Fujifilm Object Archive

Archive Solution for Research and HPC Workflows

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Fujifilm Recording Media U.S.A, Inc.

Object Archive

iRODS UGM 2022 Leuven, Belgium

FUJIFILM
Value from Innovation

Over 85 Years of Innovation

FUJIFILM
Value from 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

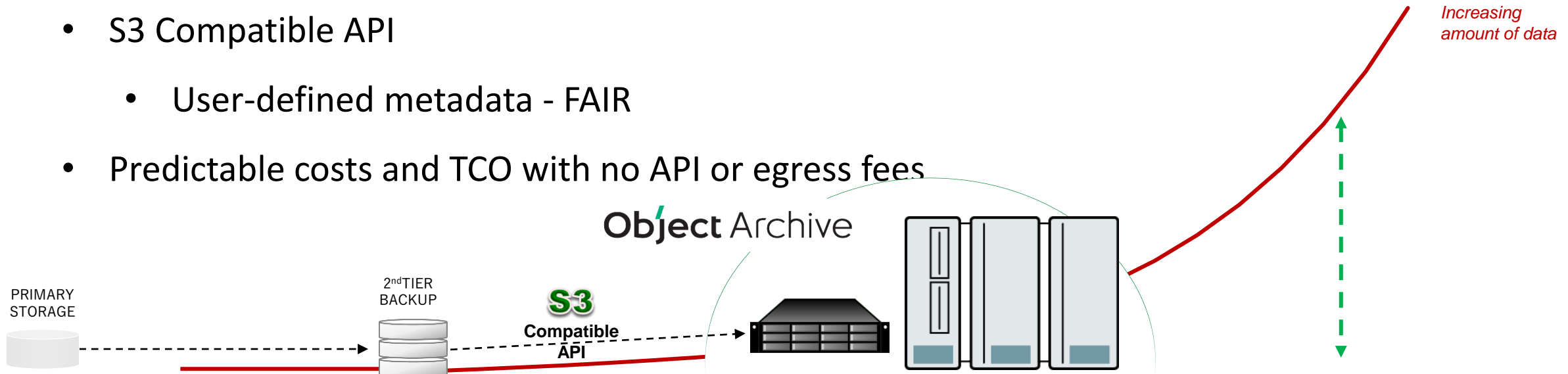## Document Solutions

1962 Japan First
Copy machine

1975
Color copy machine

1989
Digital multi function devices

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

Fujifilm Object Archive
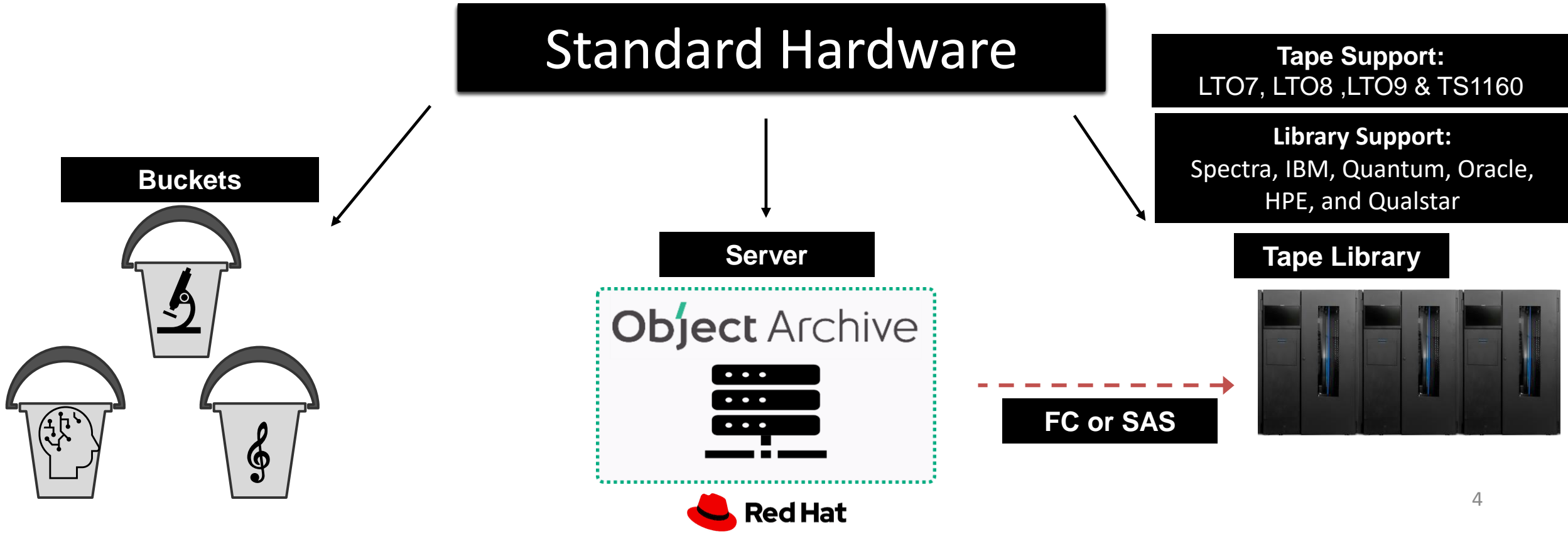
Fujifilm's Object Archive is a software defined archival tier designed to reduce cost, increase protection and provide the highest level of security for long-term digital assets for digital Preservation and long-term data archiving

