



KER5: Services in the EOSC Service Portfolio - Common/Horizontal Services

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 eosc-hub.eu

 [@EOSC_eu](https://twitter.com/EOSC_eu)

Dissemination level: Public

Disclosing Party: Project consortium

Recipient Party: European Commission





Enterprise: Boost innovation

Digital Innovation Hub:
Platform for industrial
collaborations with EOSC

EOSC
Portal
and
Marketplace

**EOSC-hub
Key Exploitable
Results**



**EOSC Hub Operators: Develop the EOSC
landscape**

Rules of Participation

Service Management
System

Interoperability &
Integration Guidelines

**Service Providers:
Provide services for
Researchers**

Internal services in the Hub portfolio

Business and sustainability models for
services and the Hub

*Educate, inform
and support my
team and
community*



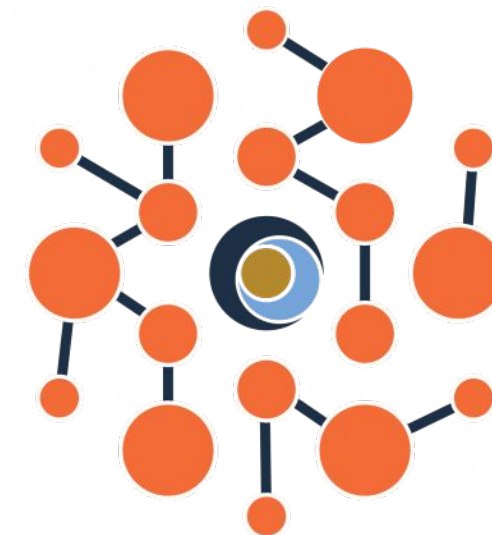
**Researchers and research communities:
Empower my research**

