



DICE

Data Infrastructure Capacity for EOSC

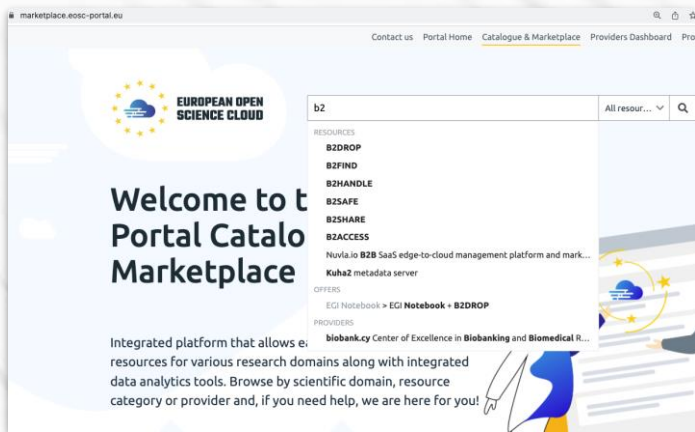
EUDAT services in the EOSC Ecosystem

EUDAT Conference

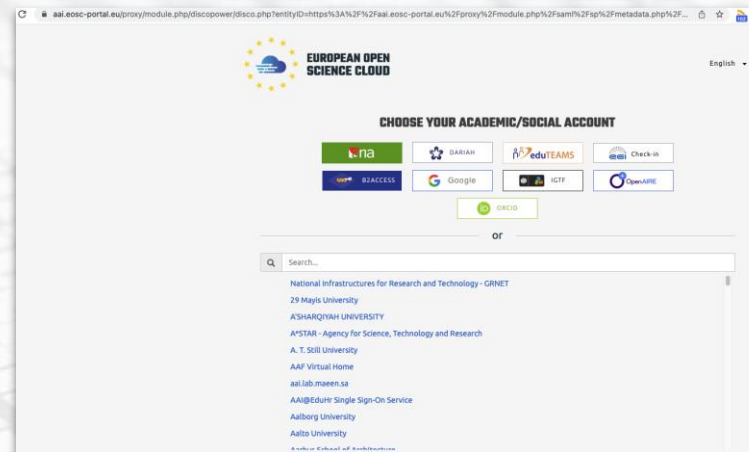
Themis Zamani / GRNET



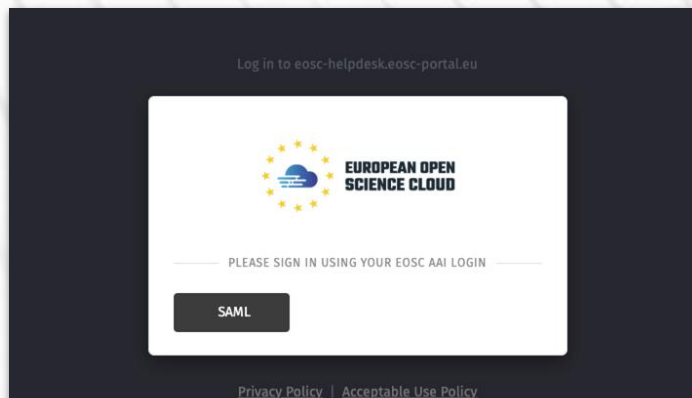
The DICE project has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 under Grant Agreement no. 101017207



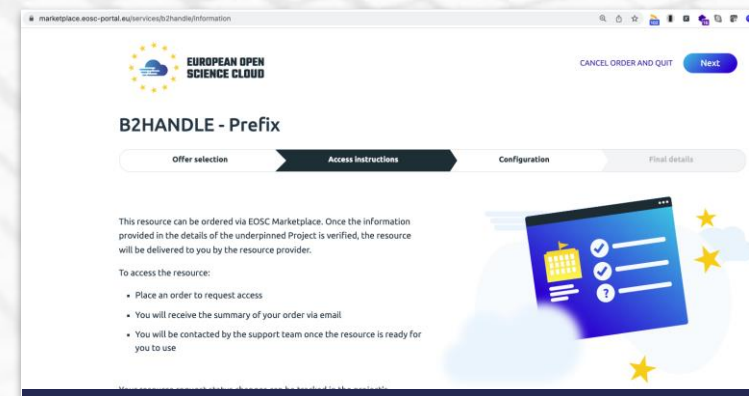
Have you visited the Marketplace ?



Did you try to login?



Do you have a question about B2 Services?



Did you tried to make an order ?

before we start

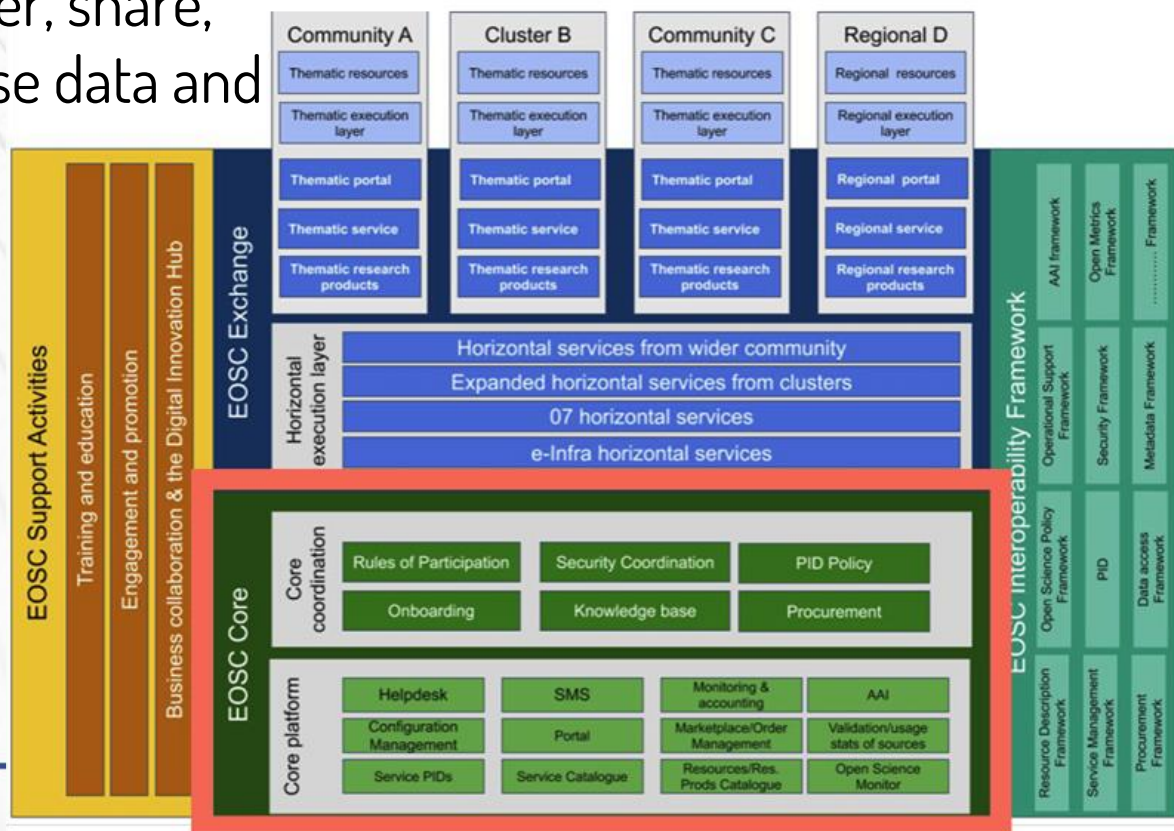
is an environment for hosting and processing research data to support EU science