- Hybrid Cloud Solution - Works like Glacier in your datacenter

  - Chain of Custody

  - Air Gap Security

- S3 Compatible API

  - User-defined metadata - FAIR

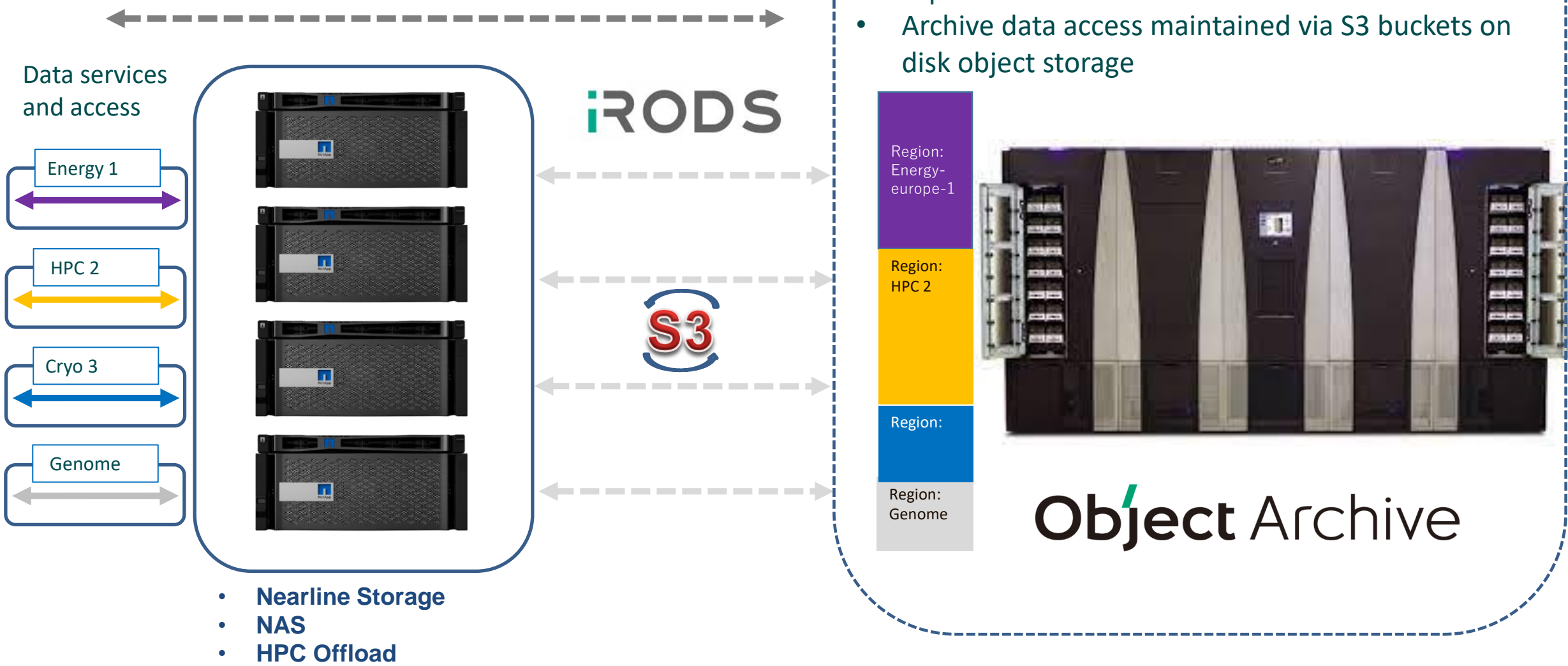- Predictable costs and TCO with no API or egress fees