**Services in the EOSC Service
Portfolio**

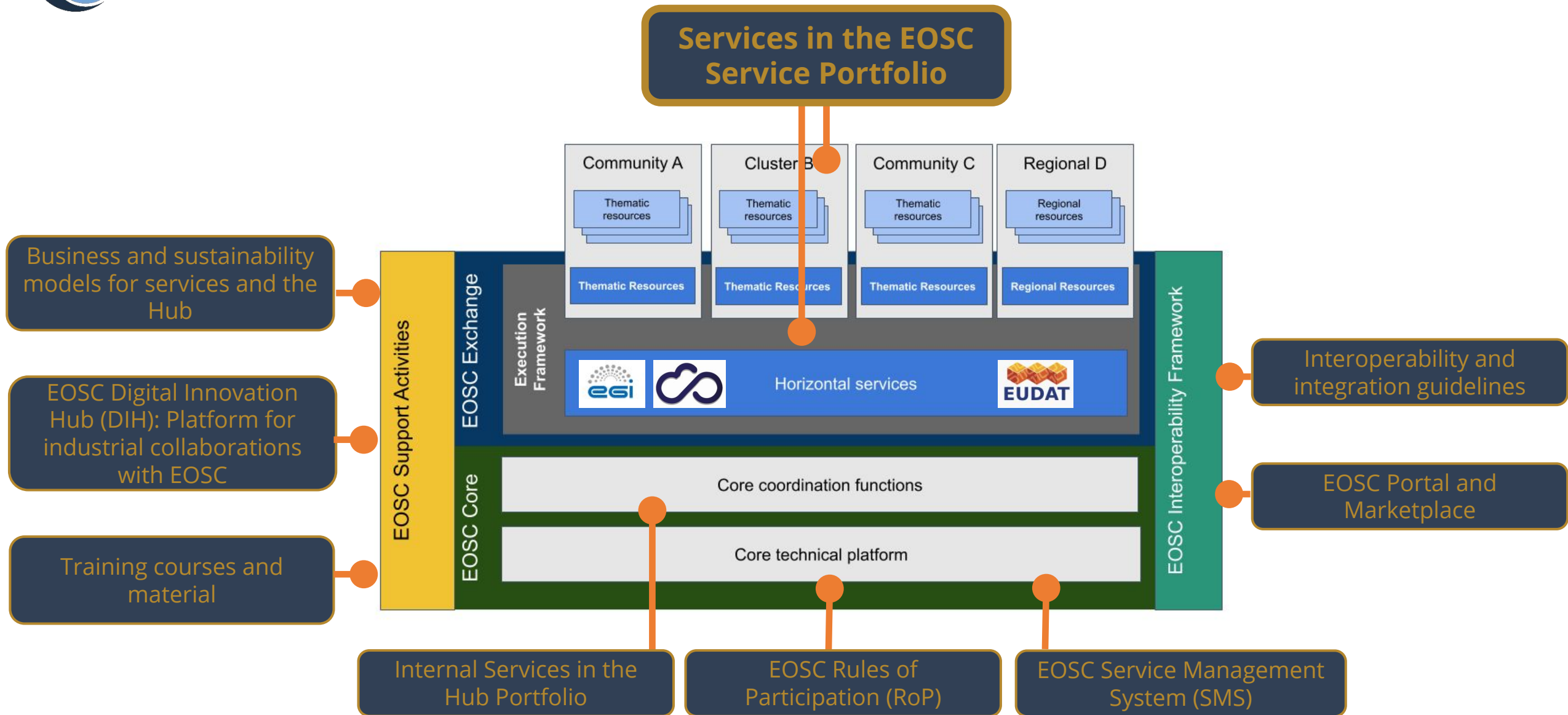
Training
courses and
Materials

KER5 will be presented in two presentations covering Common Service (John Kennedy) and Thematic Services (Debora Testi)

Description	Provides a "one-stop-shop" for a range of services and solutions to speed up the research process of the disciplines and enable cross-disciplinary collaboration and reuse of tools and results
Type	Collection of service components with well defined interfaces to provide solutions for core community use-cases
Key innovation	Larger number of high-quality, interoperable services for faster and higher quality research results
Additional background	The evolution of community facing services from numerous Infrastructure projects (EGI, EUDAT, INDIGO) into a portfolio of core services with increasing emphasis on service interoperation and integration to provide high level compound solutions



Services in the EOSC Service Portfolio

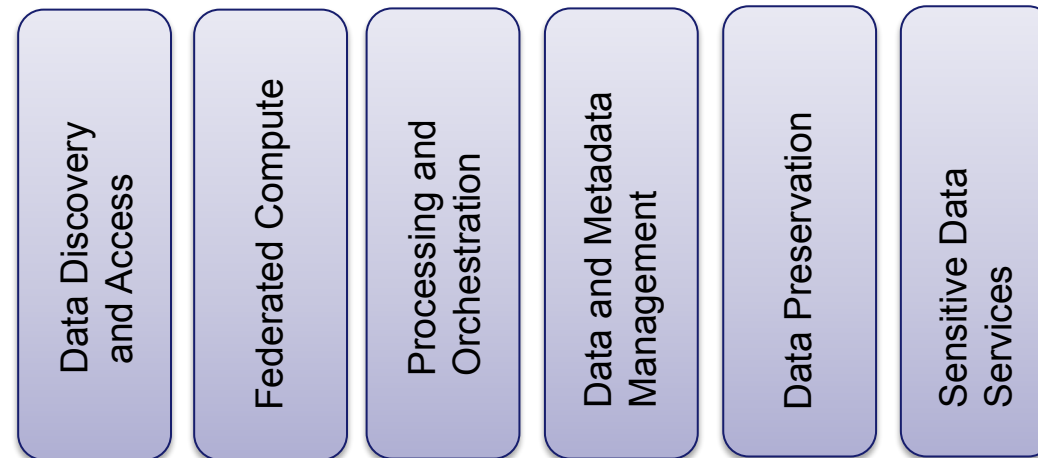




Innovation

Focus on providing services from 6 thematic areas:

1. Data Discovery and Access
2. Federated Compute
3. Processing and Orchestration
4. Data and Metadata Management
5. Data Preservation
6. Sensitive Data Services



In each of these areas provide trustworthy production services to address real life use-cases.

