ARCHIVER

ARCHIVING AND PRESERVATION FOR RESEARCH ENVIRONMENTS

Arkivum - Google

arkivum

Bringing archived data to life

Google Cloud

ARCHIVER - Archiving and Preservation for Research Environments project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824516.

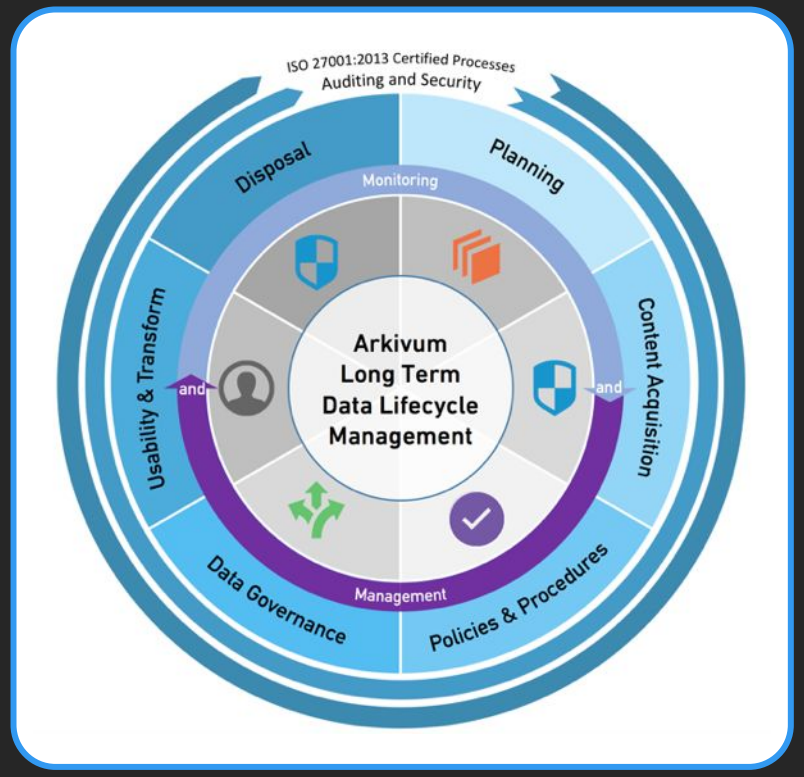
