Onboarding and Integration of services and resources in the EOSC Future platform 16 November, 2022





















EOSC core resource model and components

Paolo Manghi, OpenAIRE













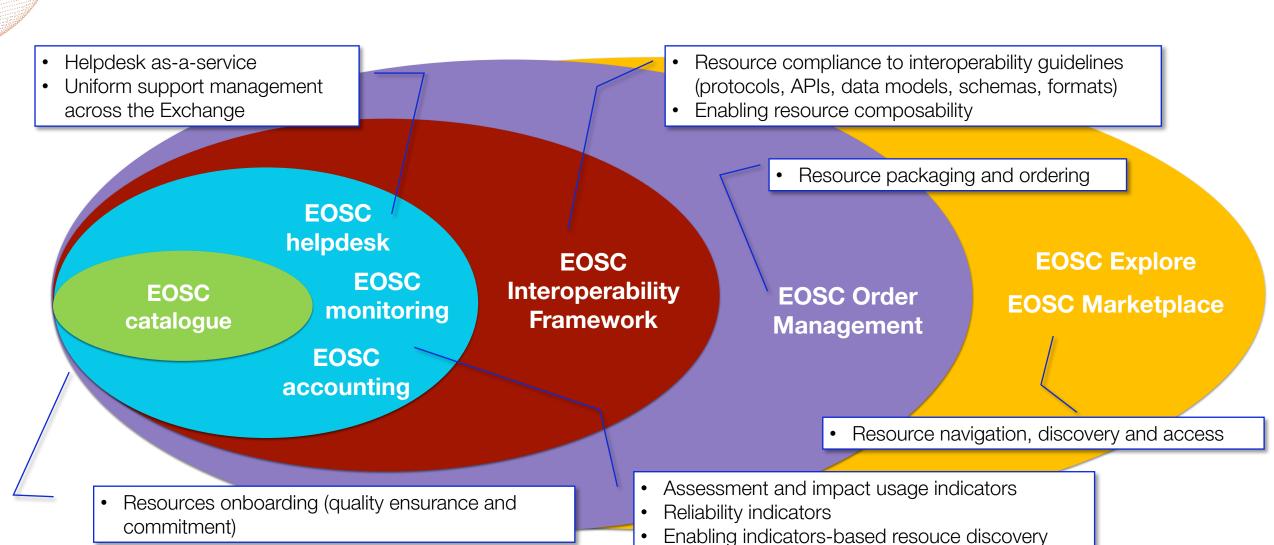








EOSC Core Services added value







Sharing resources beyond community boundaries

Create and Share resources!

Community catalogue of resources

Research Communities (e.g RIs, clusters, e-infra, long tail)



Resource Catalogue & Marketplace

SMEs, industry

Search, find, identify, compose, order, and reuse resources!



Research communities: RIs, clusters, e-infras, long tail, libraries, organizations, funders

Data Model

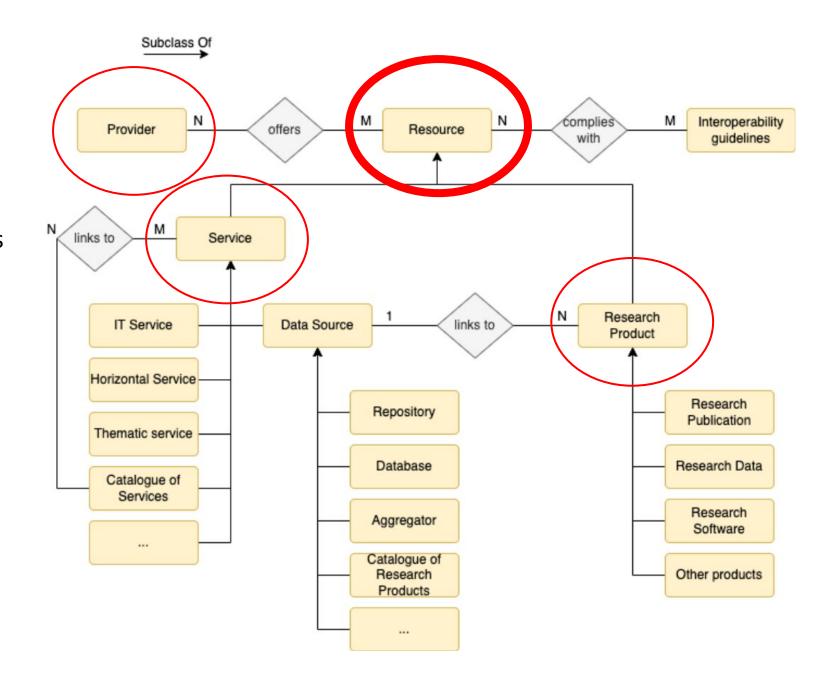
Services

- Compute Resources
- Orchestrators
- Data management services
- Virtual Research Environments
- Data Analysis tools
- Data Sources
- 0 ..