EOSC-Core

A set of services providing the means to discover, share, access and re-use data and services.

EOSC-Exchange

A set of services complementing the EOSC-Core that store and exploit FAIR data encouraging its reuse.





AAI

Resource Catalogue

Helpdesk

Monitoring

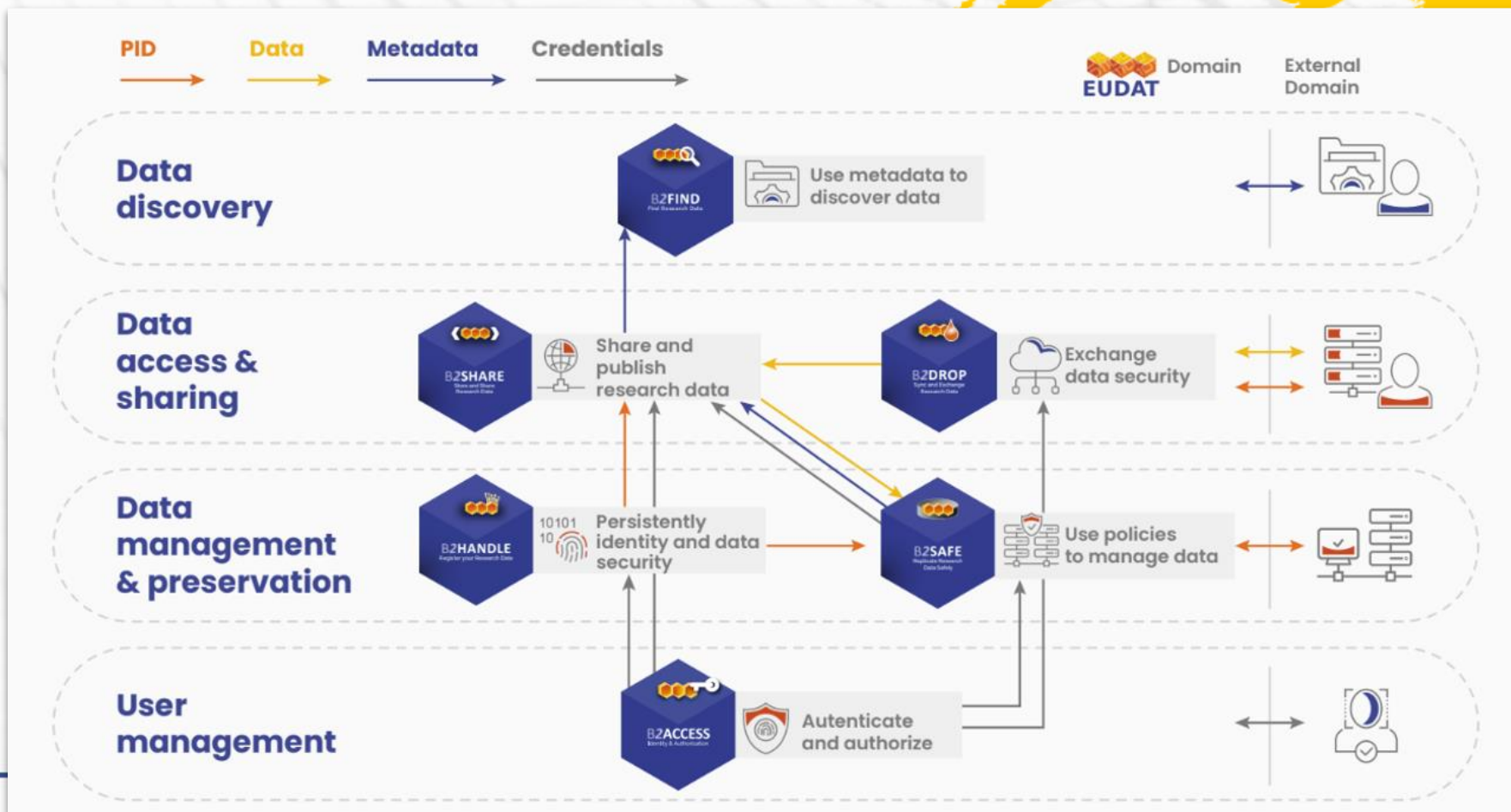
Accounting

Order Management

A set of services providing the means to discover, share, access and re-use data and services.


EUDAT Services

EUDAT is offering to research communities and researchers a set of integrated services for data management. The EUDAT services address needs at different stages of research data lifecycle





EUDAT CDI Operational & Collaboration Tools


Operational





DICE Service





- 

DPMT
Registering the corresponding Provider & the service details
- 

Monitoring
Collecting monitoring metric data.
- 


Accounting
Receiving accounting data from the service.
- 


SPMT
Describing the resource & the provider for EOSC Portal.
- 


Helpdesk
Connect with the EUDAT Helpdesk to support the users.
- 


B2ACCESS
Connect with B2ACCES to enable users authentication and authorisation.