https://tinyurl.com/y4ycaqpa

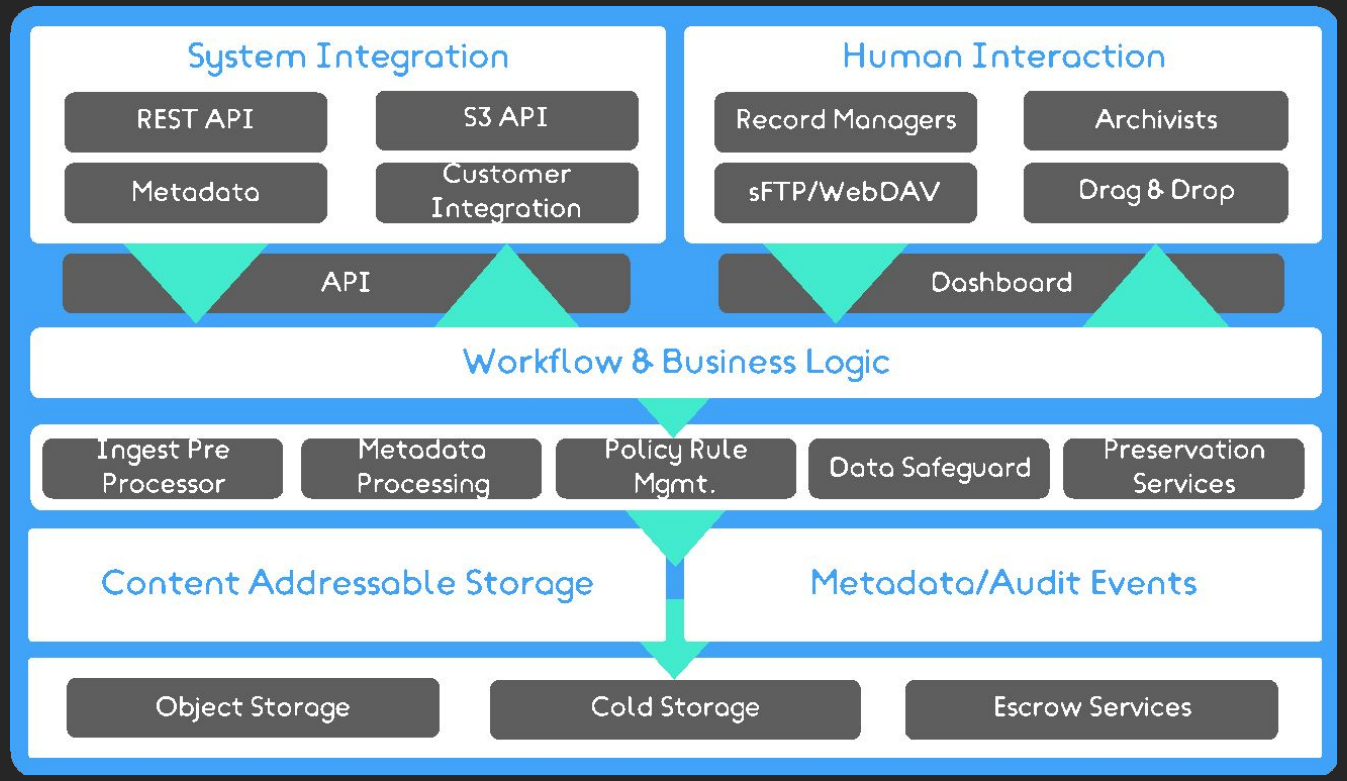
ARCHIVER

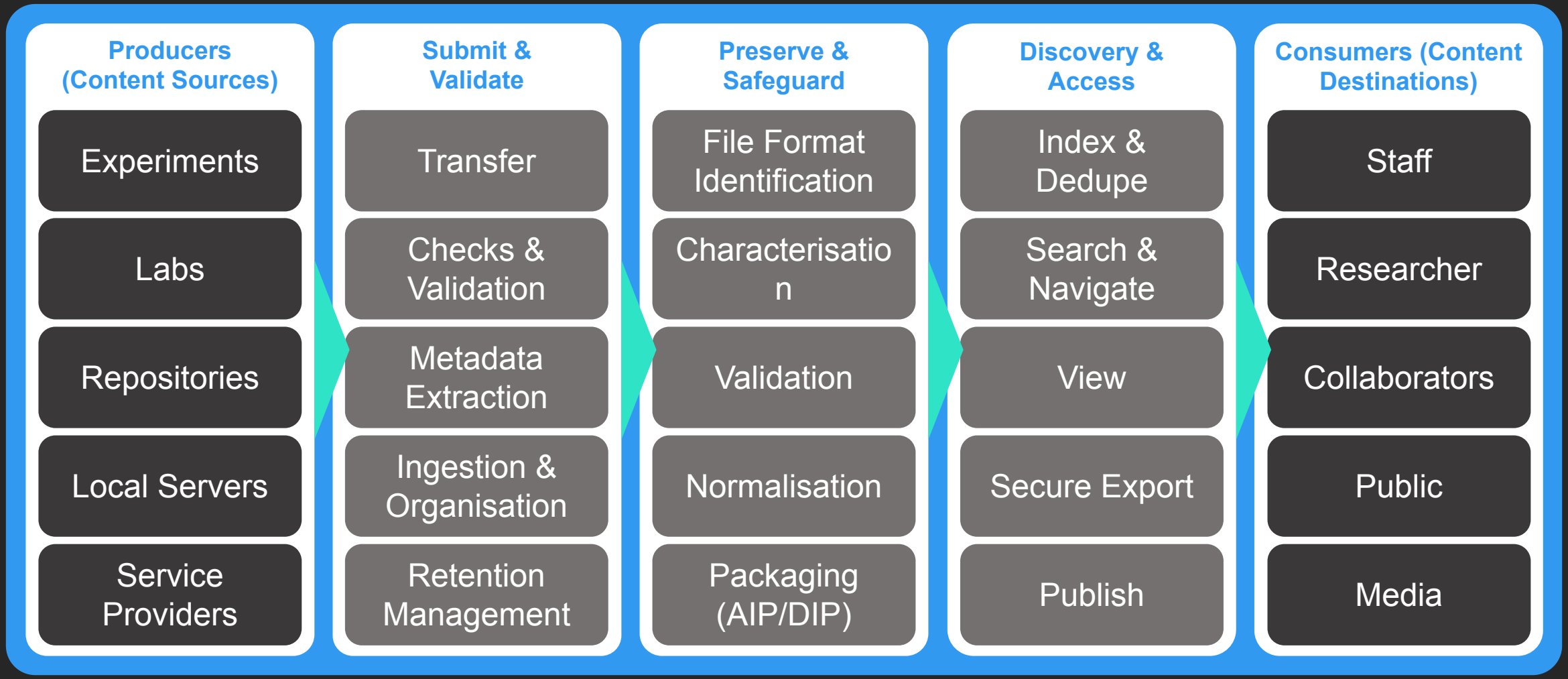
Arkivum and Google solution

Phase 2: Prototype

Arkivum Perpetua: Cloud Hosted Digital Preservation and Archiving



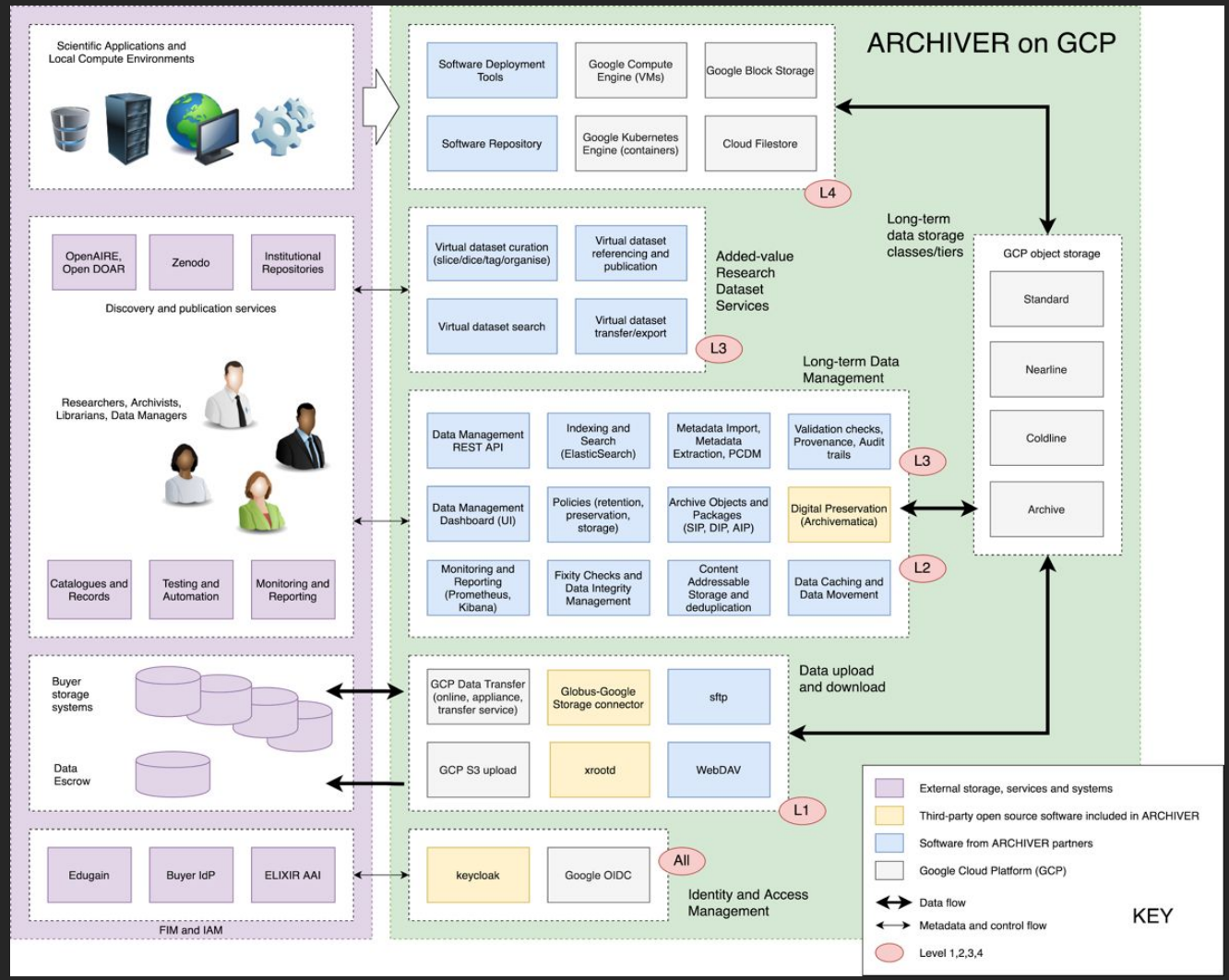




OAIS, TDR, Core Trust Seal, DPC RAM, Nestor

Arkivum / Google Solution:

- Scalable storage and compute
- High speed ingest and access
- Policy based cost optimization
- OAIS workflows and packages
- Digital Preservation rules and actions
- FAIR datasets and access
- Hosted scientific applications
- Open standards and specifications
- Exit and migration strategies