Services evolved to meet changing needs

Well documented and off the shelf for communities and end users alike.

21 services (TRL 8+) with strong uptake from communities, competence centers and researchers.

Horizontal, cross theme, activities.

Added Value:

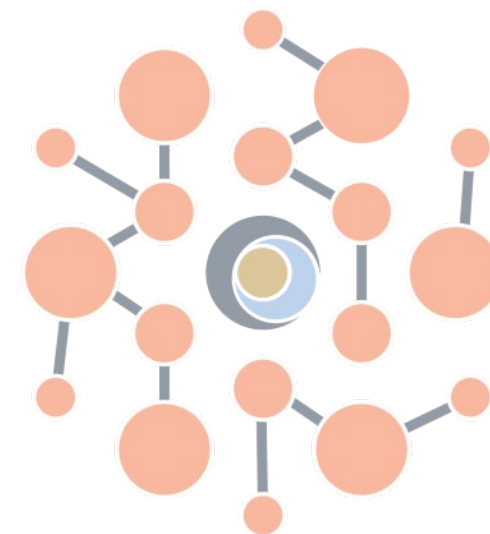
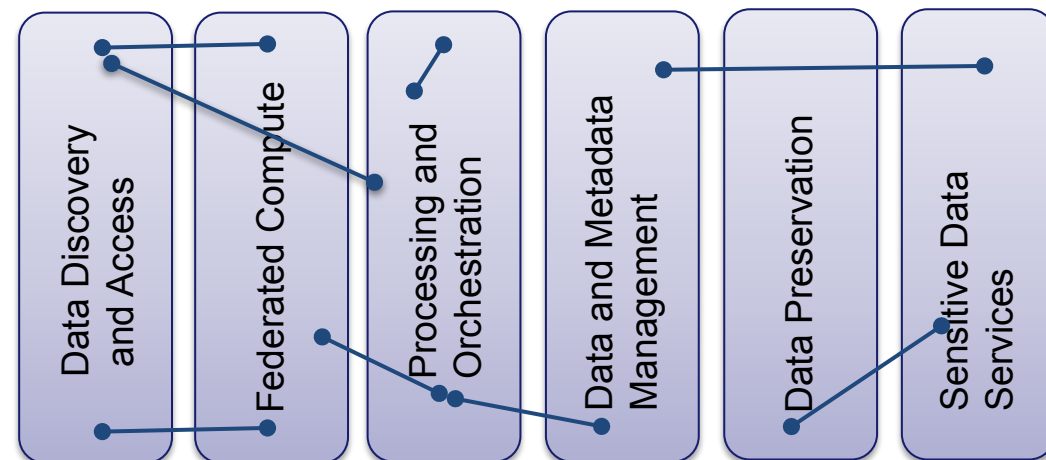
- Solve high level community use-cases
- Allows service providers to augment their service offer
- Encourages innovation

Foster Integration best practices

Trend towards Integration as a first class citizen in service design

Initial 6 community defined integration use-cases involving 10 Common Services

Throughout the project WP10 coordinated collection and prioritization of new use-cases



Herbadrop/ICEDIG community use-case:
 One of the 6 core community use-cases
 Integrating a long term digital archive with EOSC services