Collaboration



- 

AMS
A messaging Service for all
- 

GITLAB
Support full software development cycle
- 

SVMON
Version monitoring
- 

Mattermost
Platform for communication, collaboration, workflow orchestration across tools & teams

EOSC - Core & EUDAT CDI Operational & Collaboration Tools



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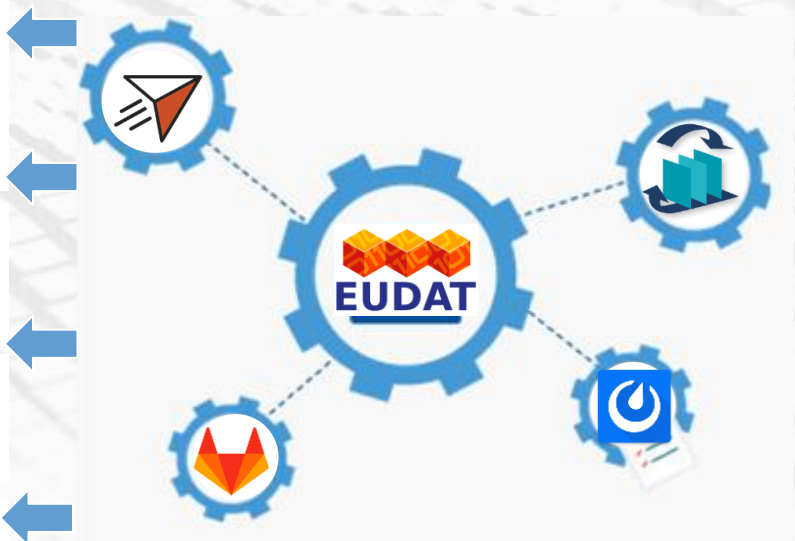
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Receiving accounting data from the service.
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Registering the corresponding Provider & the service details



DICE: Main Objectives

1 Integration with EOSC



Harmonise the integration of services and ensure interoperability with EOSC-Core components;

2 Developments & Integration



Evolve the EUDAT CDI Operation and Collaboration Tools to play a significant role in the EOSC ecosystem and to continuously support a) the integration and b) the onboarding process.

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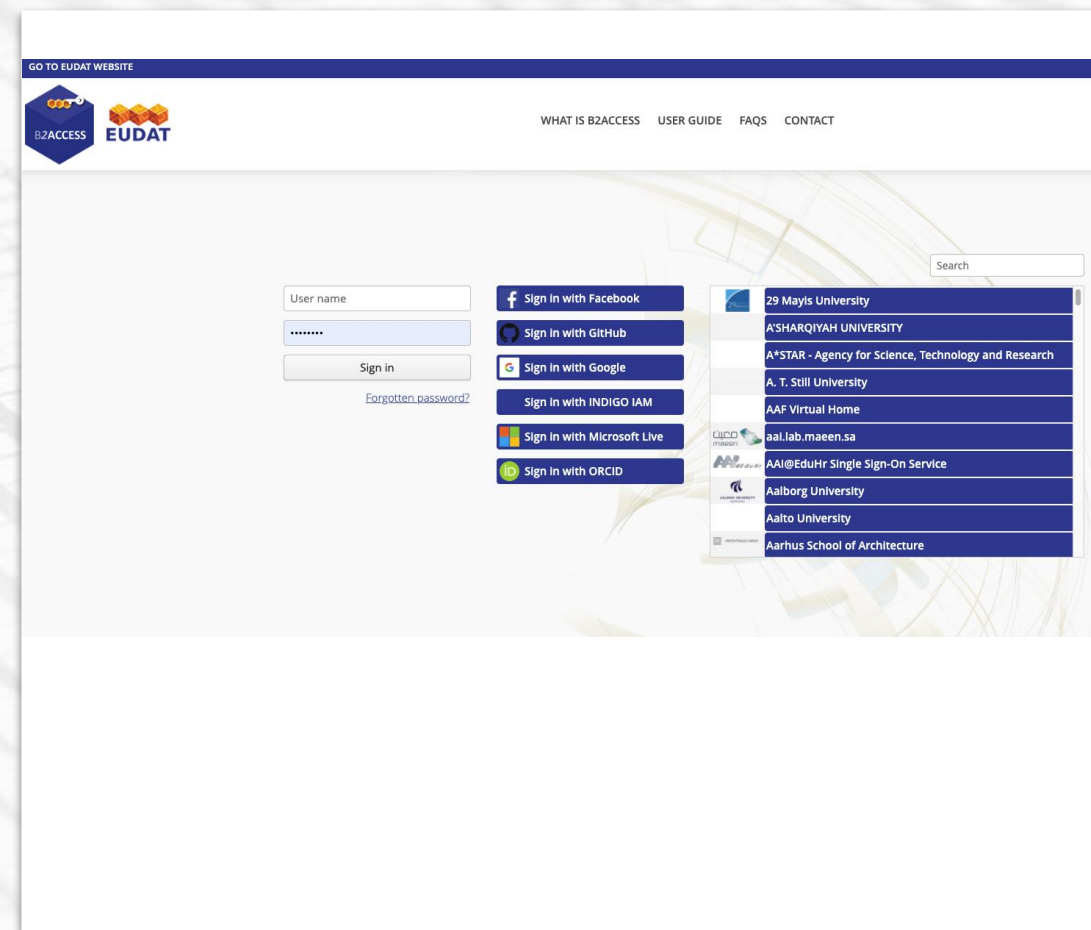


3 Supporting

- Discover services data insights and create basic sources of truth (ex. standardised vocabularies, models) to support interoperability;
- Provide Standardised APIs for the interconnection of services;
- Align with INFRAEOSC-03

B2ACCESS is a federated cross-infrastructure authorisation and authentication proxy for user identification and community-defined access control enforcement.

- Follows the technical specifications and interoperability guidelines for the AAI
- Part of the EOSC AAI
- Supports a number of communities
- Compliant to the AARC Blueprint and REFEDS Sirtfi



<https://b2access.eudat.eu>

Developments

- EOSC AAI federation (WIP)
- Optimised and extended the integration with other AAIs (EGI Checkin, EduTeams,)
- Advanced group management delegation
- Follow the evolution of the guidelines
- User experience improvements



Research Infrastructures Integration

- IT4Innovation
- Fenix RI (work in progress)

