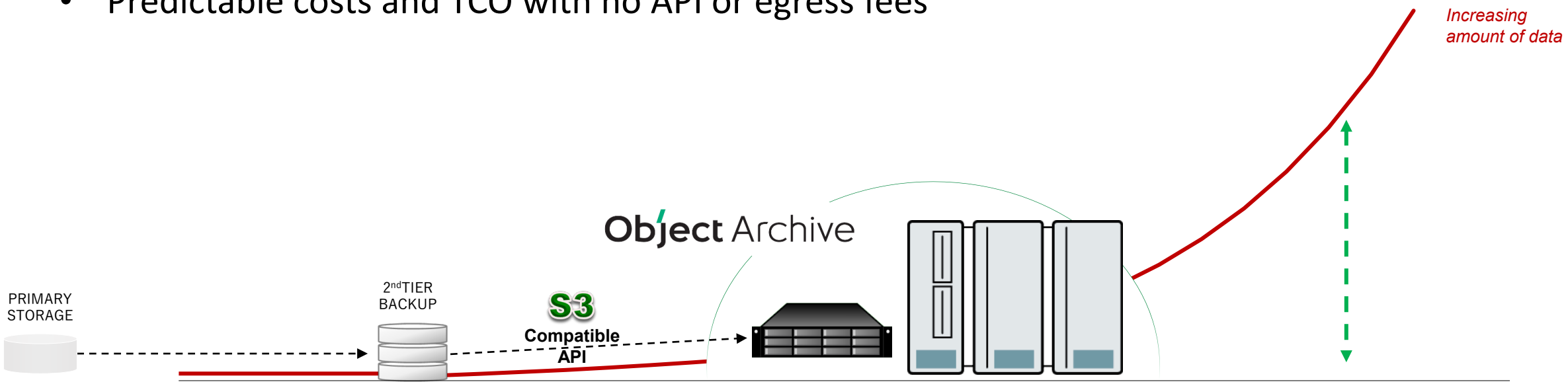
- Digital Preservation
- Scientific Research
- Multi-tenant Managed Services
- Storage Optimization
- Active Archiving



Fujifilm Object Archive

Fujifilm's Object Archive

- Works like Glacier in your datacenter
- Simplifies access with an easy-to-use API
- Scales on tape technology
- Secure with air-gap and full chain-of-custody
- Predictable costs and TCO with no API or egress fees



Fujifilm Object Archive on your Network

- Object archive is an on-premise tape-based archive solution
- Object archive can be resident anywhere on your network
- Software is bundled with tape media at 2x the capacity for redundancy
- Fully provisioned storage minimal to no physical tape management

Protected Digital Content

Data Center 1

Data Center 2

Tape Library

Object Archive

Object Archive for Workflow and Workers

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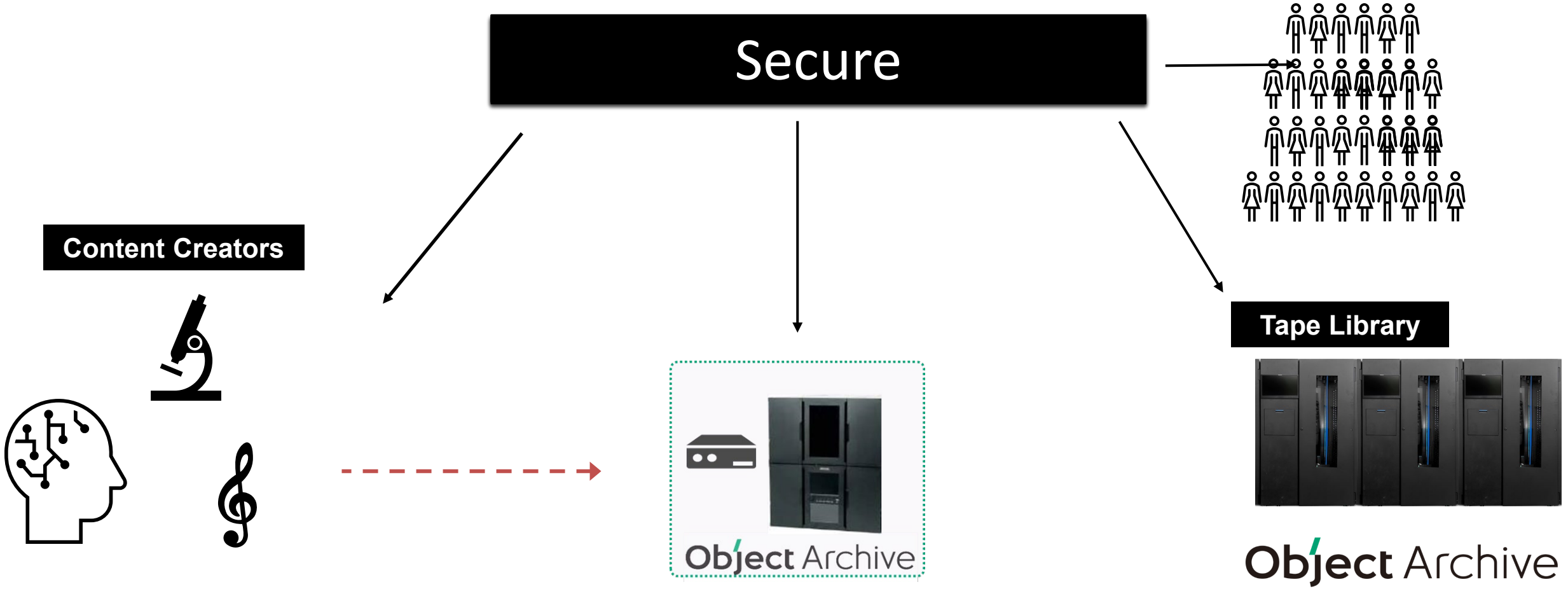
- Object Archive's API access is directly accessible to end-users, applications or administrators
- Software defined storage supports preservation, protection and curation needs
- Highly Scalable from 1PB to 100's PBs
- Supports up to 10,000 end-users and secure end-points