Service: B2SAFE, B2HANDLE, B2FIND

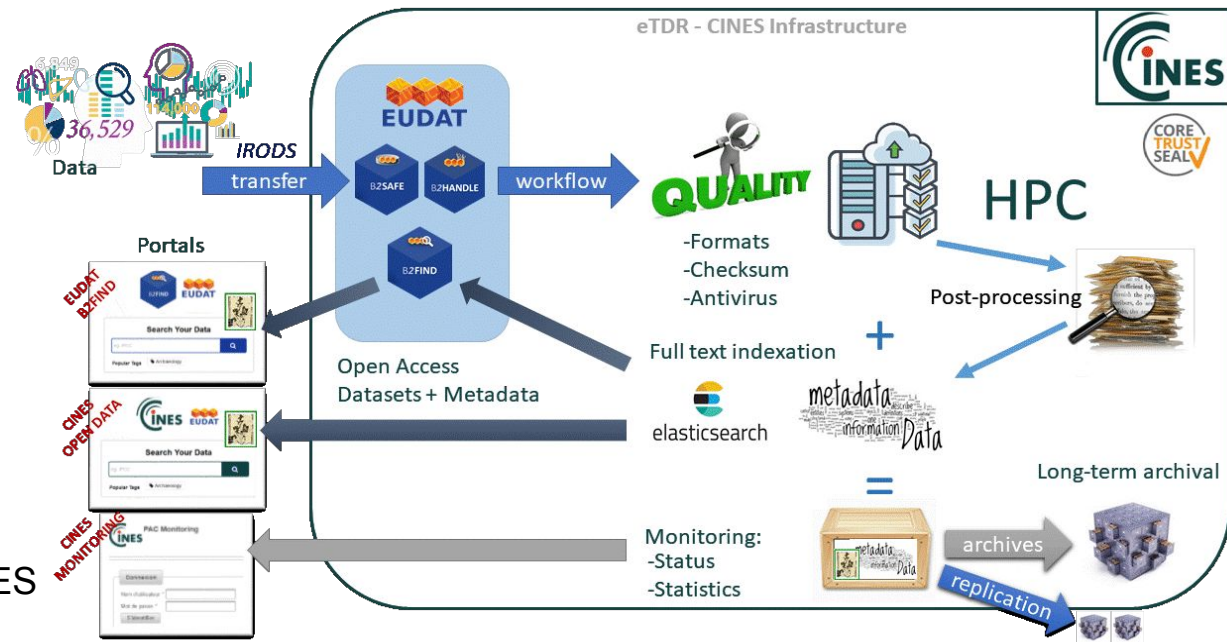
Resource Providers: CINES

Resources:

- Allocation of 27 TB of data volume on the B2SAFE instance at CINES
- Over 264,000 datasets ingested
- B2HANDLE prefix to register PIDs

Use case requirements:

- B2SAFE instance at CINES
- Access to Elasticsearch repository via HTTP-API by B2FIND
- Workflow for generation of PIDs and WebDav-URLs referring the iRODS collections



eTDR = European Trusted Digital Repository

<https://www.icedig.eu/>

What benefits does it bring?

Exploitation audience	Benefit
EOSC-CORE	Increased uptake by communities and end users alike, broad core service offering.
Service Providers	Increased visibility and uptake, integration opportunities
Researchers and research communities	Off the shelf services to address common use-cases , increasing integration activities to provide high level compound solutions. Cascading Reliability and Trust.



Exploitation

- Common building blocks (sustainable services) for research communities
- Thematic and horizontal services integrated by the KER have their own sustainability models and strategies
- Further development of the EOSC integration has been taken over by the INFRAEOSC-07 projects.
- Integration activities set to continue in the INFRAEOSC-07 projects

Research Communities and Projects:

- Proven off the Shelf Services
- Compound Solutions for common integration use-cases
 - Future Integration activities possible

Service Providers and e-infrastructures:

- Visibility and Uptake (Marketplace)
 - All Services in Marketplace
- Integration
 - Services exposed via integration

Common Service	e-Infrastructure Provider	Service Type	Used by Thematic Services	Used by Competence Center or Early adopter Project
EGI Cloud Compute	EGI	Compute	CLARIN, ECAS, GEOSS, OPENCoasts, WeNMR, EO Pillar services, DARIAH	PROMINENCE (FUSION), STARS4ALL, Euro-Argo, AiiDALab
DIRAC4EGI	EGI	Compute	WeNMR	
EGI HTC	EGI	Compute	OpenCoastS	LOFAR (Radio Astronomy), iCOMCOT (DMCC+)
INDIGO IM	INDIGO	Compute	ECAS, DODAS, DARIAH	
INDIGO Orchestrator	INDIGO	Compute	DODAS, DARIAH	
INDIGO udocker	INDIGO	Compute	WeNMR	
CVFMS	EGI	Compute	DODAS, WeNMR	
EGI-Workload Manager	EGI	Compute	OpenCoastS, WeNMR	EISCAT_3D
EGI DataHub	EGI	DataMngmnt	DODAS, ECAS, WeNMR	PROMINENCE (FUSION)
B2DROP	EUDAT	DataMngmnt	CLARIN, ECAS, OpenCoastS	Euro-Argo
B2HANDLE	EUDAT	DataMngmnt	ECAS	
B2SAFE	EUDAT	DataMngmnt		ICOS Portal (ICOS)
B2SHARE	EUDAT	DataMngmnt	ECAS, OpenCoasts	LOFAR (Radio Astronomy)
B2FIND	EUDAT	Datamngmnt	CLARIN	LOFAR (Radio Astronomy)