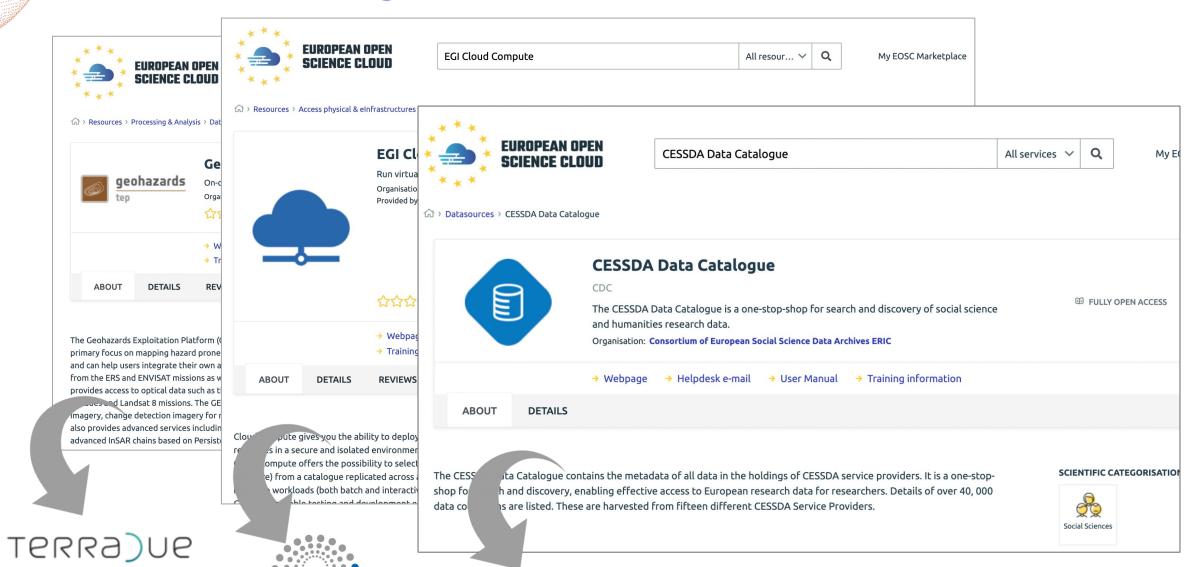
Research products

- Datasets
- Software
- Publications
- Others

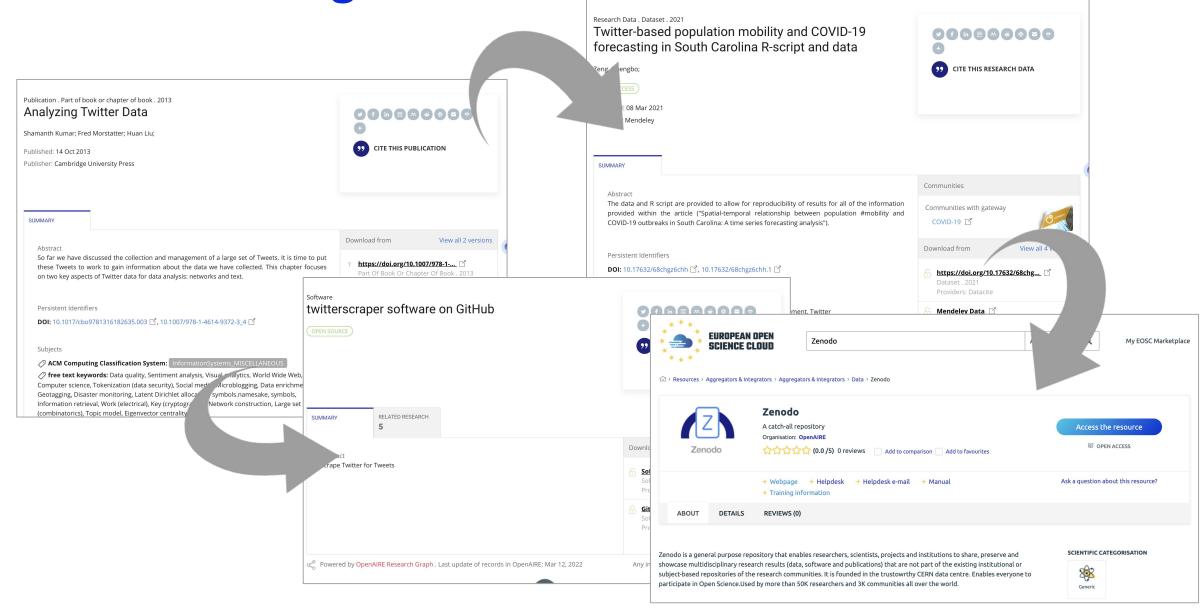
Providers



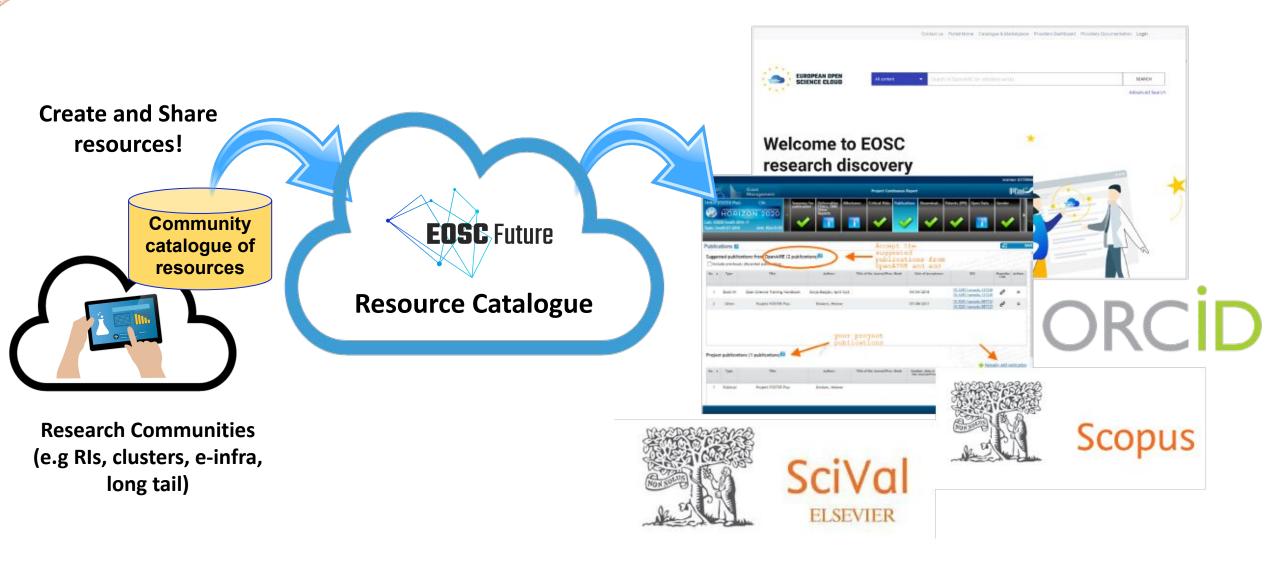
Find and navigate: services and data sources



Find and navigate: research products



Reporting to the EC and funders, connecting with scholarly communication services



Accounting: tracking Open Science, new forms of discovery, assessment

Generate and share accounting stats (e.g. product downloads/views, service accesses)

EOSC Future

Accounting services

Transparency, discovery, and selection by reuse indicators



Researchers & communities: RIs, clusters, e-infras, long tail, libraries, organizations, funders

Research Communities (e.g RIs, clusters, e-infra, long tail)





Monitoring: support and discovery



Monitoring services

EOSC Future

Transparency, discovery and selection by availability indicators



Research Communities (e.g RIs, clusters, e-infra, long tail) Sharing monitoring data



Researchers & communities: RIs, clusters, e-infras, long tail, libraries, organizations, funders

Helpdesk: support



Research Communities (e.g RIs, clusters, e-infra, long tail) Researchers & communities: RIs, clusters, e-infras, long tail, libraries, organizations, funders

Agenda

EOSC Onboarding

- Onboarding services, catalogues, and data sources (George Papastefanatos) [10m]
- Onboarding research products (Andreas Czerniak) [10m]

EOSC Core capabilities

- EOSC Order Management (Roksana Rozanska) [8m]
- EOSC Monitoring (Themis Zamani) [8m]
- EOSC Accounting
 - Accounting for services (Themis Zamani) [8m]
 - Accounting for research products (Dimitris Pierrakos) [8m]
- EOSC Helpdesk (Pavel Weber) [8m]
- Q&A

EOSC Onboarding















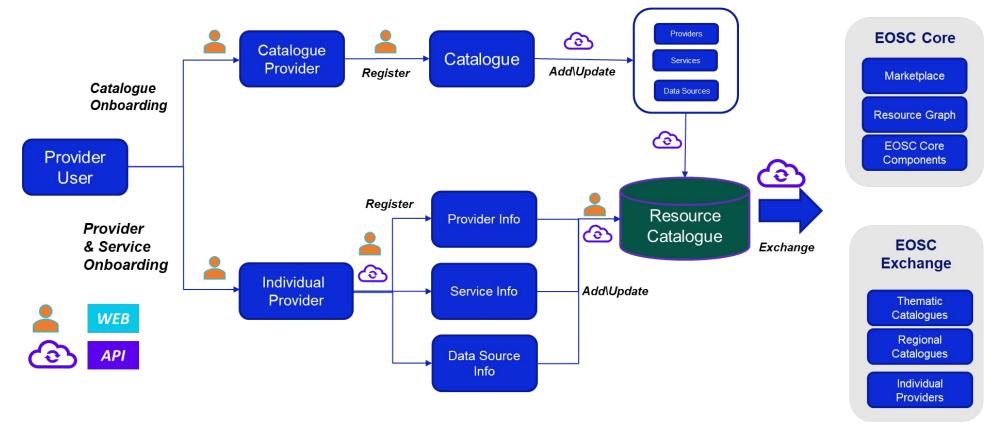






EOSC Service Onboarding

Onboarding a Service to the EOSC Service Catalogue



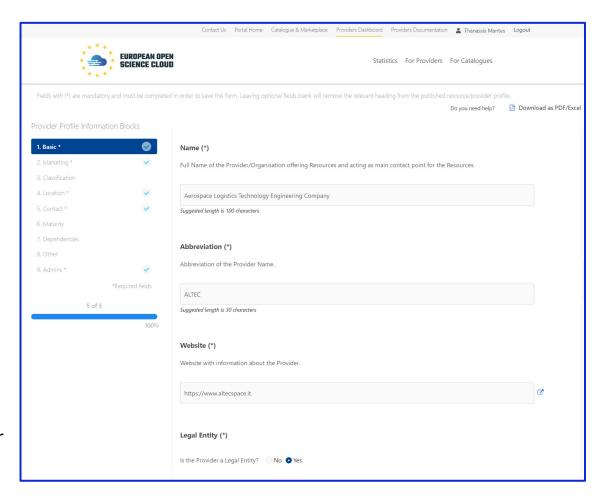
- Extended Onboarding for
 - Providers
 - Services
 - Catalogues
 - Data sources

- Support of Core Services Integration
 - Monitoring
 - Helpdesk
- Support of Horizontal Services
- APIs for Profiles 4.0

Onboarding using the Providers Portal

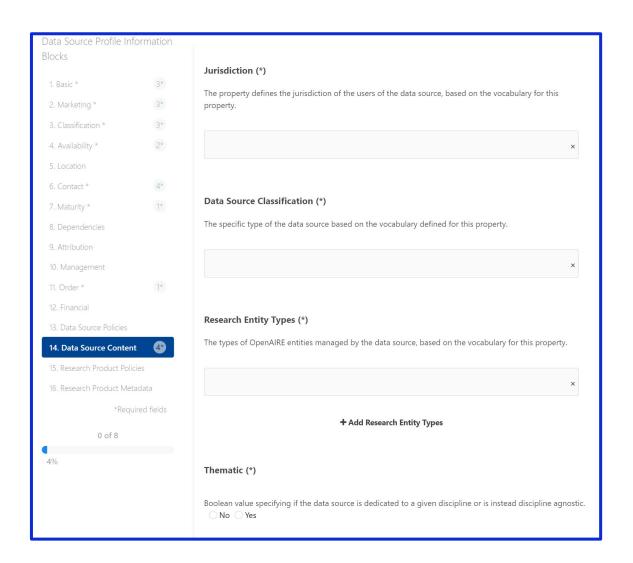
Steps to follow:

- Log in to the Providers Portal and agree to the RoP
- 2. Apply for becoming a Provider. Fill in Providers Profile forms
- 3. After approval by EPOT, register your first service. Fill in Service profile forms
- 4. After approval, register more services in Providers Dashboard
- 5. Done! (but EPOT will regularly review your services for quality)



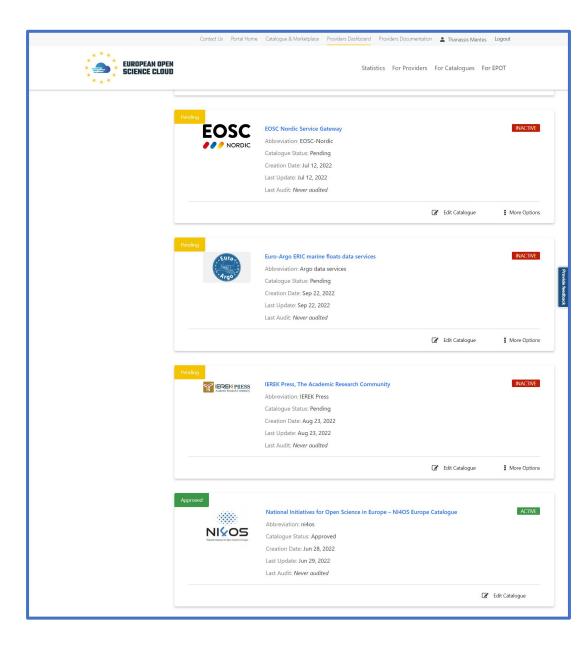
Datasource Onboarding

- Datasources: A new type of resource
- Onboarding steps are the same to the ones used for Services. There are some extra attributes for Datasources
- Provider can create a new one or prefill data from an existing one from OpenAIRE
- Harvested by Research Product Catalog
- Same functionality offered for Services will be applied to Datasources (monitoring, helpdesk, ...)