Google Cloud Platform: PB Scale Storage, Compute and Networking


Google Object Storage


Google Operations


Google File Storage


Google Security


Google Compute Engine

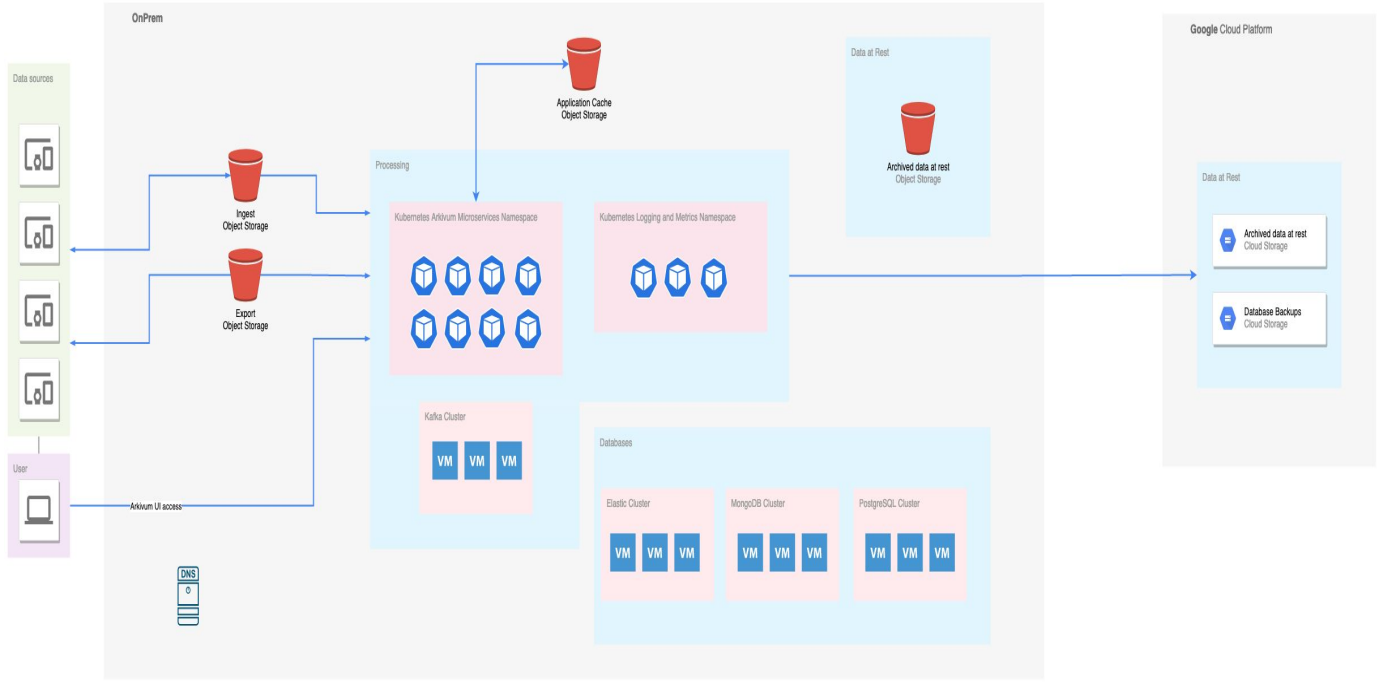

High speed network


Google Kubernetes Engine

GEANT connected

Prototype: Portability and Exit Strategies

- Deployment in GCP, on-premise and hybrid cloud
- Portable to other cloud providers
- Kubernetes, containers, Anthos, automated deployment
- Exit strategies using data escrow, open standards and fast exports