Increasing amount of data

Object Archive

PRIMARY STORAGE

2nd TIER BACKUP

S3 Compatible API

Fujifilm Object Archive Configuration

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Standard Hardware

Tape Support:
LTO7, LTO8 ,LTO9 & TS1160

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

Buckets

Server

Object Archive
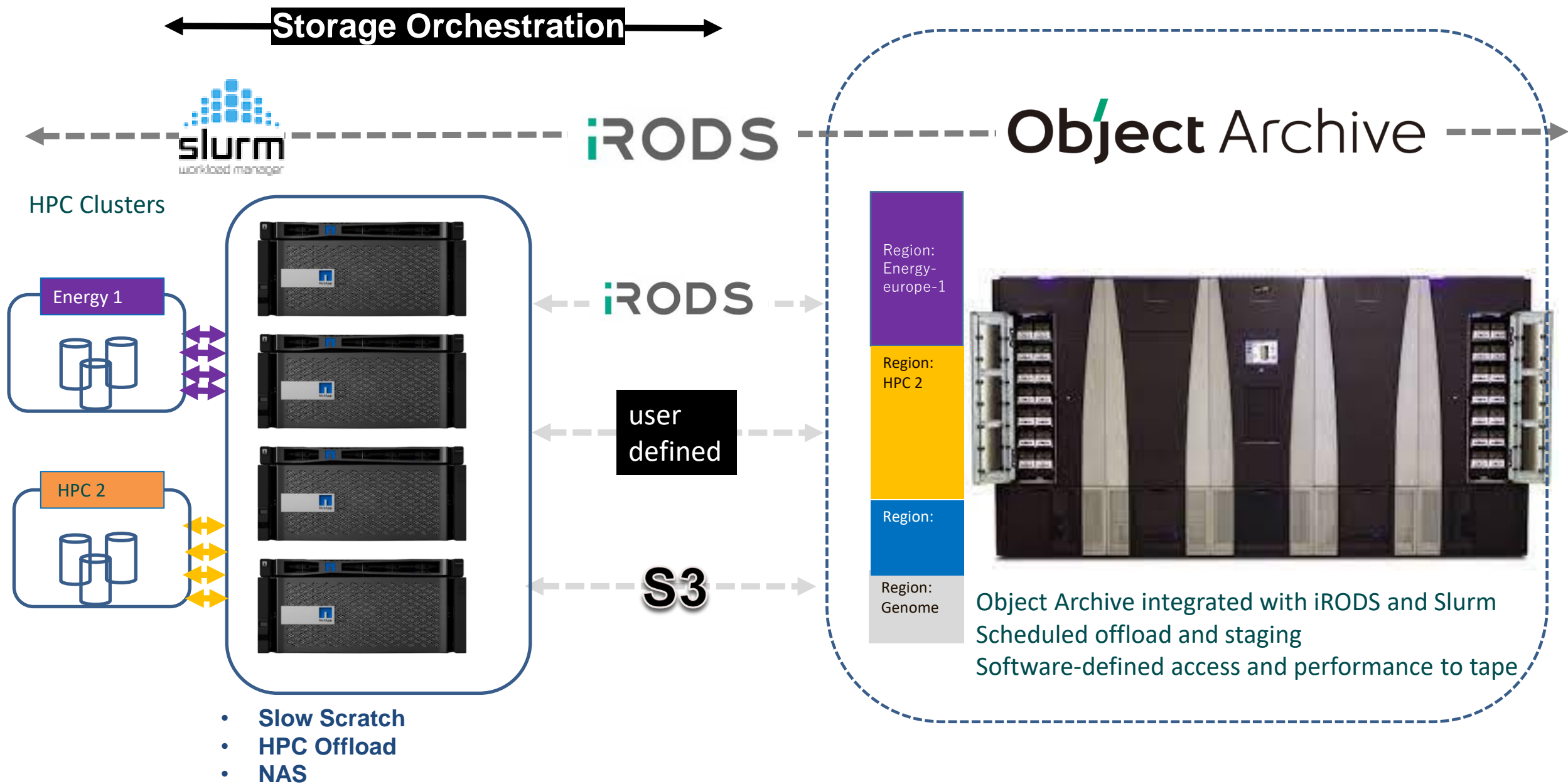
Red Hat

FC or SAS

Tape Library

4

- 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

Object Archive

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Archive Data Management

Data services and access

Energy 1

HPC 2

Cryo 3

Genome

iRODS

S3

- Multi-Tenant Solution
- Up to 10,000 buckets/Regions in Software-defined Tape
- Archive data access maintained via S3 buckets on disk object storage

Region: Energy-europe-1

Region: HPC 2

Region:

Region: Genome

Object Archive

- **Nearline Storage**
- **NAS**
- **HPC Offload**

HPC Storage Orchestration and Archive

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Storage Orchestration

slurm workload manager

iRODS

Object Archive

HPC Clusters

Energy 1

iRODS

HPC 2

user defined

S3

Region: Energy-europe-1

Region: HPC 2

Region:

Region: Genome

Object Archive integrated with iRODS and Slurm
Scheduled offload and staging
Software-defined access and performance to tape

- **Slow Scratch**
- **HPC Offload**
- **NAS**

Thank you

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