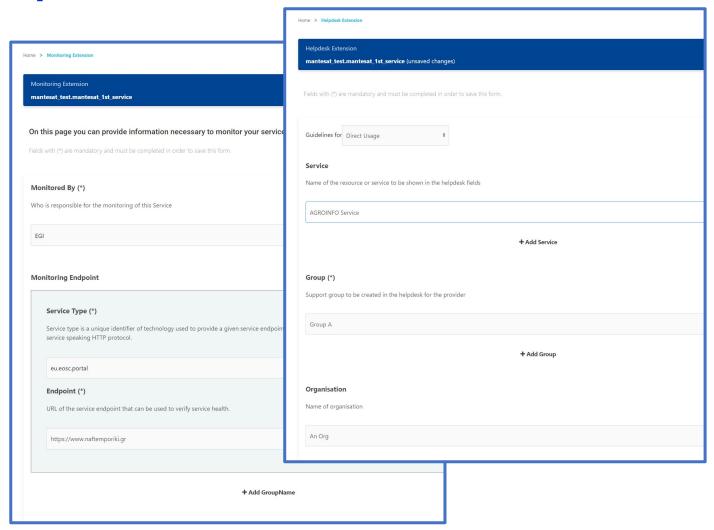
Catalogue Onboarding

- External catalogues can apply for batch onboarding of their Providers and Resources
- Catalogue Owners are responsible for their content to align with EOSC guidelines
- External Catalogue Resources can take advantage of other EOSC Core functionality (Monitoring, Helpdesk, etc)
- Catalogue Onboarding done by UI through the Providers Portal



Extended functionality for all resources

- Providers can specify endpoints and info regarding:
 - Monitoring
 - Helpdesk
- Information provided during onboarding or at a later stage
- Users and providers can see metrics for resources reliability and can benefit from a single helpdesk for any issue across the EOSC ecosystem



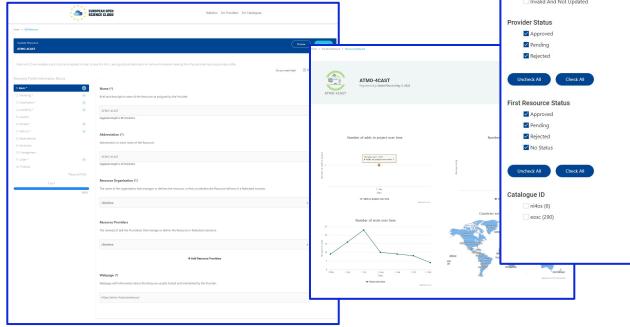
Providers Dashboard – All your resources in one place

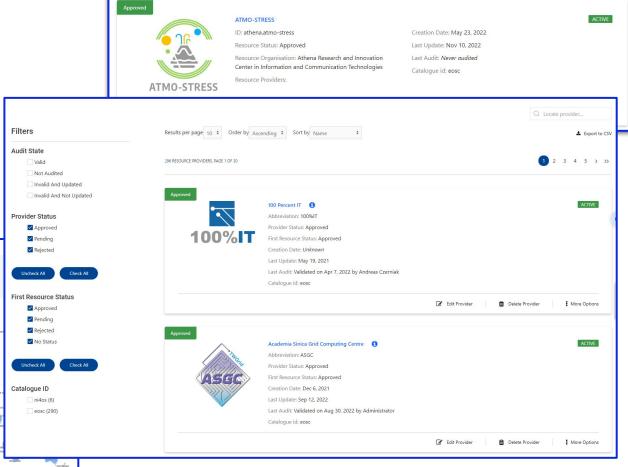
A **single** platform for providers to:

onboard their organization into EOSC portal

register and manage their resources

 gain rich insights about their offerings in the catalogue





Onboarding using a REST API

Individual Providers

- 1. The Provider Admin onboards a Provider and a Resource at the EOSC Portal.
- **2.Obtains** an EOSC Portal API token to be used for authorization.
- 3. Uses the API methods to **register and** manage Resources in the EOSC Portal.

External Catalogues

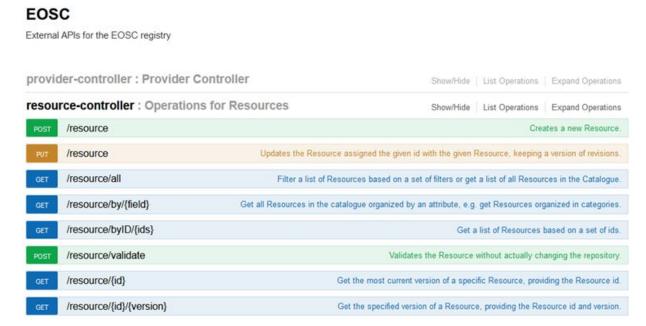
- 1. The Catalogue Owner **registers a catalogue** in the EOSC portal
- **2.Obtains** an EOSC Portal API token to be used for authorization.
- 3. Uses the API methods to **onboard & manage Providers & Resources** in the EOSC Portal.

Using the API methods

EOSC Portal API methods:

- **GET methods**: to retrieve information from the EOSC Portal.
- POST methods: to create and validate a new Resource at the EOSC Portal.
- PUT methods: to update information at the EOSC Portal.
- DELETE methods: to delete resources

The available methods are organized in Provider and Resource-specific controllers



Benefits and added value for service providers

- **Visibility:** EOSC Resource Catalogue makes services findable across disciplinary and institutional boundaries via the EOSC Explore/Marketplace. Resource providers gain extended visibility of their resources
- Reach out to wider audience: Third party catalogues and their resources now able to become part of the EOSC Resource Catalogue, reaching out to more researchers and users.
- Not just services: Onboarding capabilities are extended to support data sources and related research products in EOSC
- Added-value functionality: Integrating resources with EOSC Core Components (Monitoring, Helpdesk, others to follow) improves the maturity of the resources and its utility to potential users

Benefits and added value for service users

- Combine and compose: Users will be able follow interoperability relationships from services to interoperable products, facilitating reuse of resources
- More services to choose from: Users of both the EOSC and non-EOSC catalogues benefit from a wider range of available services, breaking down the "apparent" silos represented by the catalogues themselves.
- One-stop research shop: Users can discover and access a wider variety of EOSC resources, ranging from services and research products, to resource collections (catalogues).
- Support and metrics: Increased level of support for users, universal reliability metrics and monitoring

The road ahead

- Offer/Expand resource collection to/from more sources: Complete integration for third party Service Catalogues
- Quality of offered resources: Implementation of procedures regarding quality of control for all resources onboarded
- More resources: Extend Catalogue data model to support new types of resources (Training, etc)
- Interoperability: Interoperability Guideline support composability/compliance between services
- Extended functionality: Extend APIs, UI etc to support EOSC Interoperability
 Framework Guideline onboarding and management

EOSC Research Product onboarding

Landscape of Research Products

Literature

- Article
- Thesis
- Preprint
- Report
- ...

Datasets

- Dataset
- Collection
- Clinical Trials
- BioEntities

...

Software

- Research Software
- ...

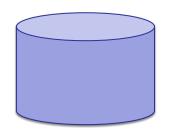
Other Research Products

- DMP
- Patents
- Service
- Workflow
- Interactive Resource

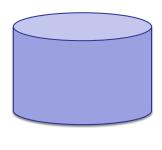
• ...

additional

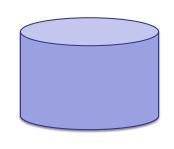
- Projects
- Funding
- Organization Units
- Equipment/Instruments
- Events
- Persons



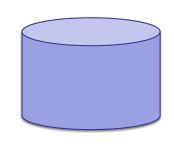
Institutional/ thematic/literature repositories