METS Metadata Encoding & Transmission Standard Official Web Site

PREMIS PRESERVATION METADATA MAINTENANCE ACTIVITY

DURASPACE™ Portland Common Data Model

kubernetes

docker

Anthos

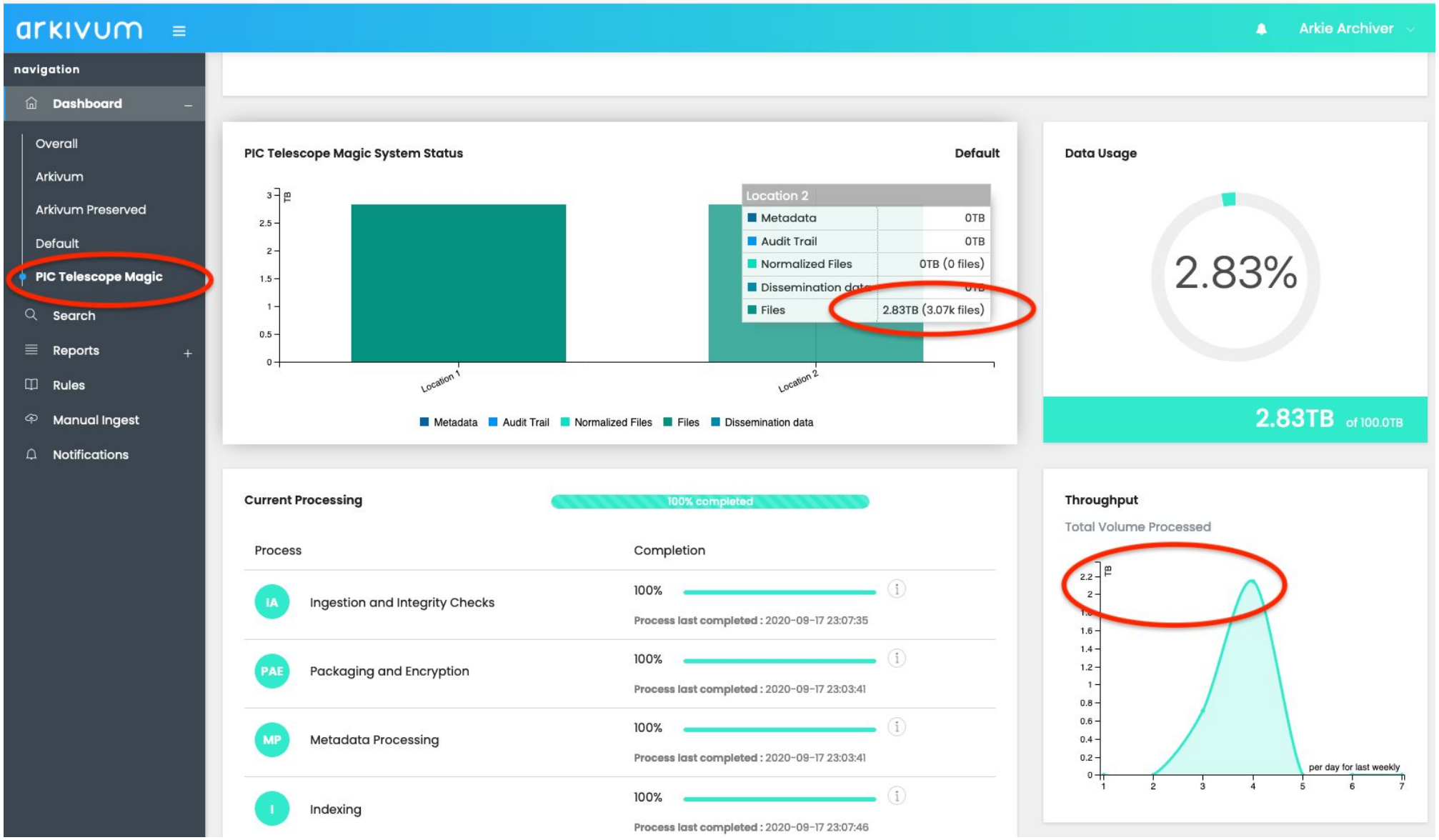
mongoDB

APACHE kafka®

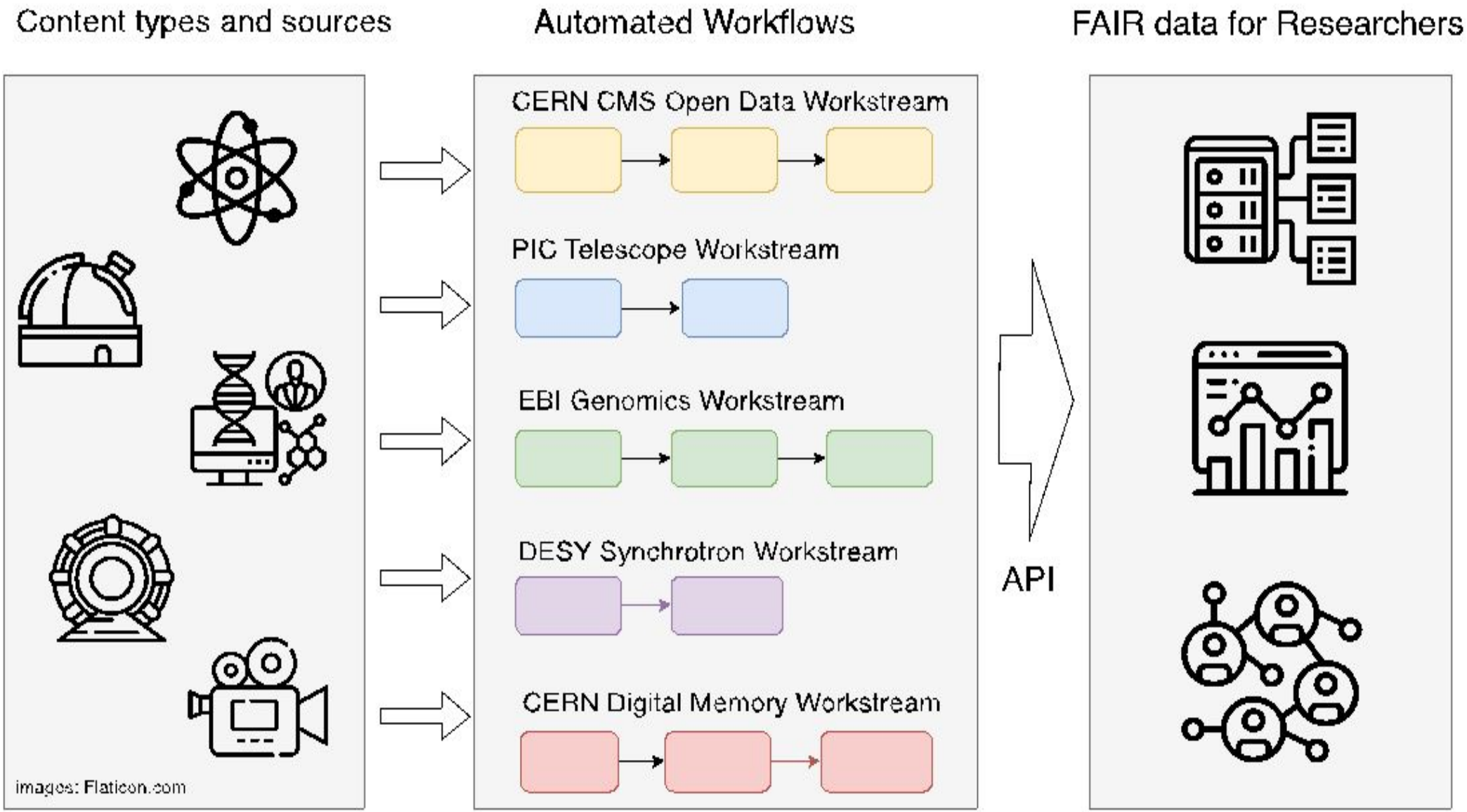
KEYCLOAK

elasticsearch

Pilot: Long Term Digital Preservation Hosted On GCP

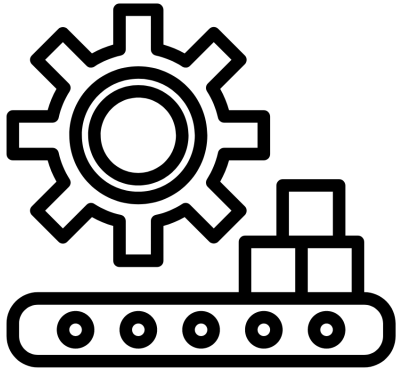


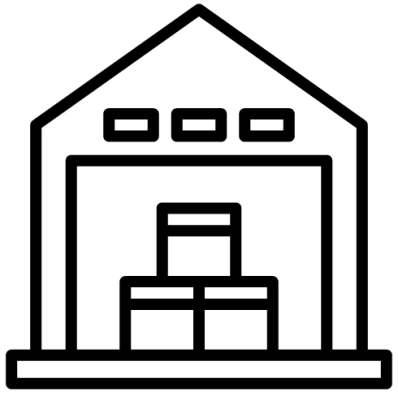