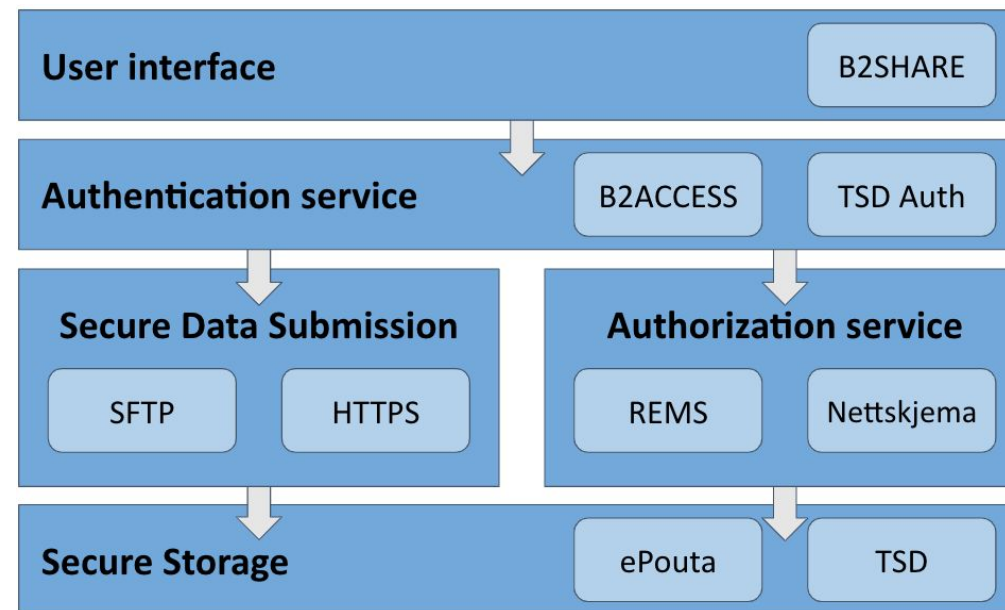
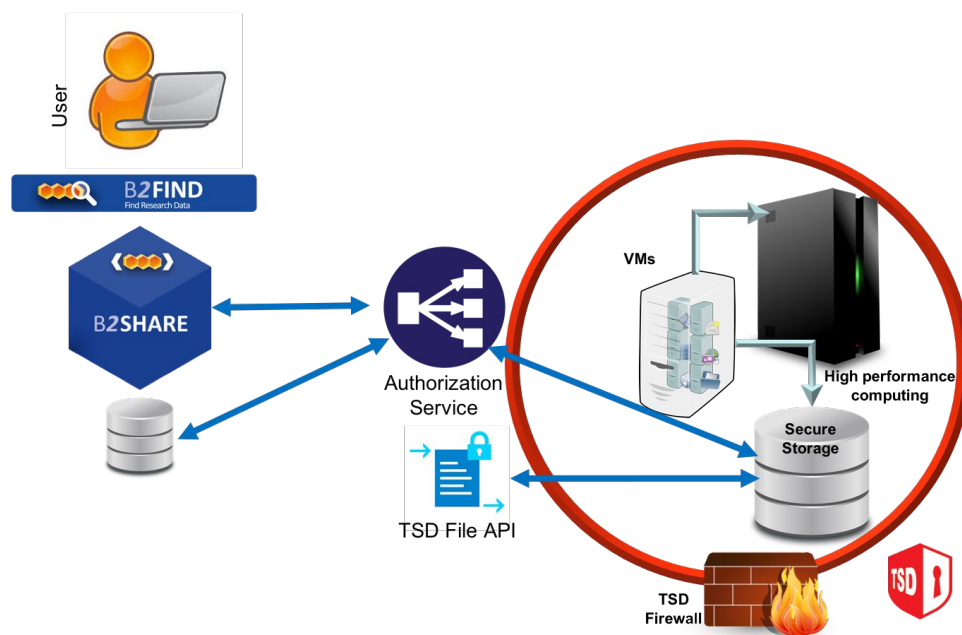
Note: Thematic Services, Competence Centers, EAPs, DIH(18 pilots) will all be covered in later presentations in more detail.