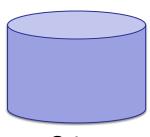
Journals/ publishers



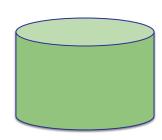
Data repositories



Software repositories



Other Products repositories

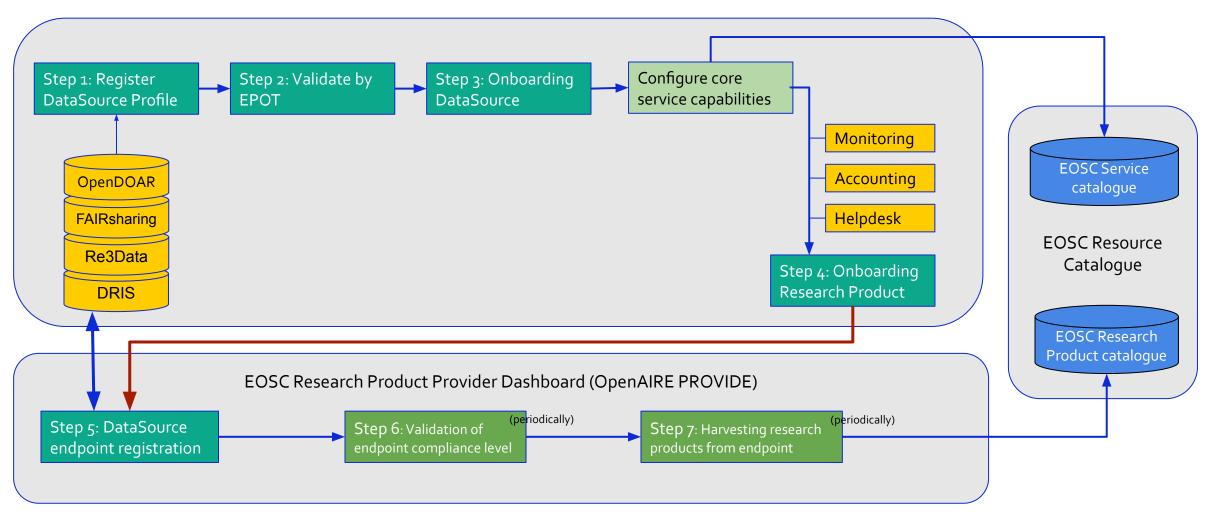


CRIS/RIM

Landscape of Research Products

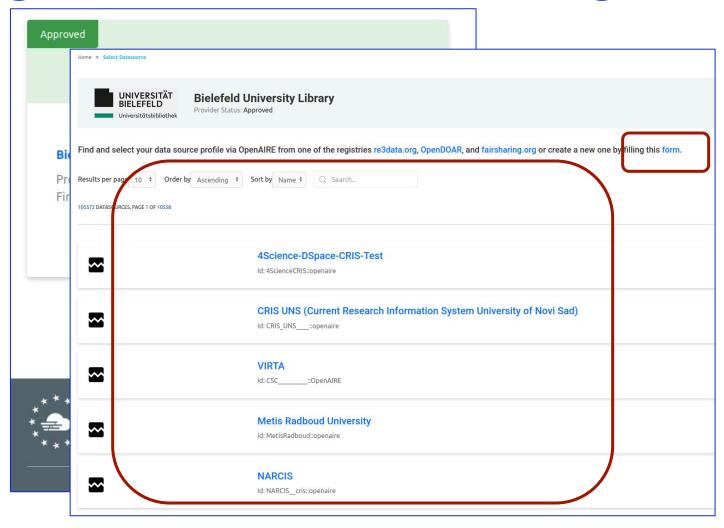
Other Research Literature **Datasets Software** additional **Products** Article Research • DMP Projects Dataset **Software** Patents Funding Collection Thesis Service Organization Units Preprint Clinical Workflow **Equipment/Instruments Trials** Report Interactive BioEntities Events Resource Persons • ... Other Institutional/ Software Data Journals/ CRIS/RIM **Products** thematic/literature repositories publishers repositories repositories repositories

Onboarding data-sources and research products



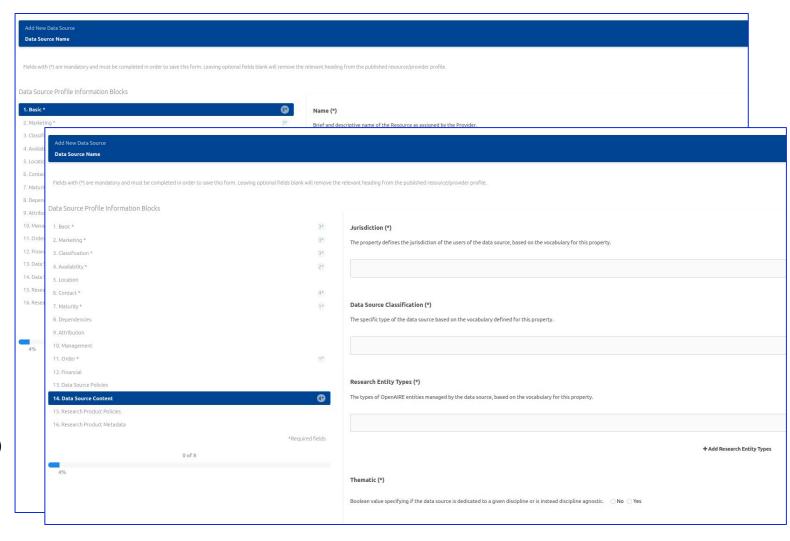
Data sources through Research Products catalogue

- Service Catalogue and Providers dashboard integration with Research products catalogue (the other 'half' of the EOSC Resource Catalogue)
- Provider can either:
 - Select an already onboarded Data source to OpenAIRE
 - Create a brand new one from scratch



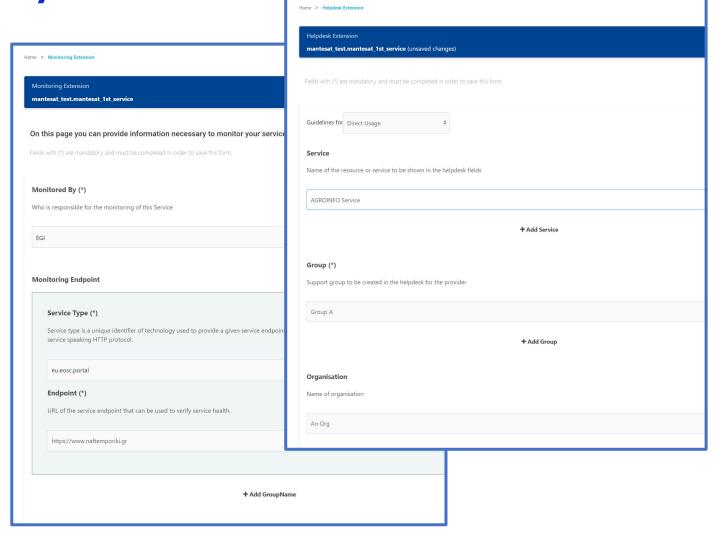
Onboarding Data sources from scratch

- Creating a Data source from scratch: similar to onboarding a regular resource.
- Newly created Data sources will be automatically synced with Research Products Catalogue
- Extra information needed
 - Data source Policies
 - Data source Content (mandatory)
 - Research products Policies
 - Research products metadata



Extended functionality for all resources

- Providers can specify endpoints and info regarding:
 - Monitoring
 - Helpdesk
- Information provided during onboarding or at a later stage
- Users and providers can see metrics for resources reliability and can benefit from a single helpdesk for any issue across the EOSC ecosystem



Fundamentals

Based on the EOSC Interoperability Framework (IF), the datasource should provide information

- on Web-Service endpoint for harvesting (periodically)
- compliant to OpenAIRE Guidelines for
 - Literature Repositories v3
 - Institutional and Thematic Repositories v4
 - Data Archive
 - CRIS (Current Research Information System) Managers v1.1.1

Benefits and added value for service providers

- **Visibility:** EOSC Resource Catalogue makes services findable across disciplinary and institutional boundaries via the EOSC Explore/Marketplace. Resource providers gain extended visibility of their resources **and research output**.
- Reach out to wider audience: Third party catalogues and their resources now able to become part of the EOSC Resource Catalogue, reaching out to more researchers and users.
- Not just services: Onboarding capabilities are extended to support data sources and related research products in EOSC.
- Bonus functionality: Integrating resources with EOSC Core Components
 (Monitoring, Helpdesk, others to follow) improves the maturity of the resources and its
 utility to potential users

Benefits and added value for service users

- Cross disciplinary search: Users will be able to search on resources (services) and research products, like datasets from different domains, as well as, articles, and more.
- One-stop research shop: Users can discover and access a wider variety of EOSC resources, ranging from services and research products, to resource collections (catalogues).
- Accounting on Research Products: Due to this service, users are able to see the interest in their datasets, and other research products.

The EOSC Order Management





















EOSC Order (and Access) Management

Structure

- \rightarrow Why
- → How to use it
- → How to integrate
- → Benefits for users
- → Benefits for providers
- → The Future



As a Provider you have already on-boarded your service to the EOSC Catalogue



When the Researcher enters EOSC Platform

With the Marketplace Projects you can:

- Organise your resources and resource orders into a logical blocks to reflect a common scientific purpose
- → **Gain support** for the created Marketplace Project
- Get assistance from international technical teams who provide advice on the most suitable solutions to address digital needs.

EOSC Catalogue and Marketplace

Welcome to the Marketplace Projects!

With Marketplace Projects you can organise your resources and resource orders into a logical blocks to reflect a common scientific purpose and gain support for the created Marketplace Project.



Create your first project

As the resources available in the Marketplace are available for all European researchers you can precise your customer typology. Tell us, whether you want to use available EOSC resources in the scope of:

- your own academic research,
- larger community collaboration,
- EC project or maybe,
- R&D work of your company.

and along with a general description of your scientific work you will be able to get assistance from international technical teams who provide advice on the most suitable solutions to address your digital needs. To get this support, after creating a MP Project please go to ,CONTACT WITH EOSC EXPERTS' tab.

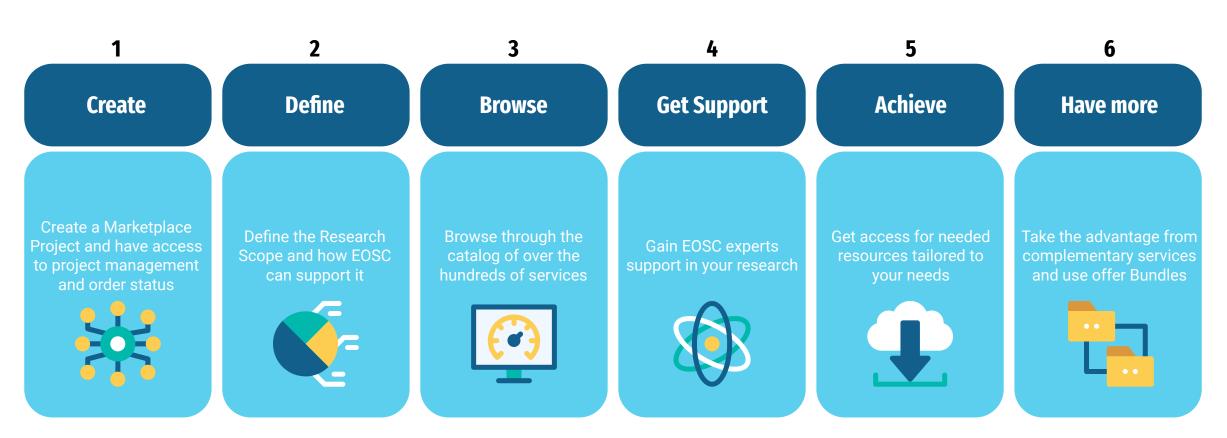
When ready to start using EOSC resources, with ,Resources' tab you can select EOSC resources and solutions suitable for your work. Some of them you will be able to start using right away, some will require you to issue access request (Marketplace order). For the latter, Marketplace Projects will be the place to follow the status of your orders, get all relevant information about the resource access when the access is granted and contact the EOSC support if necessary.