Fujifilm Object Archive Configuration

- Object Archive's runs on a x86 LINUX server running Red Hat 8
- The server connected to a tape library and drives via Fibre Channel or SAS
- The server presents buckets on the network for users and application to read and write data
- Object Archive automates all reads and writes on tape

Standard Hardware

Tape Support:
LTO7, LTO8 ,LTO9 & TS1160

Library Support:
Spectra, IBM, Quantum, Oracle, and HPE

Buckets

Server

Object Archive

Red Hat

FC or SAS

Tape Library

Object Archive

Supported S3 Compatible APIs

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#	Category	Operation	S3 API*
*1	Operation on buckets	Create a new bucket. Enables object versioning automatically (feature of Object Archive).	CreateBucket
2		Get a list of buckets.	ListBuckets
3		Retrieve the versioning state of a bucket.	GetBucketVersioning
4		Retrieve metadata about all or subset of the versions of objects in a bucket.	ListObjectVersions
5		Get a list of objects in a bucket.	ListObjects ListObjectsV2 (recommended)
6	Operation on objects	Add an object to a bucket.	PutObject
7		Retrieve metadata from an object.	HeadObject
8		Retrieve an object.	GetObject
9		Delete an object.	DeleteObject
10		Delete multiple objects from a bucket.	DeleteObjects
11		Request to restore an archived object.	RestoreObject
12		Initiate a multipart upload.	CreateMultipartUpload
13		Upload a part in a multipart upload.	UploadPart
14		Lists in-progress multipart uploads.	ListMultipartUploads
15		Lists the parts that have been uploaded for a specific multipart upload.	ListParts
16		Completes a multipart upload by assembling previously uploaded parts.	CompleteMultipartUpload
17		Aborts a multipart upload.	AbortMultipartUpload

Object Archive System Specifications

		Single Node	Cluster
System, Network	Operating System	CentOS 7.9 , Red Hat Enterprise Linux 7.9	
	Supported Web Browsers (for GUI)	Google Chrome, Microsoft Edge, Safari	
	Connectivity	Ethernet (IPv4)	
	Supported Protocols	HTTP/HTTPs	
	Supported APIs	S3 Compatible REST API	
	Maximum Object Size	5TiB	
	Maximum Number of Buckets	**10,000**	
	Maximum Number of Objects	**2 billion**	**128 billion**
Tape Storage System	Supported Tape Systems	LTO Ultrium-7, 8, IBM TS1160	
	Supported Tape Media	LTO7, LTO8 (LTO7 M8 format, WORM cartridges not supported) 3592 JE, JM, JD, JL (WORM cartridges not supported)	
	Supported Tape Recording Format	OTFormat	
	Supported Number of Tape Copies	Up to 3	
	Maximum Number of Regions	Same number as buckets	
	Supported Number of Logical Servers	1	Minimum 2, Maximum 64
	Maximum Number of Tape Libraries	1	Same number as Logical Servers
	Supported Number of Tape Drives	Up to 4	Up to 256

Q&A

Thank you

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