Secure B2SHARE

The Service providers of the secure storage services (ePouta and TSD) exploited the Integration activities within EOSC-hub to expose their services via well known EOSC-hub services (B2SHARE).

Secure B2SHARE concept:

- Layered Integration model
- Users access via well known Service B2SHARE
- Increases uptake opportunities for Secure Storage services



Layered approach to integration for exposing services

Varied Licensing Landscape - Open source strongly encouraged.

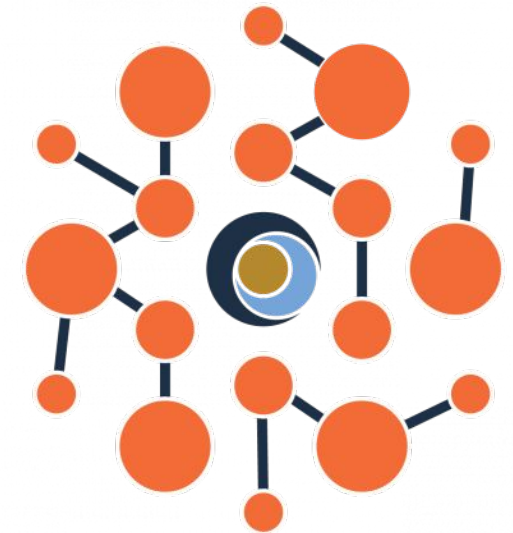
Each of the services accessible through the marketplace has its own IPR approach (ranging from the public domain to proprietary software) and terms and conditions for use (within the constraints of the KER 3, Rules of Participation). The components from the Hub Portfolio (internal services) which are offered for integration by external services in the EOSC Service portfolio integration are also offered under a range of open licences.

The EOSC-integration related work consists of developments or adaptations made to over 50 open source components each of them released under an OSI-approved open source license.

EOSC-hub website	https://www.eosc-hub.eu/key-exploitable-results/external-services-eosc-service-portfolio
Publications	<ul style="list-style-type: none"> • EOSC-hub eTDR@CINES – Business model • Demonstrator Videos for Transparent Data Exchange and Secure B2SHARE • Slide sets for Each Service
Magazine	https://www.eosc-hub.eu/news/new-improved-b2find-30
Selected presentations at events	<ul style="list-style-type: none"> • The common services have been presented at numerous events. The EOSC-Hub weeks in 2019 and 2020. • B2FIND @ Realising EOSC - EOSChub / SSHOC / FREYA joint meeting, Nov 17th 2020 • Integrating EOSC services to enable FAIR principles @ Realising EOSC - EOSChub / SSHOC / FREYA joint meeting, Nov 17th 2020



WPs in leading roles	WP6
WPs providing contributions	WP2, WP5, WP7, WP8, WP10, WP13
Other information	<p>D2.6 - First Service roadmap, service portfolio and service catalogue</p> <p>D6.5 - Final report on the maintenance and integration of common services</p> <p>D7.5 - Final report on Thematic Service exploitation</p> <p>D8.2 - Final report on Competence Centre key results and exploitation status and plans</p> <p>D9.4 - Joint Digital Innovation Hub Final Results and Sustainability Plan</p> <p>D10.2 EOSC-hub Technical Roadmap v2</p>



**Thank you
for your attention!**

Questions?



EOOSC-hub

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