Integration with DICE services

- DICEReg From MPCDF
- B2SHARE / KIT Institute IBPT

B2ACCESS fulfils

EOSC AAI guidelines

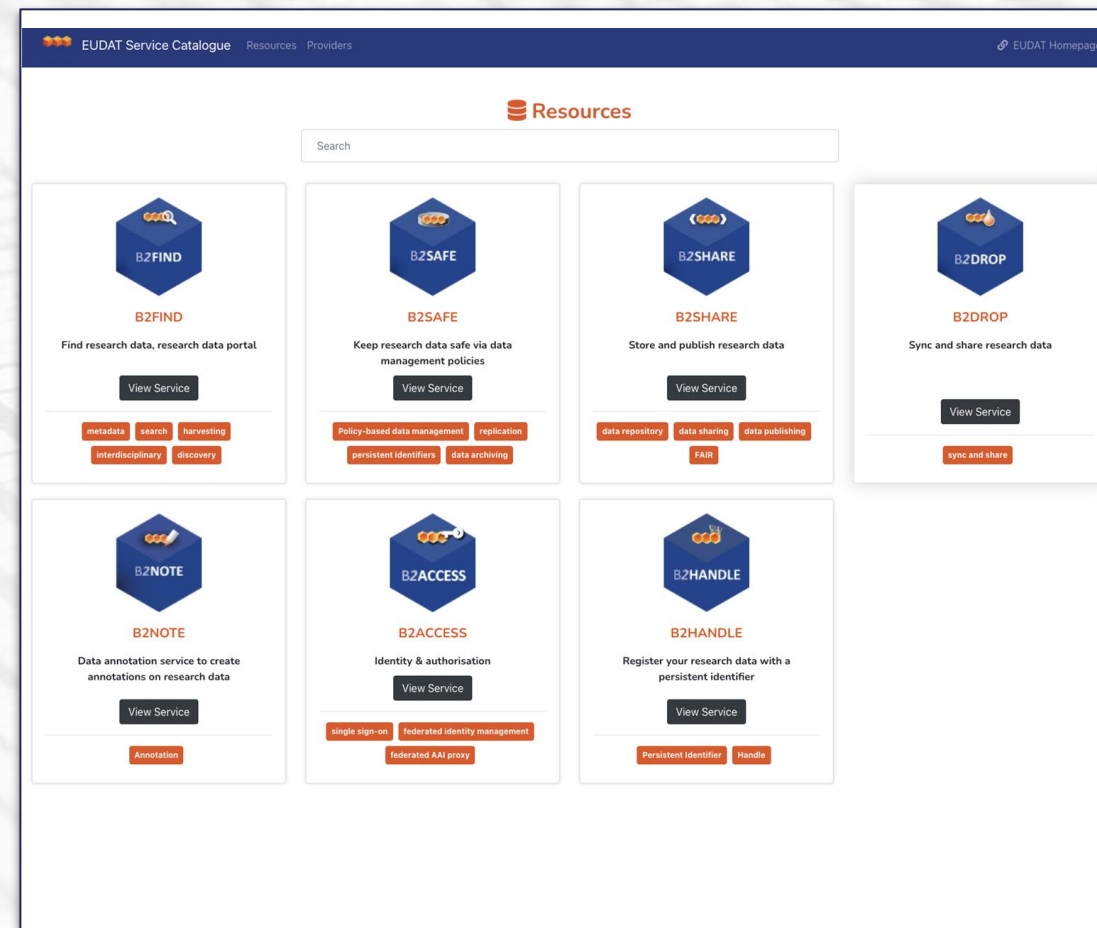
EOSC Rules of Participation

AGORA / SPMT

The Service Portfolio Management Tool (AGORA) is a tool aimed at facilitating service management in IT service provision. It represents a complete list of the services managed by a service provider. Its main features are:

- Easy to use
- Supports Resource and Provider Profiles v4.0
- Integrated to EOSC
- Following FitSM processes

Provide an access point for resources.

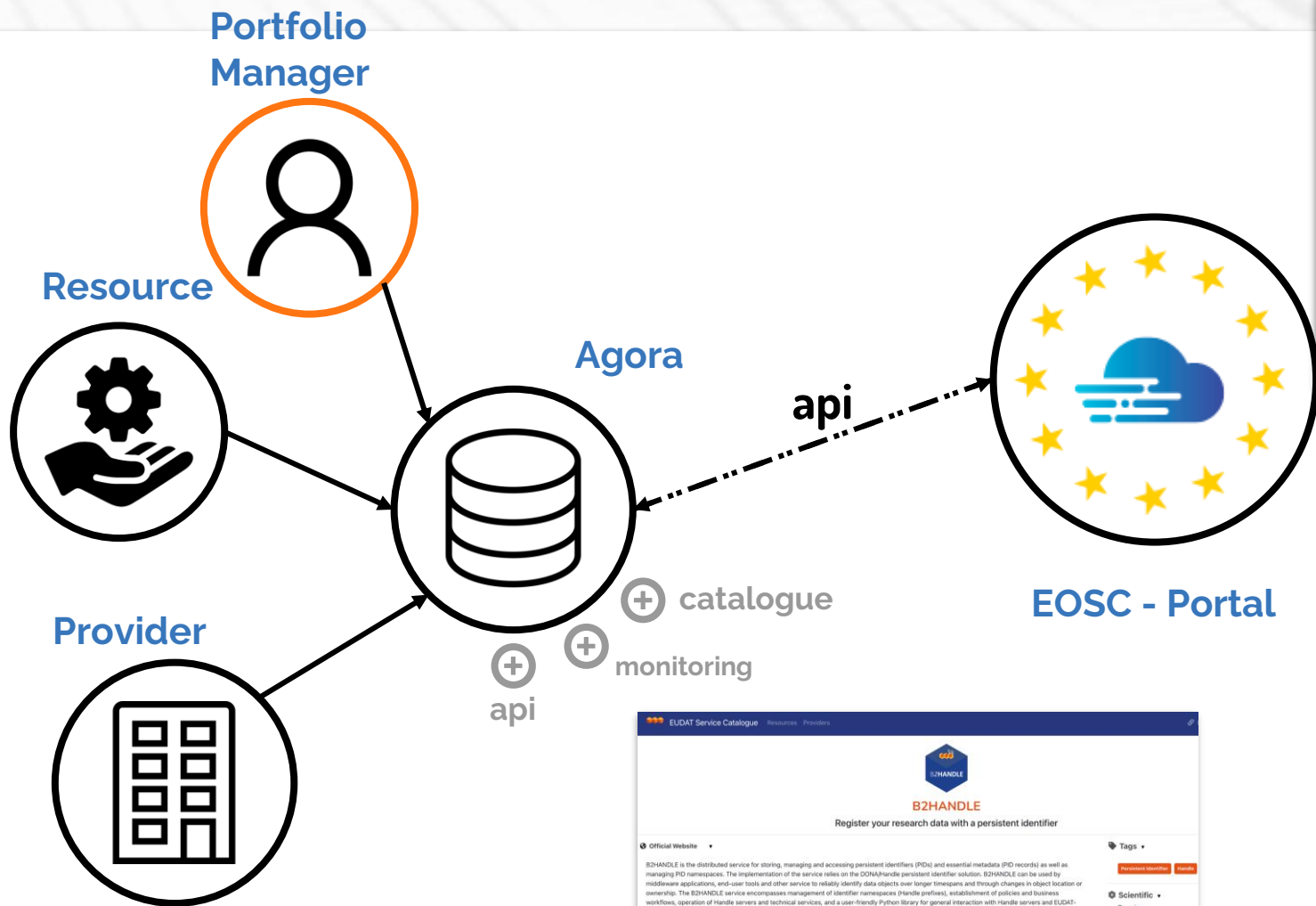


The screenshot shows the 'Resources' page of the EUDAT Service Catalogue. The page features a search bar at the top and a grid of service cards. Each card includes a blue hexagonal icon with a white logo, the service name, a brief description, a 'View Service' button, and a list of associated keywords in orange boxes. The services displayed are:

- B2FIND**: Find research data, research data portal. Keywords: metadata, search, harvesting, interdisciplinary, discovery.
- B2SAFE**: Keep research data safe via data management policies. Keywords: Policy-based data management, replication, persistent identifiers, data archiving.
- B2SHARE**: Store and publish research data. Keywords: data repository, data sharing, data publishing, FAIR.
- B2DROP**: Sync and share research data. Keyword: sync and share.
- B2NOTE**: Data annotation service to create annotations on research data. Keyword: Annotation.
- B2ACCESS**: Identity & authorisation. Keywords: single sign-on, federated identity management, federated AAI proxy.
- B2HANDLE**: Register your research data with a persistent identifier. Keywords: Persistent Identifier, Handle.

<https://sp.eudat.eu>

Integration to EOSC Platform (now)



Resources > Details EDIT UPDATE RESOURCE TO EOSC PORTAL

Basic information

ERPBAI.0 - ID	7	State	Published
ERPBAI.1 - Name	B2SAFE	ERPBAI.2 - Resource Organisation	EUDAT Collaborative Data Infrastructure
ERPBAI.3 - Service Providers			
Jülich Supercomputing Centre, National Infrastructures for Research and Technology, CSC – IT CENTER FOR SCIENCE, IT4Innovations / VSB-TUO, The Cyprus Institute, Karlsruhe Institute of Technology, Barcelona Supercomputing Center - Centro Nacional de Supercomputación, Cineca Consorzio Interuniversitario, SURF			
ERPBAI.4 - Webpage			
https://www.eudat.eu/services/b2safe			
EOSC ID	eudat.b2safe	EOSC State	approved resource

AGORA / SPMT fulfils

SPM Processes

EOSC API roles & processes

EOSC Rules of Participation

Profiles 4.0

EUDAT Service Catalogue - Resources - Providers

B2HANDLE
Register your research data with a persistent identifier

Official Website

B2HANDLE is the distributed service for storing, managing and accessing persistent identifiers (PIDs) and essential metadata (PID records) as well as managing PID namespaces. The implementation of the service relies on the DONA/Handle persistent identifier solution. B2HANDLE can be used by middleware applications, end-user tools and other service to reliably identify data objects over longer time spans and through changes in object location or ownership. The B2HANDLE service encompasses management of identifier namespaces (handle prefixes), establishment of policies and business workflows, operation of Handle servers and technical services, and a user-friendly Python library for general interaction with Handle servers and EUDAT-specific extensions. B2HANDLE is mostly transparent to end-users, shielding them from the complexity of infrastructure details. B2HANDLE supports a dedicated Handle record structure (a PID profile) for the safe data management within an infrastructure with a given topology.

Features

- Globally resolvable identifiers via the Global Handle Network (DONA, <https://hdl.handle.net>)
- Communities and organisations can obtain Handle Prefixes (aPIC, 21 #####) for their own use
- PIDs can be hosted at EUDAT service providers
- B2HANDLE operates as a federation of EUDAT service providers based on policies

Tags

- Persistent Identifier
- Handle

Scientific

Domains:

- Domain:

Subdomains:

- Domain:

Resources

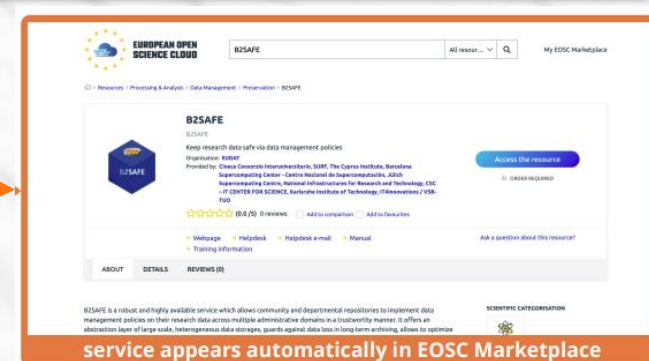
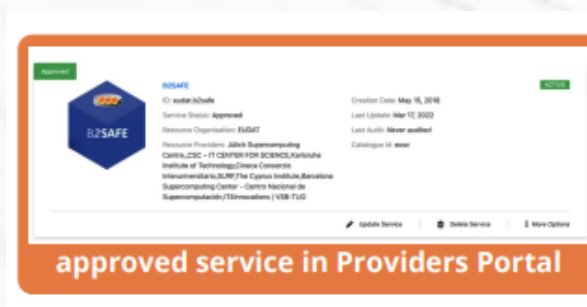
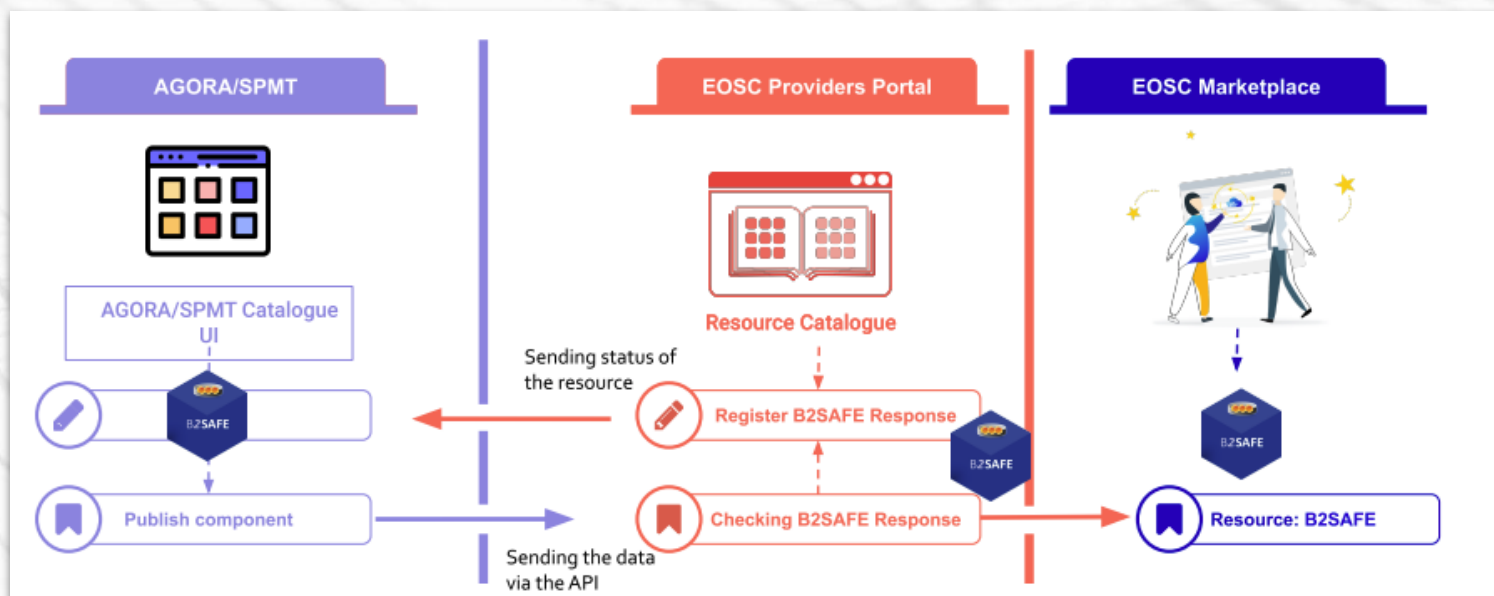
Categories:

- Open
- Not Recommended

The integration

Main benefits of this integration:

- Adopted and implemented **EOSC Profiles v4.0** specification.
- **Onboards quickly and efficiently resources and providers**
- **Advertise** the EUDAT services on EOSC Portal via one click!
- Allows to **curate** EUDAT services **independently** of the EOSC Portal
- **Reach a wider user base** to promote the EUDAT Services.

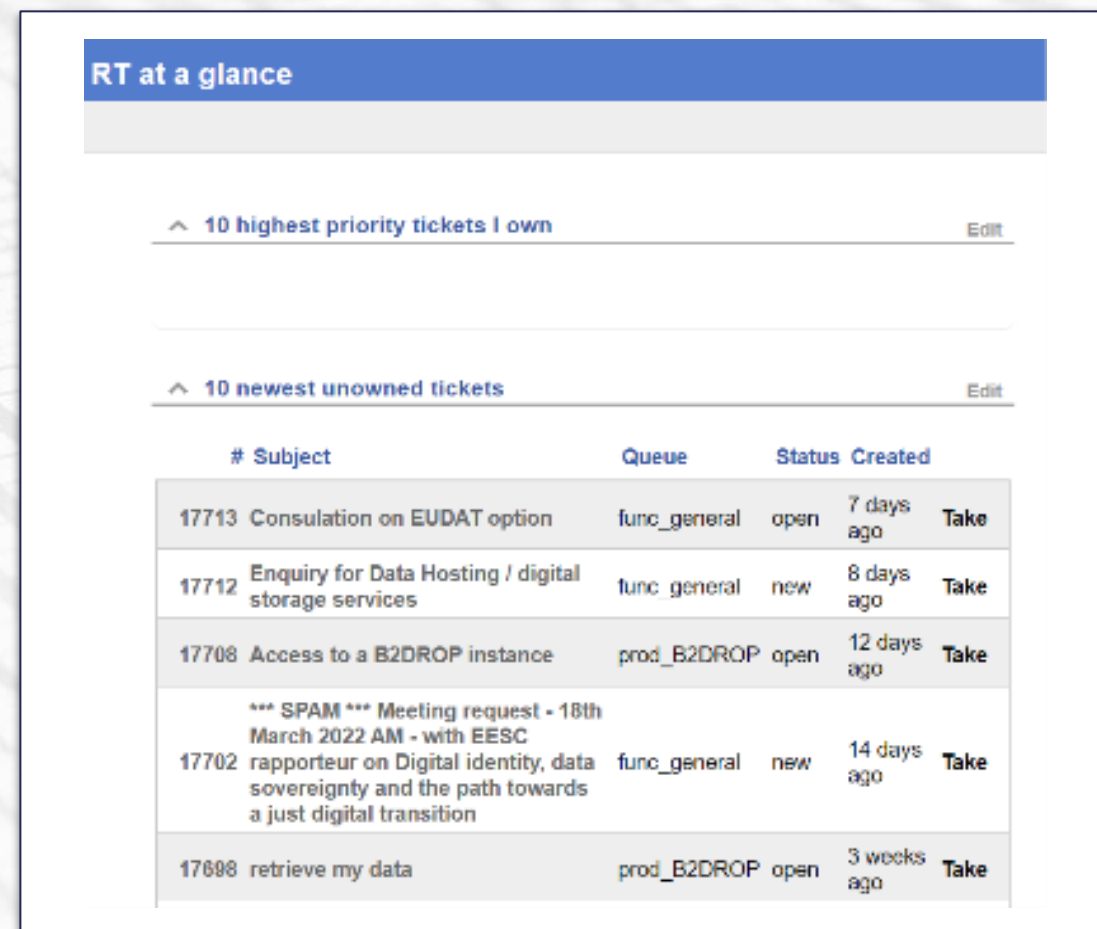


EUDAT CDI Helpdesk

EUDAT Helpdesk is a communication resource that serves as a communication channel for support and problem resolution. It manages possible incidents related with EUDAT/DICE specific services, transferring them to the appropriate support team.

- Connected to EOSC Helpdesk (fully integrated with the old system)
- Follows the interoperability guidelines.

New EOSC Helpdesk Service: mapping of the current EUDAT RT and the new EOSC Helpdesk tool is ongoing