So find out how EOSC can support your scientific needs and use our quick creation form to add your first

Mandage In an apple

When a researcher enters EOSC Platform

EOSC Catalogue and Marketplace



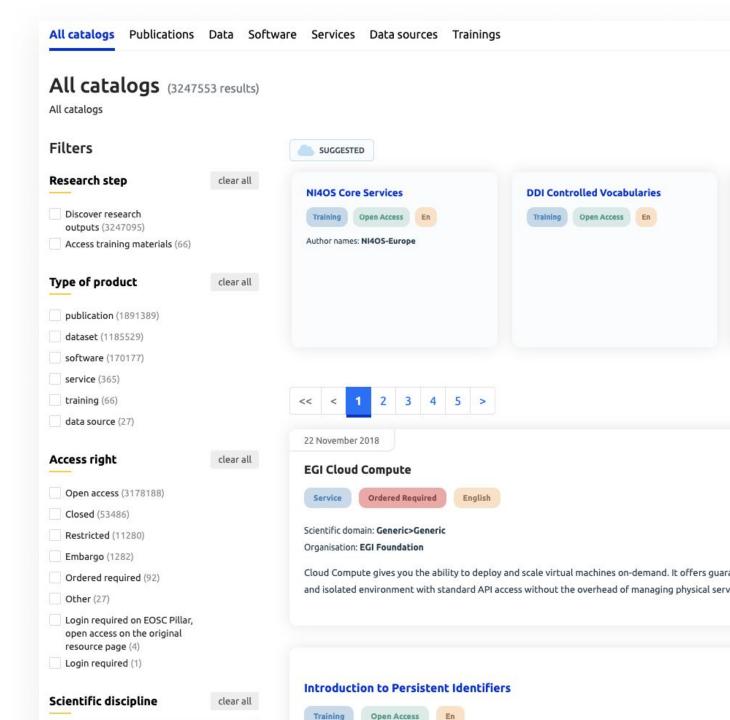
EOSC Platform helps to find resources tailored to the Researcher needs

When entering the EOSC catalog researchers can search the resources with **various and specific filters** to help them find the most suitable tools.





EOSC Catalogue and Marketplacew

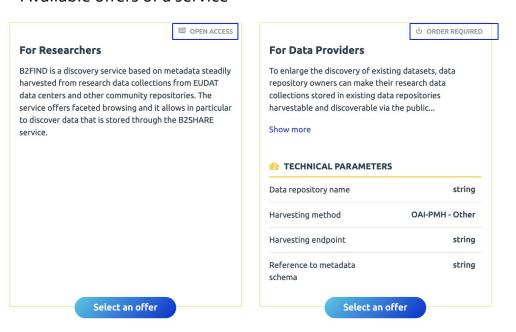


This is it! Needed Resource was Found!

B2FIND Service Open Access English B2FIND is the EUDAT metadata indexing service and provides a discovery portal which allows users to find data collections within an international and inter-disciplinary scope. It is based on a comprehensive metadata catalogue of research data collections stored in EUDAT data centres and community repositories. Harmonization of the metadata descriptions collected from heterogeneous sources enables not only the... Show more

But what is that I will get in fact...

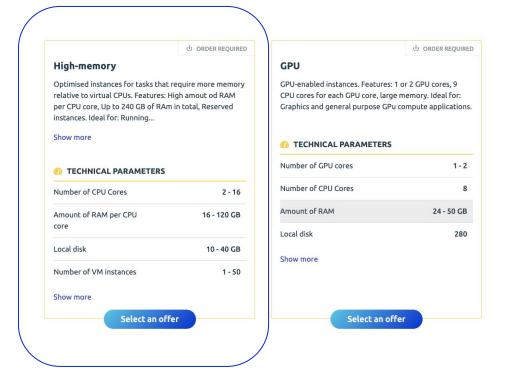
Available offers of a service

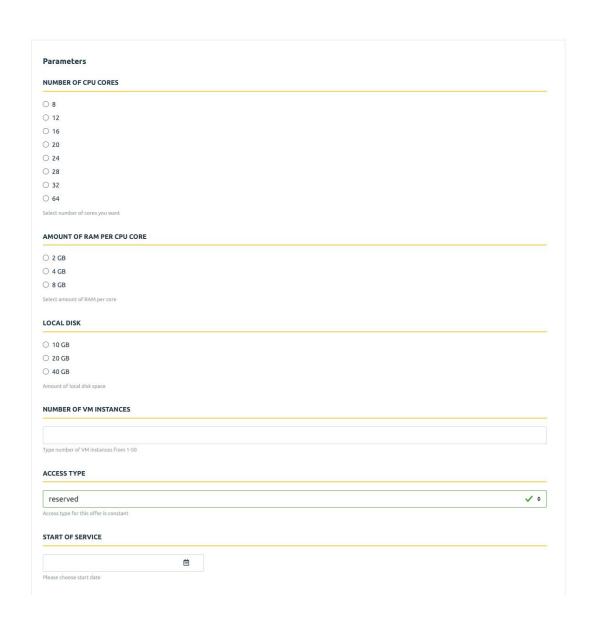


Both for free but to start to use it...

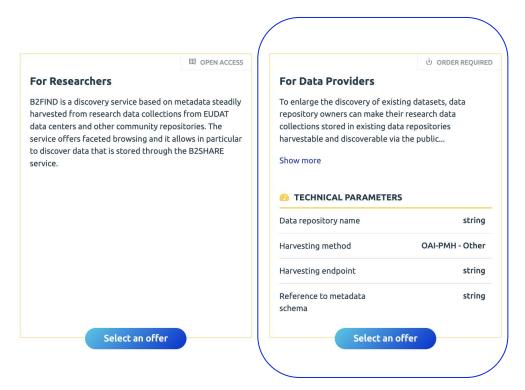
I know what is offered and I can tell what I need

I can pick the offer which suits me more





I know what is offered and I can tell what I need



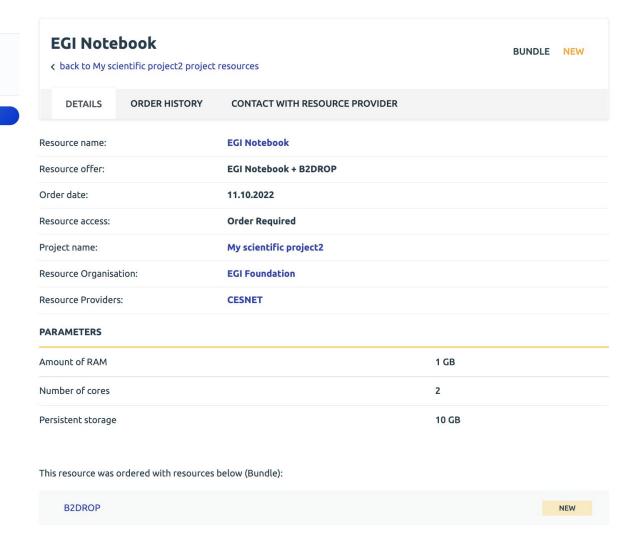
DATA REPOSITORY NAME			
ype data repository name			
HARVESTING METHOD			
OAI-PMH			
JSON-API			
CSW 2.0			
Other			
hoose harvesting method			
HARVESTING ENDPOINT			
larvesting endpoint URL			
REFERENCE TO METADATA SCH	EMA		



My scientific project1

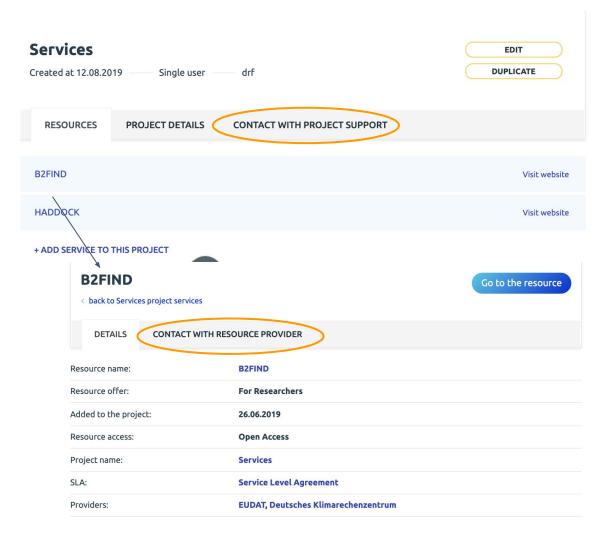
My scientific project2

Create new project



So I can use it

MY PROJECTS							
My scientific project1	My scientific proje	ct1	EDIT				
My scientific project2		ngle user ———— drf	DUPLICATE				
+ CREATE NEW PROJECT							
CALAILACTION	RESOURCES PROJECT DETAILS CONTACT WITH PROJECT SUPPORT						
	PROJECT DETAILS						
	Project name						
MY PROJECTS							
My scientific project1	ail.co	m					
My scientific project2							
+ CREATE NEW PROJECT							
	Origin country						
	Poland						
	Webpage						
	http://www.cyfronet.pl						
	USAGE						
	Reason to request access Not specified	to the EOSC resources					
	110c specified						



So I can use it





Ordered resources



Open access resources

B2FIND	Visit website
HADDOCK	Visit website
DisVis	Visit website

Benefits and added value for service users

- Transparency of Technical Capabilities
 User is aware of what are the (technical and infrastructure)
 parameters of the service = idea of how it will be to use it
- Ability to express what is needed for a specific user use case
- One entry point to manage all EOSC-related orders
- Possibility to ask for service integrations for a scientific use case
- One place to connect all resources used in the scope of one research project (MP projects)
- Ability to share and disseminate created projects



Benefits and added value for provider

- Better Targeting Ability to express different capabilities for (different) users
- Possibility to connect different order management policies depending on the users type/credibility
- Gathering context relevant to decision making
- Possibility to define ordering metadata, to accurately deliver the service
- Dedicated channel to communicate with the user

