

EOSC-hub support to the European Open Science Cloud

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eosc-hub.eu



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EOSC-hub About the European Open Science Cloud

 A EC high-level initiative addressing the fragmentation of today's European digital infrastructures for research

EOSC Objectives	Actions
Increase the ability to exploit research data across scientific disciplines and between the public & private sector	 Publish, discover, access services and resources for all scientific disciplines Open to national, regional, pan-European providers, and supports different exploitation models (e.g. free at point of use, commercial)
Increase interoperability, interconnect the existing and the new research digital infrastructures across Europe	> Provide thematic services integrated with European compute/data platforms for data exploitation > Single sign on, integrated access and order
Support open science	> Services to share and discover research artefacts (publications, datasets, software, workflows etc.), research artefacts data sources (publication repositories, publishers, data archives, software archives, etc.)

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20 digital research infrastructures, EGI, EUDAT CDI and INDIGO-DataCloud jointly offering services, software and data for advanced, data-driven research & innovation

EOSC-hub

100 36 million Euro

The Hub:

a European contact point to discover, access, use and reuse resources for advanced data-driven research

→ contact@mailman.eosc-hub.eu



EOSC-hub contributions to the EOSC roadmap

EOSC strategic actions 1/3

Architecture	Provides a framework to manage services
	sourced from a number of service providers
	and plays the role of service integrator.

Data

Through the EOSC-hub Marketplace, provides a discovery and access channel to FAIR-accredited datasets



EOSC-hub contributions to the EOSC roadmap

EOSC strategic actions 2/3

Services	Contributes to the definition of a participatory
	and lightweight service portfolio management
	process in collaboration with the participating
	service providers.

Engages with the demand and supply side of the EOSC, and will co-develop and operate a marketplace as one entry point to EOSC.



EOSC-hub contributions to the EOSC roadmap

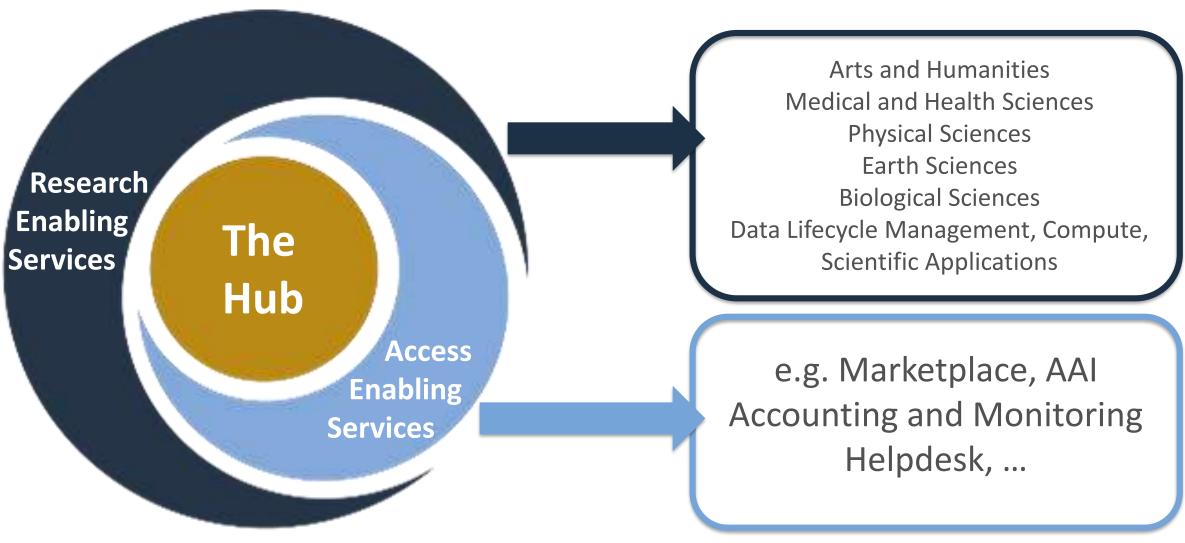
EOSC strategic actions 3/3

Rules of Participation

Collaborates with partners and external projects/initiatives to **establish and maintain a corpus of policies** that is attractive and provides value for both service providers and service users.