Prototype: Factories for LTDP in Large Scale Science

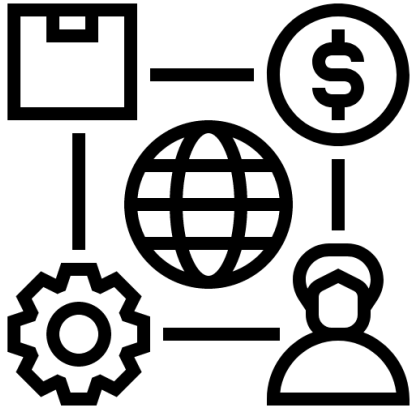


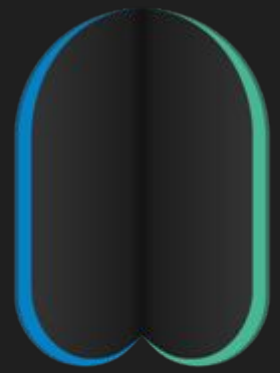
Prototype: Approach

- Automation, Scalability and Efficiency: Preservation Factories
- Minimal Effort Ingest / Minimal Viable Preservation
- Dataset Authenticity, Integrity and Usability: FAIR
- Platform for building Trusted Digital Repositories
- Fully SaaS on GCP, but also portable to on-premise and hybrid deployments









arkivum

Bringing archived data to life

London Office

Top Floor, The Walbrook Building
25 Walbrook, London EC4N 8AF UK
T: +44 (0)1249 40 50 60
E: hello@arkivum.com

Reading Office

Landmark, 450 Brook Drive, Green Park
Reading, Berkshire RG2 6UU UK
T: +44 (0)1249 40 50 60
E: hello@arkivum.com

Thank you

https://www.archiver-project.eu/

www.arkivum.com

Find us on LinkedIn or on Twitter @Arkivum