



ARCHIVER

ARCHIVING AND PRESERVATION FOR RESEARCH ENVIRONMENTS

T-Systems International – GWDG – Onedata





<https://tinyurl.com/y23gskwj>



ARCHIVOR
HELEX
NFB/USA
ARCHIVING AND PRESERVATION FOR RESEARCH ENVIRONMENTS

ARCHIVING AND PRESERVING TO DISCOVER

PROTOTYPE PHASE

Jurry de la Mar

T · Systems ·

ARCHIVING AND PRESERVATION FOR RESEARCH

MISSION T-SYSTEMS



“WE MOBILIZE MORE KNOW-HOW AND CREATE MORE DATA DISCOVERY IN RESEARCH BY DEMOCRATIZING ACCESS TO PROFESSIONAL ARCHIVING AND PRESERVATION FOR THE COST OF STORING THE INFORMATION.”

Team T-Systems.

INNOVATE, PERFORM AND SUSTAIN

T-Systems Team of Experts



Jurry de la Mar

Science and Research Expert, T-Systems



Prof. Dr. Philipp Wieder

Research Data and Preservation Expert, GWDG



Lukasz Dutka

Research Data Expert, Onedata



Dietrich Singh

Cloud Expert, T-Systems



Bartosz Kryza

Distributed Data Expert, Onedata

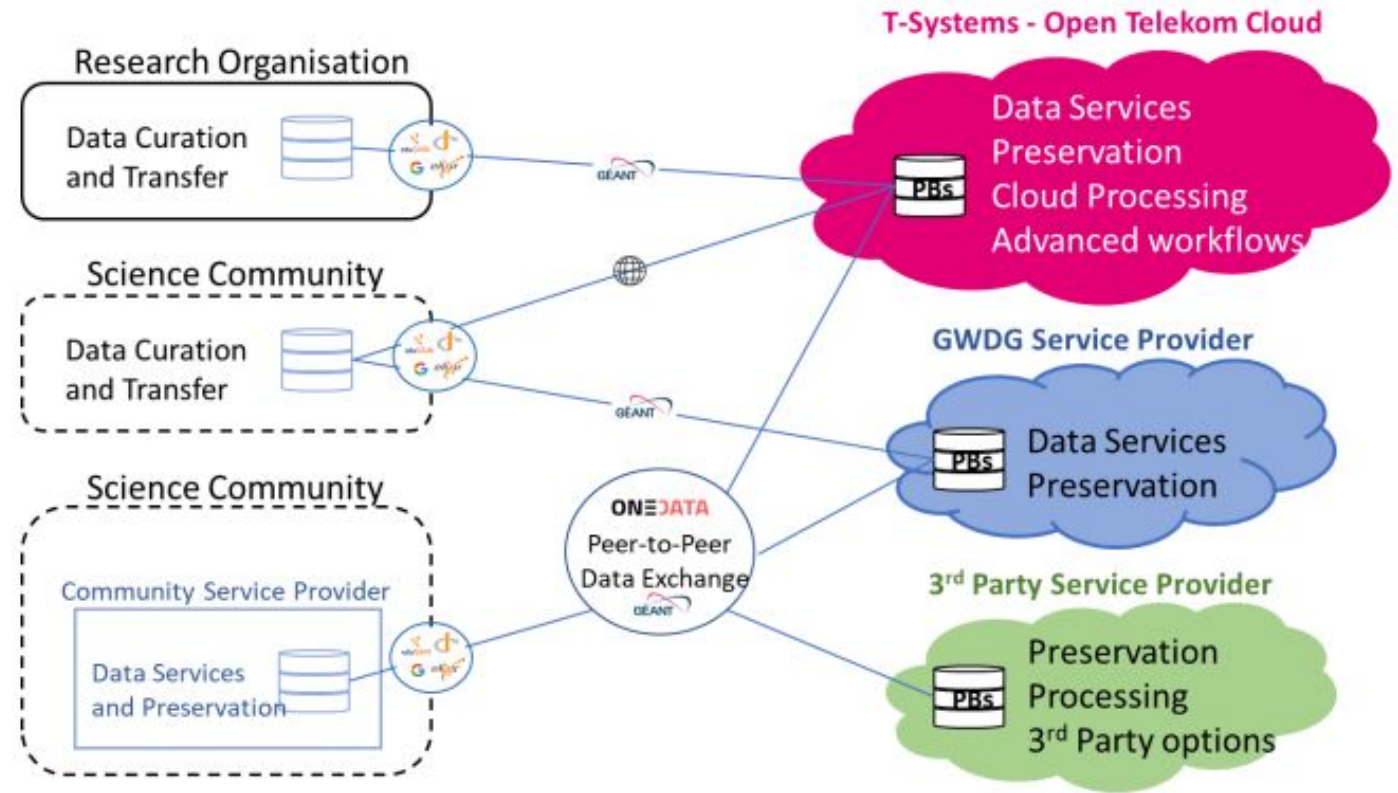


Prof. Dr. Ramin Yahyapour

Research Data and IT Expert, GWDG

DESIGN: OPEN-SOURCE AND CLOUD-AGNOSTIC

- Modern data access and management platform allowing automated push/pull ingestion from legacy data sources
- Creation of arbitrary size standards compliant archive-packages in cost- and energy-effective manner
- Highly scalable and flexible metadata extraction framework
- Flexible setup and control of archiving pipelines with BPMN workflows
- Fully open-source and deployable on Kubernetes



BPMN = Business Process Model and Notation Standard

PROTOTYPE FOCUS

Functionality	Prototype Phase	Pilot Phase
Sustainability	X	X
Hybrid Deployments	X	X
Data redundancy	X	X
Data-at-rest encryption	X	X
Data immutability	X	X
Extended KPI monitoring	X	X
CTS/ISO certification	Preparation	X
Intelligent caching		X
Cloud UI integration		X



The proof of the pudding is in the eating!

All Services

My Favorites



Computing



Elastic Cloud Server (10)
Elastic, scalable computing servers



Bare Metal Server (0)
Provides dedicated physical servers for tenants



Image Management Service (2)
Self-service image management



Cloud Container Engine (0)
container service that features high availability and elastic scalability



Auto Scaling (0)
Dynamically adjusts computing resources



Dedicated Host (0)
Dedicated physical servers

Storage



Elastic Volume Service (12)
Elastic, scalable block storage