How to join EOSC Order Management

Portal Home Catalogue & Marketpla **EUROPEAN OPEN EUROPEAN OPEN** Find service.. **SCIENCE CLOUD** A > Compute > EGI Cloud compute Edit Offer **EGI Cloud compute** Name * Computational tools to model complexes of proteins and other biomole Provided by EGI Federation General purpose Description * DESCRIPTION OPINIONS (5) Base preformance instance type. Features: Accessible in opportunistic or reserved ways, CPU cores could be over Integrative modeling of biomolecular complexes with the user-friendly, EC HADDOCK portal Ideal for: Web services, Micro-services, Development environtments, Building server, Small database, Test environments. HADDOCK is a web portal that offers computational tools for structural biologists to model the st of proteins and other biomolecules via a user-friendly interface. The portal offers a number of inte the amount of information and restraints that researchers wish to place on their models. HADDOC with several classes of problems, including protein-protein, protein-nucleic acids and protein-ligan HADDOCK (High Ambiguity Driven protein-protein DOCKing) is an information-driven flexible doc modeling of biomolecular complexes. HADDOCK distinguishes itself from ab-initio docking metho encodes information from identified or predicted protein interfaces in ambiguous interaction rest the docking process. HADDOCK can deal with a large class of modeling problems including proteir nucleic acids and protein-ligand complexes. Besides the application software, the service also provides automated pre- and post-processing, tl Order type * and job scheduling and monitoring for running the application, so that the researcher does not ne application porting and procuring the necessary compute infrastructure. order_required Vouchers allow researchers to "shop around" and cl provider that gives them the best value for money ☑ Disable ordering via EOSC Marketplace and provide the order URL of the reso

Order url

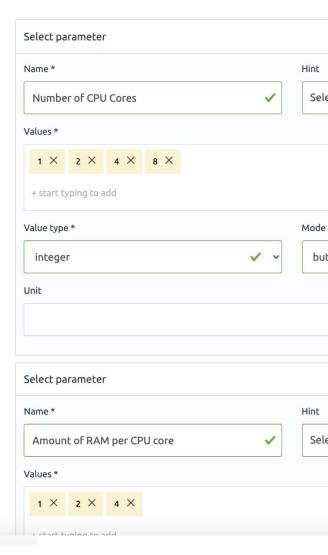
OFFER PARAMETERS

Url should start with http or https:[e.g. http://webpage.org]. This url will be available on service order

Service offers

OFFER PARAMETERS

Constant	
Input	
Select	
Multiselect	
Date	
Range	
Quantity price	



Order management summary

- The user facing part exposing the offerings and allowing the user to ask for the access (place the order) using the parameters defined by the provider, and providing the information on the scientific purpose for it
- User facing part supporting the management of the issued orders or access requests, keeping the user updated on their status and offering the communication channel with the provider in the scope of the order
- Provider facing UI allowing to create and manage their offers for a given service along with the list of parameters to be filled in by the user when placing an order
- Provider facing UI gathering orders issued by the users, allowing to manage them



Order Management is facilitating the interaction between consumers and providers that leads to service utilization.

Order management summary

These components are available in the **EOSC Catalogue** and **Marketplace**.

- Offerings API Exposing functions that are necessary to manage offerings from provider's order management system, including their technical parameters and ordering configuration
- Ordering API which enables integration with the ordering process. External Order Management Systems (OMSes) can use it to keep order processing on their side, but still providing users with a consistent order workflow and support.



Integration

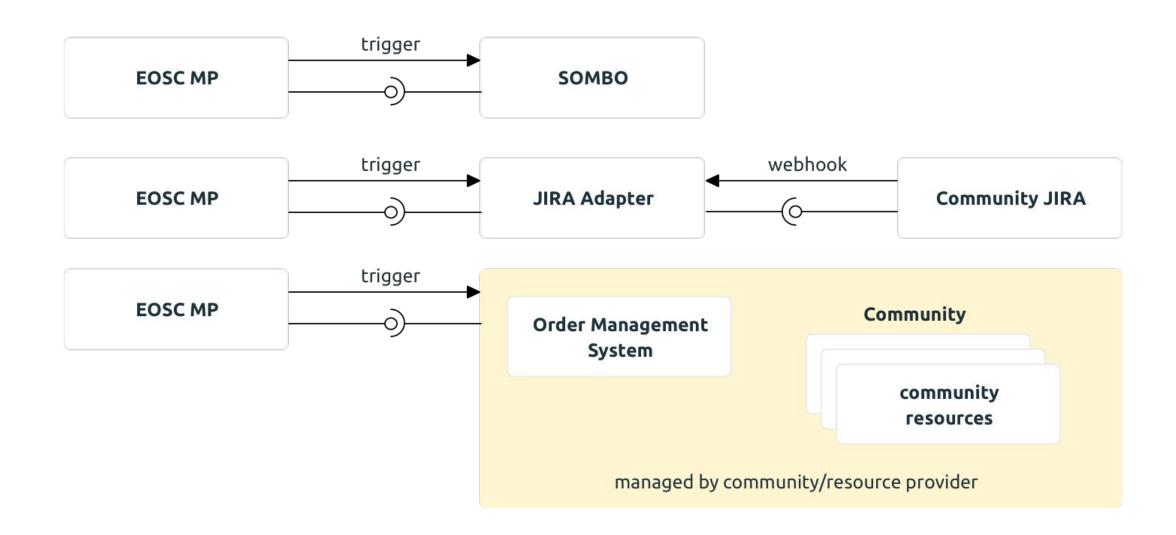
WHO?

- Providers using JIRA for order management purposes
- Providers with mature service delivery sustaining their own OMS

WHY?

- Having EOSC Front-Office as a new channel for potential customers
- Sustaining one tool as a OMS for the service provider
- Added value for your potential users:
 - valuable and useful to users. since they benefit from the existing order management framework. Users value the use of a common ordering framework both for single services and for bundles of services that can be "ordered" simultaneously.
 - With more providers joining the EOSC OMS (using one of the integration options) EOSC user has one central place to manage EOSC resource orders and communicate in the scope of these orders

Integration



EOSC Order Management: The Future



- Virtual Access and other procurement models support
- EOSC Service Accounting Integration
- EOSC Service Monitoring Integration



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EOSC Order Management: The Future



Use Cases Cooperation

We build EOSC together!

October 2023

- 'Composability indicators' associated to EOSC resources
- Researchers can access fully integrated/ end-to-end workflows for various research topics
- 3. Execution framework

The EOSC Monitoring





















Structure

What is the need and how it is covered

Benefits for providers

Benefits for users

How to use it

Architecture picture

Integration Options



As a Provider you have already on-boarded or planning to on-board your service to the EOSC Catalogue

EOSC Monitoring

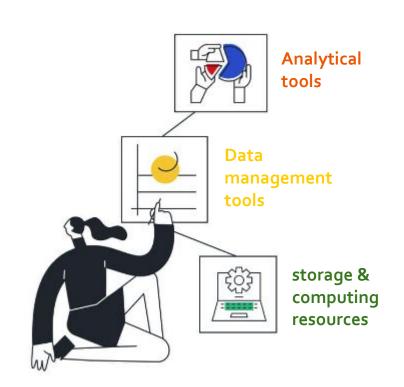


BUT lets focus on the story

Daily Life of a researcher



Researchers are looking for services to cover their daily needs.





Common Steps for all

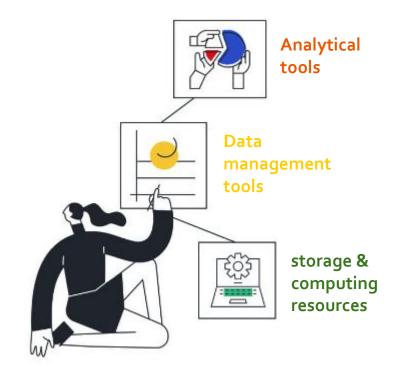


- Search based on some criteria
- **Evaluates**

Features FOR Availability

Start using it

Researchers are looking for services to cover their daily needs.



Researchers are looking for services to cover their daily needs.



Common Steps for all



1 Search based on some criteria

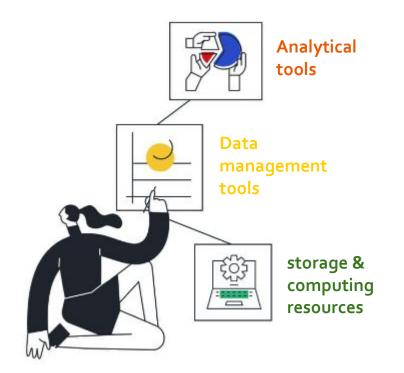
2 Evaluates

FOR

Features Availability



When the user starts using the service, things don't look always as expected



Researchers are looking for services to cover their daily needs.



Common Steps for all



Search based on some criteria

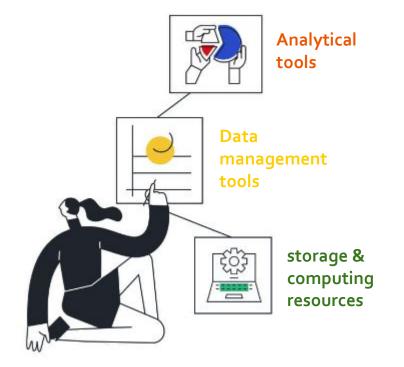
2 Evaluates

FOR

Features Availability



When the user starts using the service, things don't look always as expected

















Added value of the EOSC Platform EOSC Monitoring

EOSC Monitoring is the **key service needed to gain insights** into the Resources Onboarded in EOSC. It is continuous and on-demand to quickly detect, correlate, and analyse data for a fast reaction to anomalous behaviour.