EOSC-hub Service catalogue



https://www.eosc-hub.eu/catalogue/



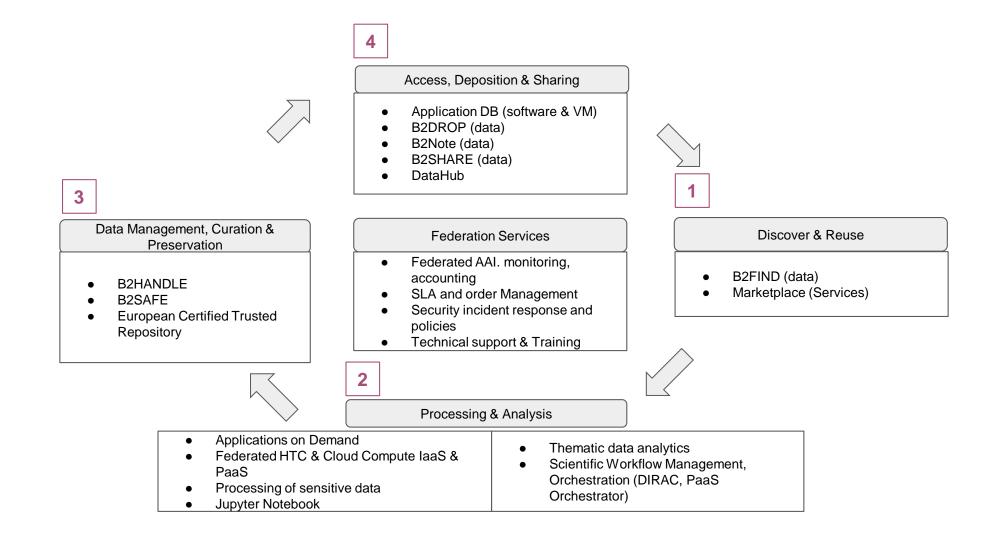
External and internal services

- © EOSC-hub (external) service portfolio → Research enabling
 - The set of **customer-facing services** that are offered by the EOSC Hub
- EOSC-hub internal service portfolio Access enabling
 - The set of **supporting services** needed to operate the EOSC Hub

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Another view on the services based on the Research Data Lifecycle





EOSC-hub (External) Service Portfolio - areas

Compute

EGI High-Throughput Compute

EGI Cloud Compute

EGI Cloud Container Compute

Platforms

EGI Workload Manager

IM (Infrastructure Manager)

PaaS Orchestrator

Identity & Security

EGI Check-in

B2Access

IAM

Data Management & Storage

B2Handle

B2Find

B2Drop

B2Safe

B2Stage

CVMFS

EGI Datahub

EGI Online Storage

eTDR

Sensitive Data Service

Thematic Services

ECAS

DARIAH Science

Gateway

OOPENCoastIS

GEOSS

EO Pillar

WeNMR Suite

DODAS

LifeWatch Services

CMI

Professional Services

FitSM Training

Data Management Planning

Research Data

(developing)

...

Aggregators

Applications Database

Repository of Validated Software



EOSC-hub Services by area

e-Infra

Humanities

Language

Engineering

Medical and Health Sciences

Natural sciences

EGI Federation

and literature (CLARIN)

Environmen tal engineering (sea vessels, LNEC)

Biological Sciences (ELIXIR)

Astronomy (LOFAR)

- Fusion (ITER)

Physical Sciences

- **High Energy Physics** (CMS and VIRGO)
- Space Science (EISCAT-3D)

EUDAT CDI

Arts (DARIAH)

Civil Engineering (Disaster Mitigation)

Structural biology (WeNMR)

Earth Science

- EO Pillar
- GEO
- Climate Research (ENES)
- Seismology (ORFEUS, EPOS)

Biological Sciences

- Marine and freshwater biology (IFREMER)
- **Biodiversity** conservation (LifeWatch)
- Ecology (ICOS)