Cloud Server Backup Service (1)
Secure, reliable cloud server backup



Storage Disaster Recovery Service (0)
Storage disaster recovery service



Volume Backup Service (1)
Secure, reliable block storage backup



Object Storage Service
Scalable cloud storage



Scalable File Service (0)
Elastic, scalable file storage

Network



Virtual Private Cloud (3)
Provides securely isolated virtual networks



Elastic Load Balancing (0)
Distributes traffic across multiple ECSs



Direct Connect (0)
Provides high-speed, stable network access services



Private Link Access Service (0)
High-quality, secure and dedicated network access service



Domain Name Service
Stable, secure, fast domain name resolution



NAT Gateway (0)
provides source NAT service



Virtual Private Network (0)
Enables remote secure access to VPC networks



CDN (Akamai)
Easy-to-use, reliable, quick content distribution



Elastic IP (10)
Flexible public network access

Security



Anti-DDoS
Provides Anti-DDoS protection



Web Application Firewall
Filters malicious web traffic



Key Management Service (0)
Easily manage the keys used to encrypt your data

Management & Deployment



Cloud Eye
Resource monitoring and alarm notification



Identity and Access Management
Manages user access and encryption keys



Resource Template Service
Provides orchestration for resources



Cloud Trace Service
Records operations performed on cloud resources



Log Tank Service
Log collection, query, and storage



Tag Management Service
Efficient resource management with tags

Application



NEW Archiving and Preservation



Simple Message Notification
Provides simple and reliable message notification service



Software Repository for Container (0)
Secure and reliable container image management

COMMERCIALISATION AND SUSTAINABILITY

- **Freemium service**
 - Support EOSC
 - Long-tail of science
 - Quick uptake
- **Premium service**
 - Advanced and customized solutions
- **Collaborate model**
 - On-premise services
 - 3rd party service providers
 - Collaboration with GAIA-X
 - Continuous innovation and sustainability of toolsets



The Deutsche Telekom Group-wide program "We care for our planet" objective is to help the company achieve its climate targets: 100% green energy by 2021, 90% emission reductions by 2030, carbon-neutral by 2050.

THANK YOU



LIFE IS FOR SHARING.