RT at a glance

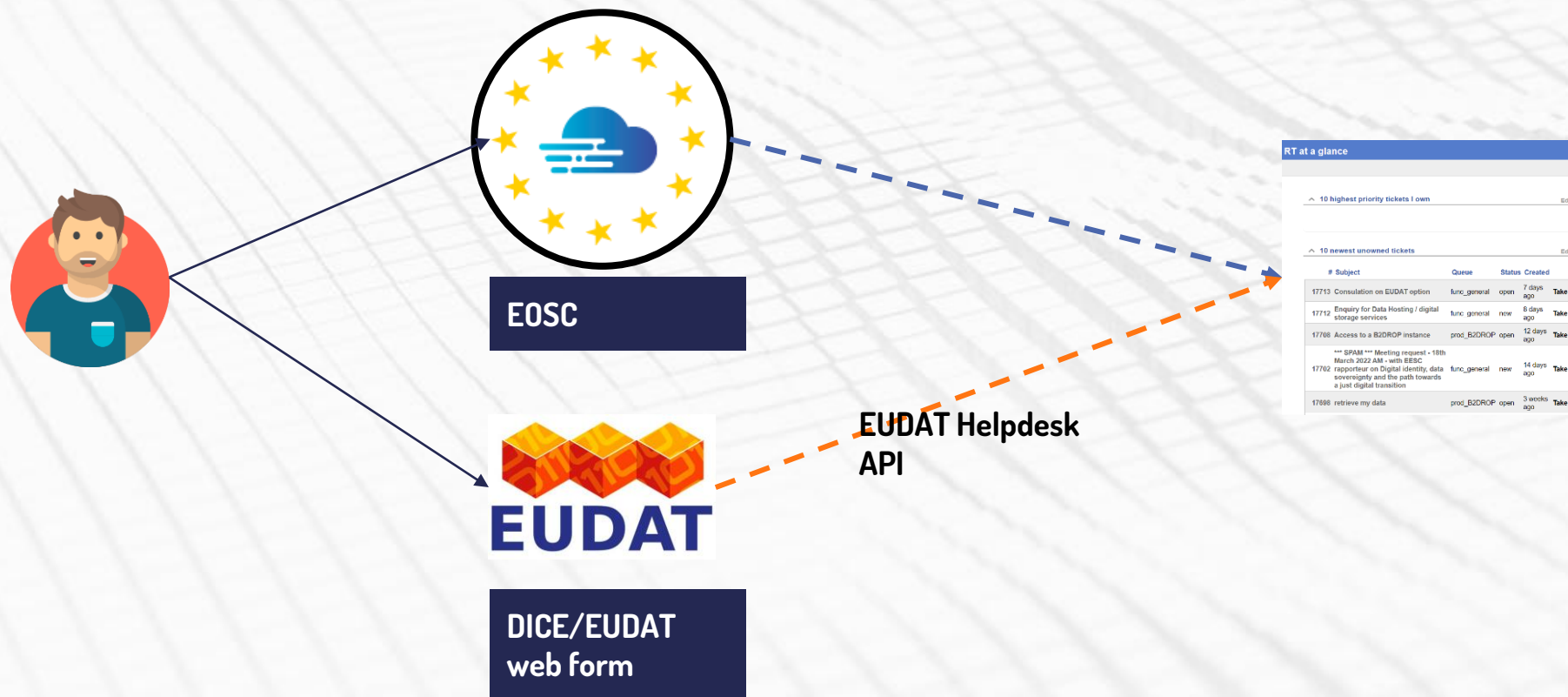
^ 10 highest priority tickets I own Edit

^ 10 newest unowned tickets Edit

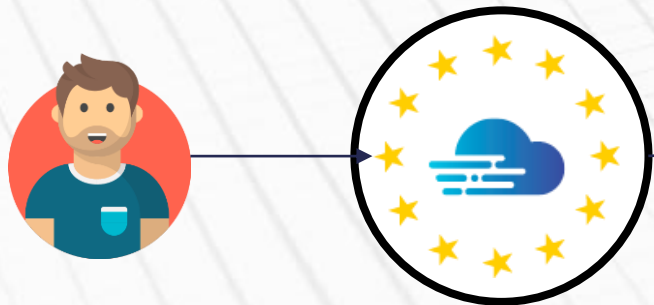
#	Subject	Queue	Status	Created	
17713	Consulation on EUDAT option	func_general	open	7 days ago	Take
17712	Enquiry for Data Hosting / digital storage services	func_general	new	8 days ago	Take
17708	Access to a B2DROP instance	prod_B2DROP	open	12 days ago	Take
17702	*** SPAM *** Meeting request - 18th March 2022 AM - with EESC rapporteur on Digital identity, data sovereignty and the path towards a just digital transition	func_general	new	14 days ago	Take
17698	retrieve my data	prod_B2DROP	open	3 weeks ago	Take

<https://helpdesk.eudat.eu/>

EOSC Helpdesk and EUDAT Helpdesk




Now that the services are onboarded , Helpdesk is connected...



EUROPEAN OPEN SCIENCE CLOUD

Find resource... All resour... Q My EOSC Marketplace

Resources > Processing & Analysis > Data Management > Persistent Identifier > B2HANDLE



B2HANDLE
Register your research data with a persistent identifier

Organisation: EOSC
Provided by: National Infrastructures For Research and Technology, FWF, Gesellschaft für wissenschaftliche Datenverarbeitung Göttingen

5 stars (0.0/3) 0 reviews Add to comparison Add to favorites

Website Helpdesk Helpdesk e-mail Manual Ask a question about this resource?

Access the resource

VARIOUS ORDER TYPES

ABOUT DETAILS REVIEWS (0)

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Features

- Globally resolvable identifiers via the Global Handle Network (GHN, <https://hdl.handle.net/>)
- Communities and organisations can obtain Handle Prefixes (ePIC, 21.#####) for their own use
- PIDs can be hosted at EUDAT service providers
- B2HANDLE operates as a federation of EUDAT service providers based on policies
- PIDs are mirrored across multiple providers for high resolution and high availability
- Handle records can be customised to community and organisational needs (for example include checksums and timestamps to ensure authenticity of the data objects)
- Support for reverse look-ups of handle records
- REST API for easy registration and minting of PIDs

Resource offers

For Researchers

PIDs are normally automatically minted at and within data management and data repository systems, for example via the EUDAT B2SHARE data repository service. Therefore, researchers in need of a...

For Data Managers

B2HANDLE is the distributed service for minting, storing, managing, and accessing persistent identifiers (PIDs) and essential metadata (PID records) as well as managing PID namespaces. The B2HANDLE...

B2HANDLE

Offer selection Access instructions Configuration PIDs to a project

Offers

To gain the access to the resource, please select an offer that suits your needs best.

For Researchers

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Select an offer

For Data Managers

B2HANDLE is the distributed service for minting, storing, managing, and accessing persistent identifiers (PIDs) and essential metadata (PID records) as well as managing PID namespaces. The B2HANDLE...

TECHNICAL PARAMETERS

Number of Prefixes 1 prefix - more than 3 prefixes

Preferred service provider GRNET - Other

Number of PIDs 100 PIDs - 1M PIDs

Select an offer

Prefix

PIDs are comparable to the ISBN numbers assigned to books. A PID consists of a Prefix and a Suffix. The Prefix identifies the naming authority of the PIDs identified by the Prefix. The prefix...