EOSC Monitoring continuously checks the service so

- Providers provide a more reliable service with better availability
- Users select the service without facing unexpected service errors.



Researchers are looking for services to cover their daily needs.



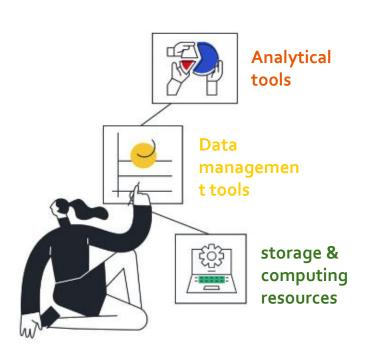


Search based on some criteria

2 Evaluates the service

EOSC enhancement to Step 2

EOSC Monitoring .
Checks and report status /
availability of the service in
various intervals



What EOSC Monitoring is?

EOSC Monitoring Service is trying to emulate the user behaviour and constantly monitor the Services to provide:

- Real time status reports
- Real time alerts
- Availability and reliability reports
- A service to help Providers
 - Increase customer satisfaction
 - Diagnose and prevent internal, or user related issues
- A way to build trust with your users or potential new customer



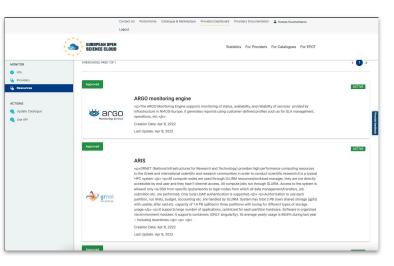
How Can I Start using EOSC Monitoring



BASE MONITORING

Enabled by default to all on-boarded services

Step 1: Visit Provider Portal



Step 2: Select the Resource



Step 3: Add data

	Contact Us Portal Home Logout	Casopa a navepace	Providera Dani Edani	Providers Documentation	& Kostas Koumantaros		
EUROPEAN SCIENCE (OPEN CLOUD		St	atistics For Providers	For Catalogues For E	EPOT	
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tho is responsible for the monitoring of this Service							
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Provider onboards the service to the Marketplace



Publish your service

Provider onboards the service to the Marketplace





Automatically

Publish your service

DESCRIPTION

Base Monitoring of the service (simple health check)

- Does your **service** respond in a request?
- Is the service certificate valid?

FEATURES

Alerting (Real Time)
Reporting
Observability of the status

ADDED VALUE

Diagnose and prevent internal, or user related issues.

Increase UP-time of the service

Provider onboards the service to the Marketplace



Publish your service



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DESCRIPTION

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Reporting
Observability of the status

ADDED VALUE

Diagnose and prevent internal, or user related issues.

Increase UP-time of the service



DESCRIPTION

With extra Business Value based on the functionalities of the service.

- Can the **user** login to the service
- Can the **logged in user** download a file



Better Trends

ADDED VALUE

Better Insights of the service
Understand exactly how real users experience your service.

Increase customer satisfaction

How I can see the results





BASE MONITORING

Enabled by default to all on-boarded services

USER PERSPECTIVE MONITORING:

If you want more ... you have to enable the monitoring extension

RESULTS



EOSC Monitoring UI



Marketplace



Providers Portal



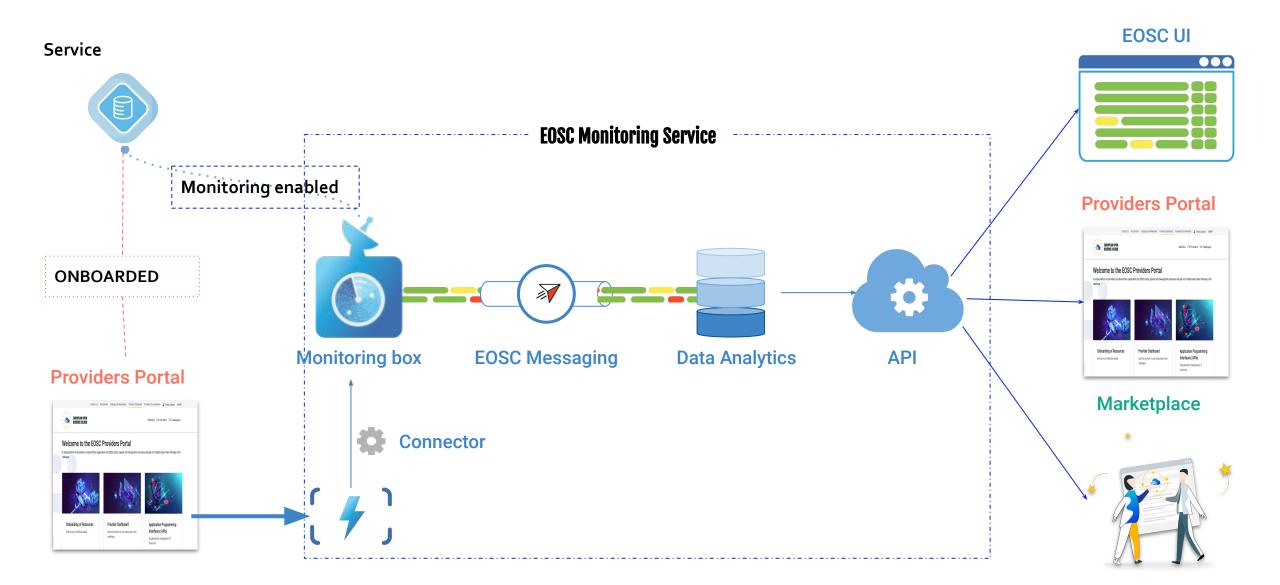
RESULTS





Marketplace

Architecture picture

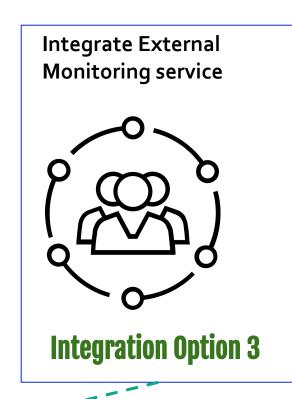


4 Integration Options

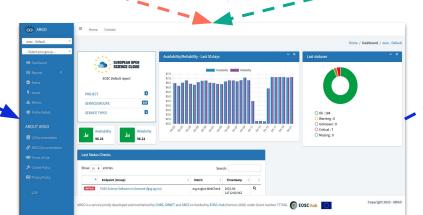
Monitor an Onboarded Service (central one)

MOST POPULAR Integration Option 1

Monitor an Infrastructure (community) **Integration Option 2**



Third-party services **exploiting EOSC** Monitoring data **Integration Option 4**



The EOSC Accounting





















Structure

What it is

Benefits for providers

Benefits for users

How to use it

Architecture picture

EOSC Accounting for services

Outline

- What is it
- Benefits for providers
- Benefits for users
- Architecture picture
- How to use it

Accounting for Services: What is it

The Accounting System is a platform that is responsible for **collecting**, **aggregating**, and **exchanging** the metrics between different infrastructures, providers, and projects.



Functionalities of the service

- Accepting input from several different resources, define and support metrics for them.
- Store metrics into a data store.
- Search, filter, offer data for a specific time period via API, UI
 - Be able to aggregate data (WiP).
 - Offering the aggregated input to several different clients (WiP).



BETA

Essentially, the main functions of the service are expressed by a REST API. supports all the resources

Highly available and reliable API that is capable of handling a significant load of requests so as to act as an exchange and aggregating point for accounting data. **Project** /accounting-system/projects Returns all Projects to which a client has access. /accounting Provider /accounting-system/projects/{project id}/providers/{provider id}/acl Returns all Access Control entries that have been created for a particular Provider **POST** /accounting Installation /accounting /accou POST /accounting-system/installations Generates a new Installation. **POST** /accounting Metric DELETE /accou GET /acco /accounting /accou GET /accounting-system/installations/{installationId}/metrics Returns all Metrics under a specific Installation. /accounting-system/project DELETE /acco /accounting-system/installations/{installationId}/metrics Assigns a new Metric to a specific Installation. **POST PATCH** /acco **GET** /accounting-system/installations/{installationId}/metrics/{id} Returns an existing Metric. DELETE /accounting-system/installations/{installationId}/metrics/{id} Deletes an existing Metric. https://argoeu.github.io/argo-accounting/

Accounting for Services: What is it? - UI



Previous 1 Next

Apart from the API, it also supports an easy to use UI.