INDIGO-DataCloud

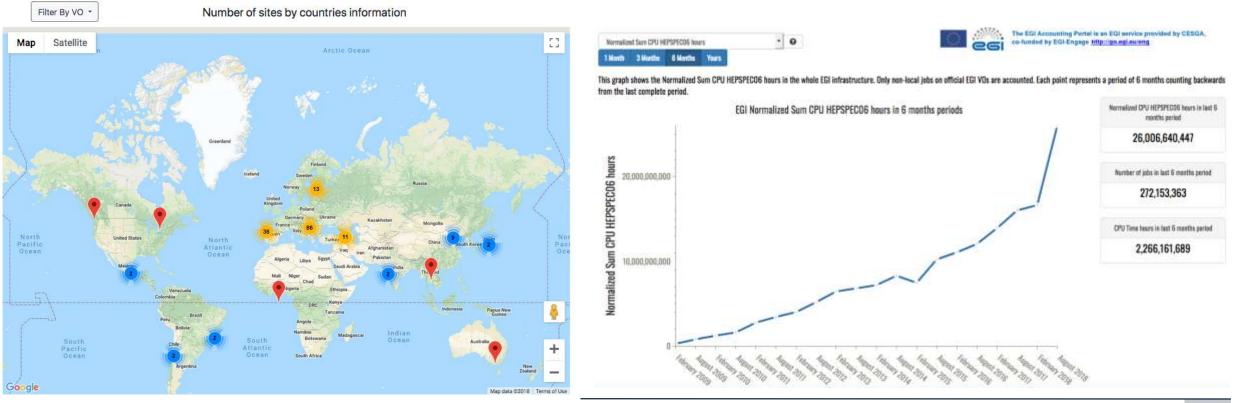
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EOSC-hub Compute Platform: EGI

970,600 computing cores; 356 PB disk & 380 PB tape storage

666 open research publications from Jan 2018 (OpenAIRE stats)





EOSC-hub Data Platform: EUDAT CDI

- 10K records deposited in B2SHARE
- 1PB / 80M registered objects
- 13 community repositories integrated into the CDI
- 630K records in B2FIND

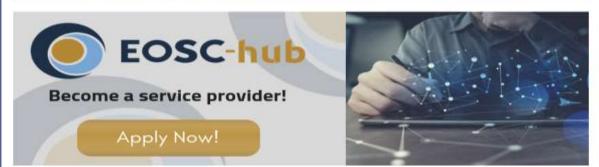
- EUDAT Ltd. formally established to operate on a nonprofit making basis as the voice of European organisations working together as part of the EUDAT CDI
- Over 20 major European research organisations, data and computing centres currently part of the EUDAT CDI

+7000
Online community members





Join as a service provider



The EOSC will be Europe's virtual environment for all researchers to store, manage, analyse and re-use data for research, innovation and educational purposes. EOSC is intended to set off the ground by federating existing scientific data infrastructures and digital infrastructures for data exploitation that are now spread across disciplines and EU member states. This will make access to scientific data and other scientific outputs easier and more efficient.

Why join as a service provider?

By contributing your services and resources to the EOSC catalogue through EOSC-hub, you can:

- Choose to advertise them on the Marketplace operated by EOSC-hub and promote their adoption outside your traditional
 user groups, reaching a wider user base; use the makerplace as a free online platform where you can manage access
 requests and agree suitable service levels with the requesters; receive statistics about access requests and about
 customer satisfaction.
- Get support to leverage and integrate functionalities of other EOSC provided services and resources. For example, to
 enable your service to scale out to cloud compute and storage resources, integrate with data services or authenticate
 and authorize users via federated login.
- Influence EOSC service provisioning policies and the portfolio roadmap via the EOSC-hub Service Management Board.
- · Join the group of providers that meet EOSC-hub quality standards.

Service requirements

To become a provider we require that:

- The service is accessible by users outside its original community.
- The service is described through a common template focused on value proposition and functional capabilities.
- At least one service instance is running in a production environment available to the user community.
- Release notes and sufficient documentation are available.
- Helpdesk channels are available for support, bug reporting and requirements gathering.
- The provider is committed to including the management of access requests through the EOSC-hub marketplace, in addition to any other means of access requests they may currently have.

Interested?