TECHNICAL PARAMETERS

Number of Prefixes 1 prefix - more than 3 prefixes

Select an offer

PID Hosting

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TECHNICAL PARAMETERS

Number of Prefixes 1 prefix - more than 3 prefixes

Number PIDs/year 100 PIDs - more than 1M PIDs

Preferred provider GRNET - Other

Select an offer

Search

Find a service

Make an order

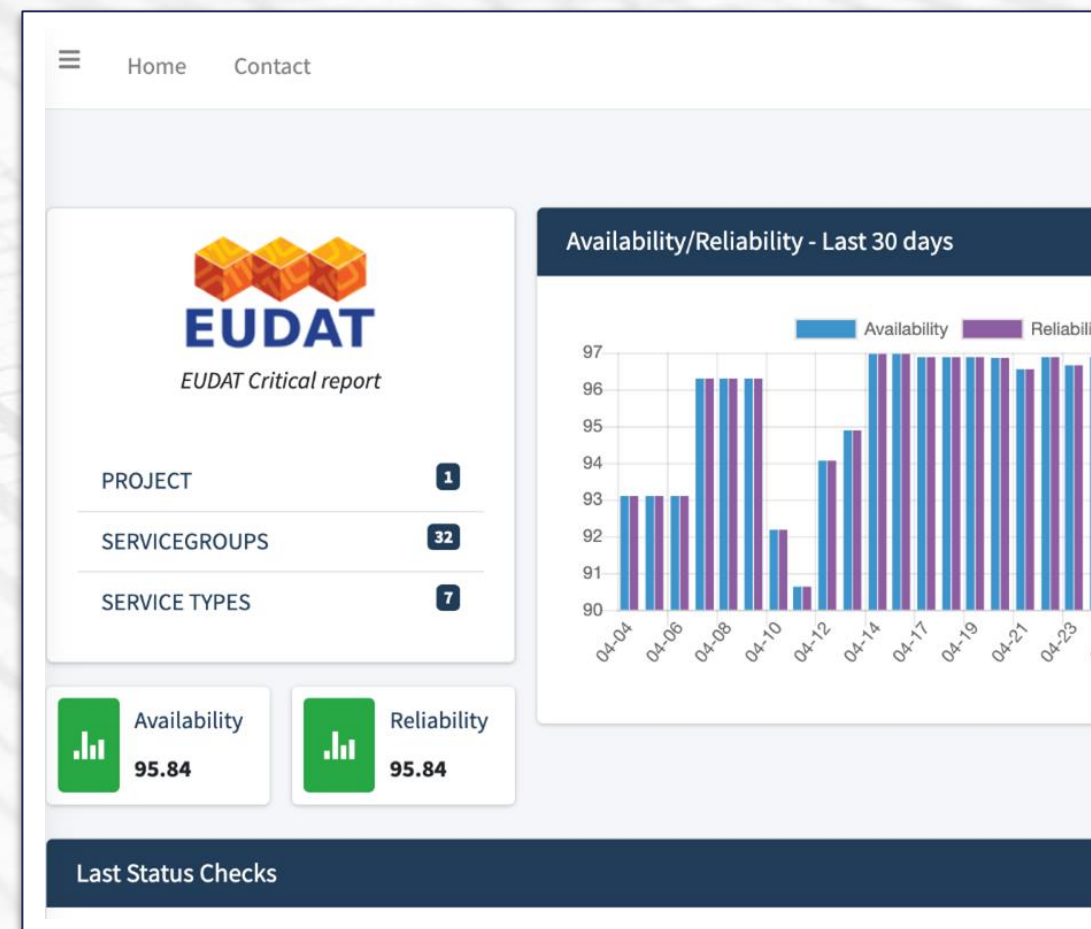
Helpdesk

ordering process enabled

EUDAT CDI Monitoring

A Service that monitors the services by emulating typical user scenarios which allows them to infer the quality of service the actual user gets. The result:

- Availability / Reliability Report
- Status Report
- Alerts



<https://avail.eudat.eu/>

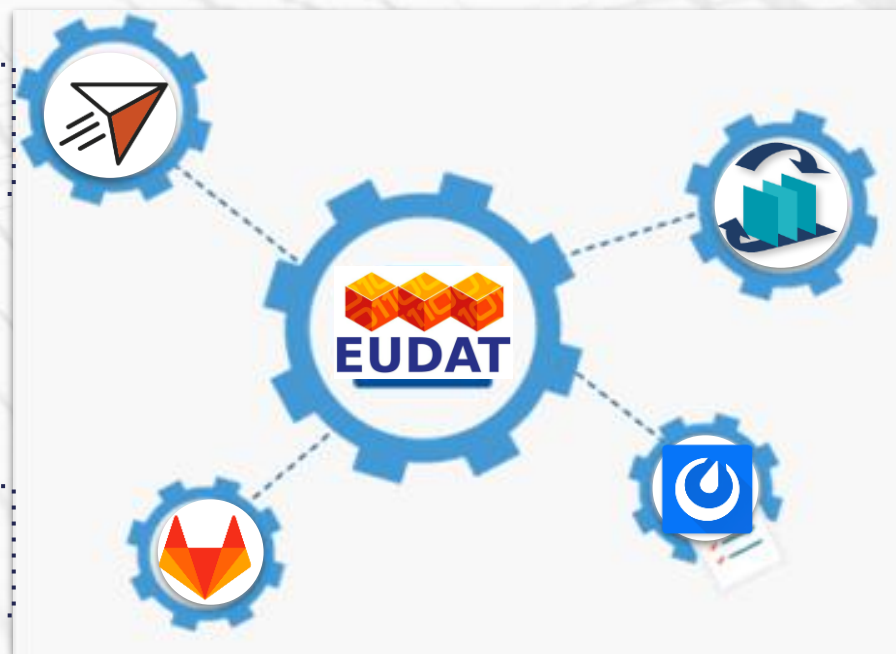
Other elements of the federated core

Messaging service for exchanging messages

<https://msg.argo.grnet.gr>

GitLab as the software development platform

<https://gitlab.eudat.eu>



SVMON as a software version monitoring

<https://svmon.eudat.eu>

Mattermost as a collaboration tool

<https://chat.eudat.eu>

EUDAT Services in EOSC

SPMT
Describing the resource & the provider for EOSC Portal.

BZACCESS
Connect with BZACCESS to enable users authentication and authorisation.

Have you visited the Marketplace?

Did you know that you can login via B2ACCESS?

Helpdesk
Connect with the EUDAT Helpdesk to support the users.

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Do you have a question about B2 Services?

Did you tried to make an order?

Next Steps

Authentication & authorisation services

- Support the integration with the EOSC AAI federation

Catalogue

- Maintain the integration with EOSC
- Profiles 4.0

Helpdesk & Orders

- Maintain the integration with EOSC
- Investigate the order management integration



ACCT & Monitoring:

- Integrate EUDAT Monitoring to EOSC Monitoring
- Investigate the ways of integrating ACCT to EOSC

Other elements of the federated core

- Support other tools to integrate
- Create sources of truth and display the data to other services
- Internal integration



Thank you !

Themis Zamani

themis@grnet.gr



DICEosc



/company/diceosc