Fill the online application form

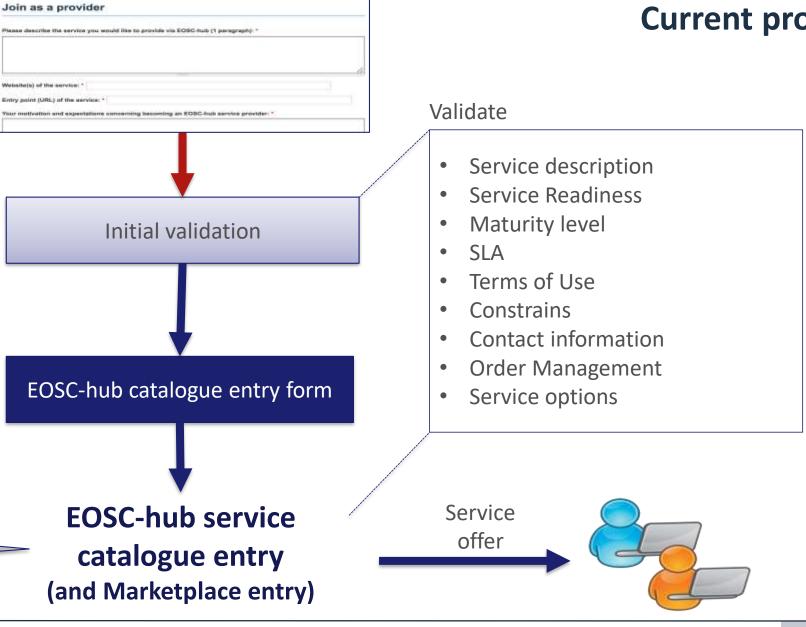
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Become a provider

https://www.eosc-hub.eu/join-as-service-provider

ase describe the service you would like to provide via EOSC-hub (1 paragraph): *
bsite(s) of the service: *
ry point (URL) of the service: *
r motivation and expectations concerning becoming an EOSC-hub service provider: *
at are the key selling points/benefits of the service to potential users? *
ich institute(s) is/are the service provider(s)? *
o is the main contact for the service? (name and email): *
w large is the current user base of the service? How do you expect this to change after joining EOSC-hub? *
der what conditions would you like to make the service available for EOSC-hub users? Select the line(s) that appl
ailable for anyone without login ed to login, but free to use ed to login and conditions/restrictions apply based access (e.g. pay-for-use, monthly fee)
and a second (e.g. pay-ini-use, morning ree)

Becoming a provider Current process

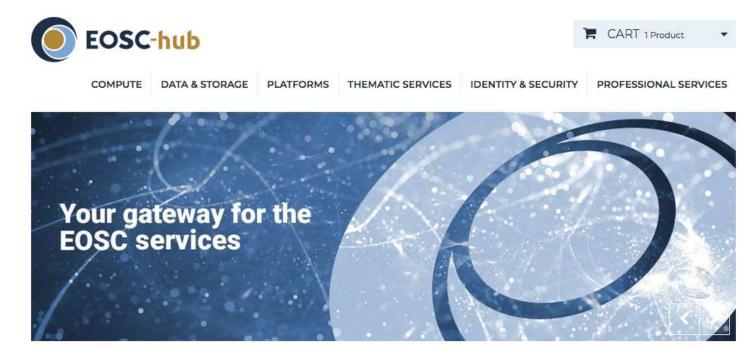


Finalize in a phone meeting

10/18/2018



EOSC-hub Marketplace http://marketplace.eosc-hub.eu/









DATA & STORAGE



PLATFORMS



THEMATIC SERVICES



IDENTITY & SECURITY



PROFESSIONAL SERVICES

A platform where services can be:

- Promoted
- Discovered
- Ordered
- Accessed

3-steps process for users

- Authentication & registration
- Product discovery and specification
- Ordering and request processing



- EOSC-hub started in Jan 2018 with an initial set of service selected
 - Thematic services were selected via an open call mechanism
- Most of these services are already available for use
- The EOSC Portal will be launched November 23rd
 - The EOSC-hub marketplace will be unveiled as one of the underpinning components

Thank you for your attention!

Questions?