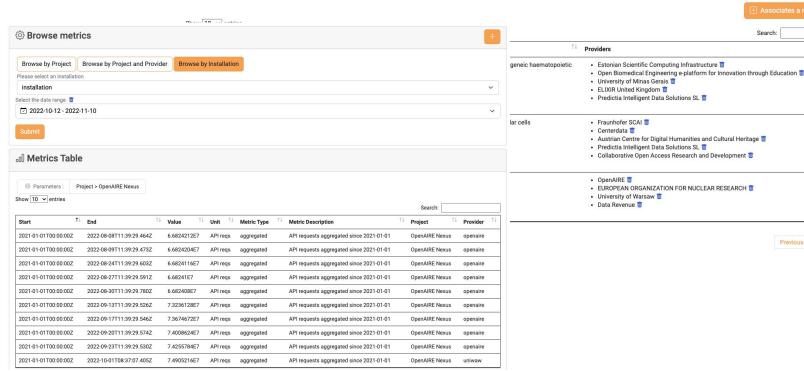
Manage

View

Filter

Browse

https://accounting.eosc-portal.eu/



People participating in EOSC Accounting for Services

Organizations participating













Benefits

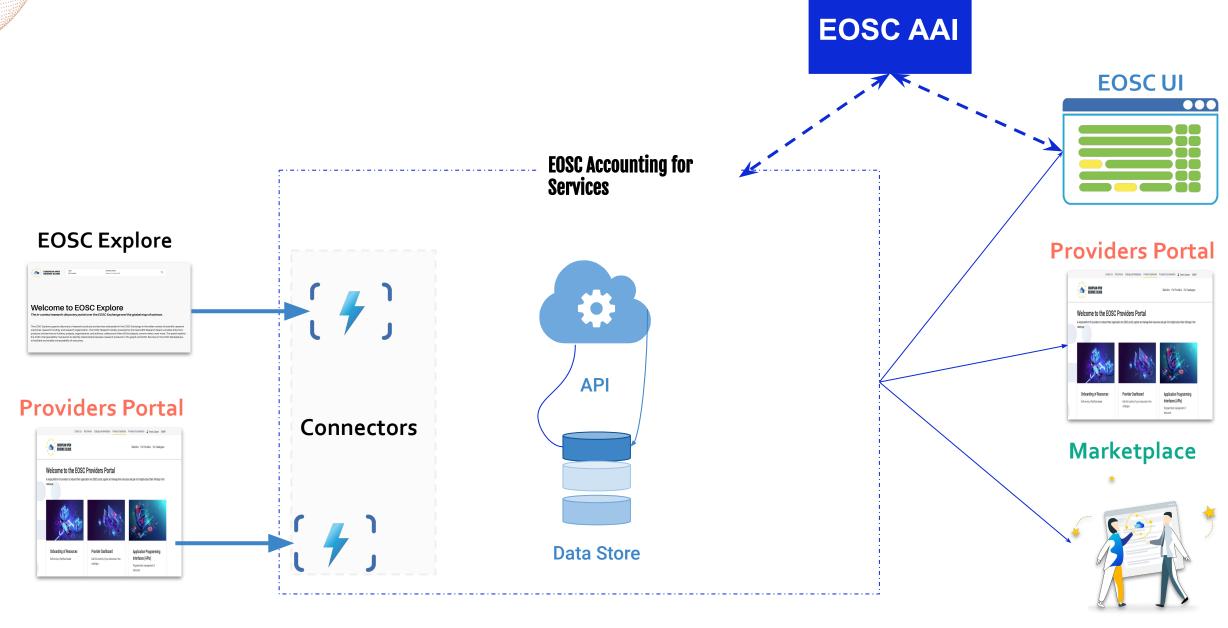
For Providers

- Provides a unified/generic way to expose the metrics of a Service that show the usage/impact by EOSC Users.
- Provides a unified/generic way to expose the usage of service per Project, Provider and Service.

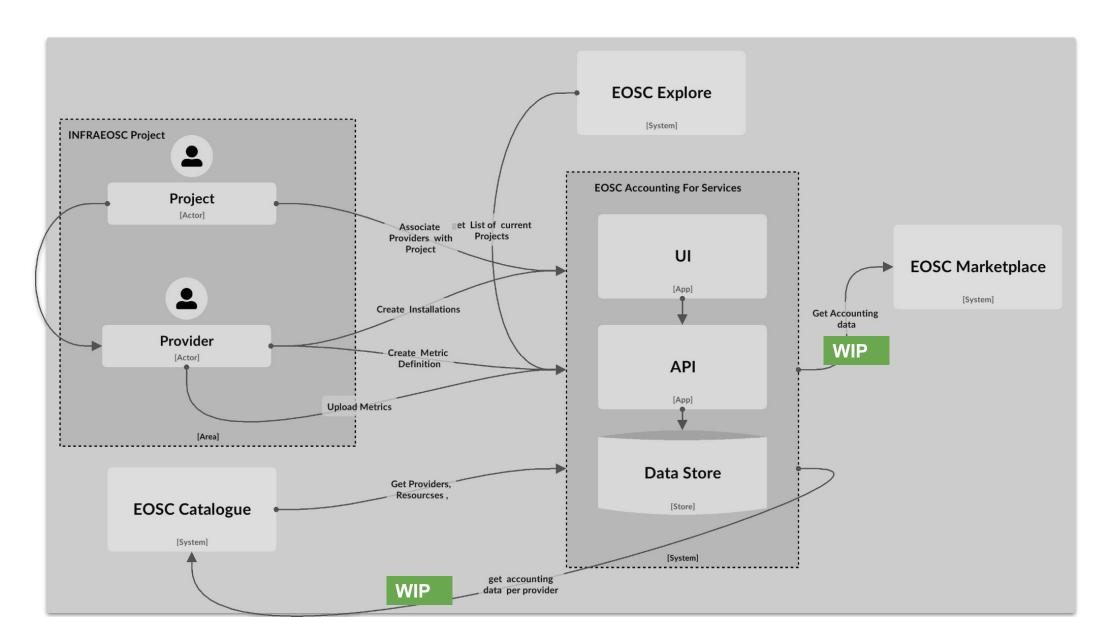
For End Users

Provides a unified/generic way to see the usage of service per Project, Provider and Service.

Architecture Picture



EOSC Accounting for Services: How to use it?



EOSC Accounting for research products

Accounting for Research products

- The EOSC Accounting for Research Products is able to aggregate from data sources (via push and pull protocols) **usage indicators** for different types of **EOSC research products** at the level of PIDs
 - Usage indicators: download and views (more in the future)
 - Research Products: publications, datasets, software, etc.
- It exploits open standards and protocols for both collecting data and exporting data
- It integrates the aggregated usage statistics with the EOSC Research Products
- It is powered by the OpenAIRE UsageCounts Service

Research product Accounting Architecture

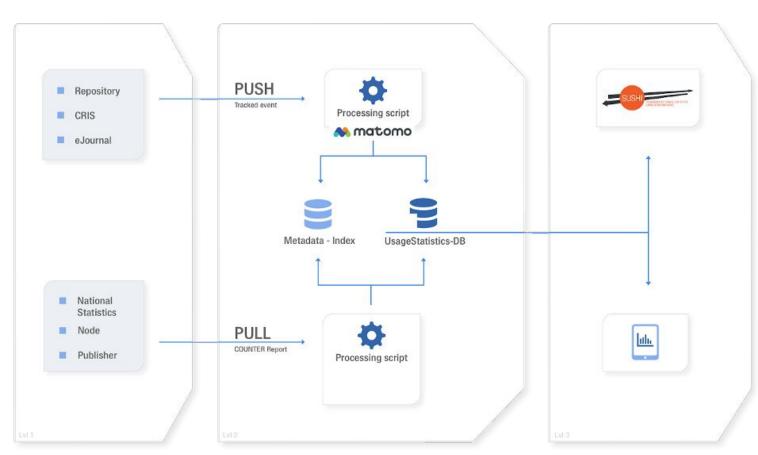
The Service collects usage activity from events (metadata views, full text downloads) related to research products of the EOSC Research Graph, creates and deploys aggregated statistics for these products.

PUSH Workflow

- Server side real-time tracking using Matomo's Analytics Platform API.
- Generic Log file parser: A python script that parses log files and sends the usage events to Matomo Analytics platform (not in real time).
- IP Anonymization is supported.

PULL Workflow

 Collecting consolidated statistics reports from aggregation services using protocols such as SUSHI-Lite.



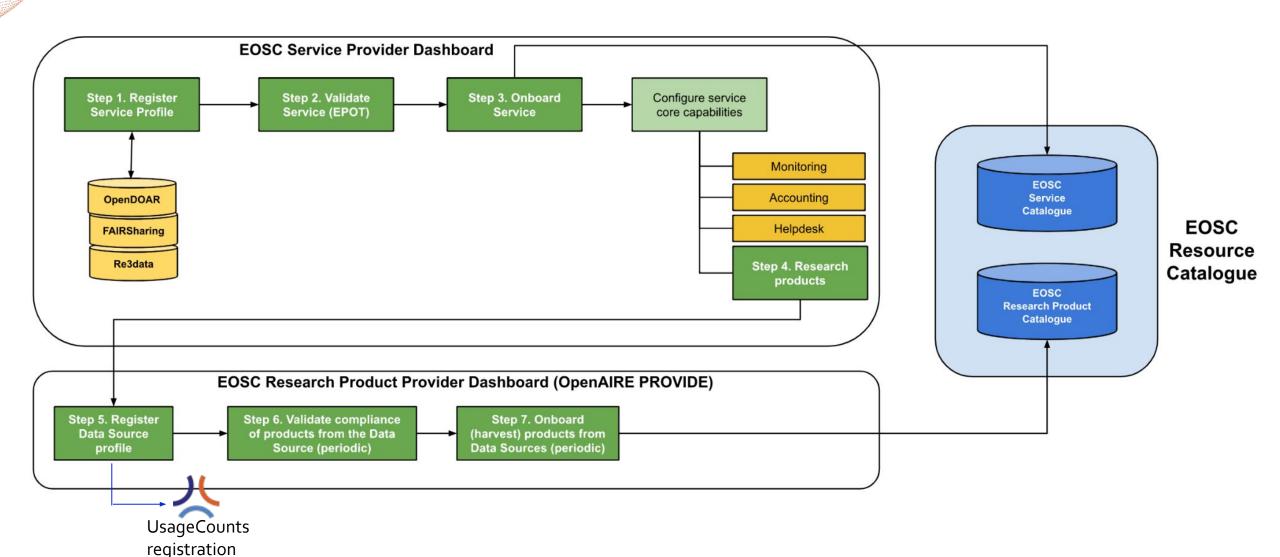
Research product Accounting FactSheet

- Statistics on usage activity of Research Products
- Complements existing citation mechanisms and assists stakeholders like (institutional repository managers, research communities, research organizations, funders, and policy makers) to track and evaluate research from an early stage
- Provision of COUNTER CoP standardized usage statistics reports via SÚSHI-Lite API
- Enrichment of EOSC Resource Catalogue with usage statistics indicators visible to end-users and enabling "popularity"-driven discovery and selection

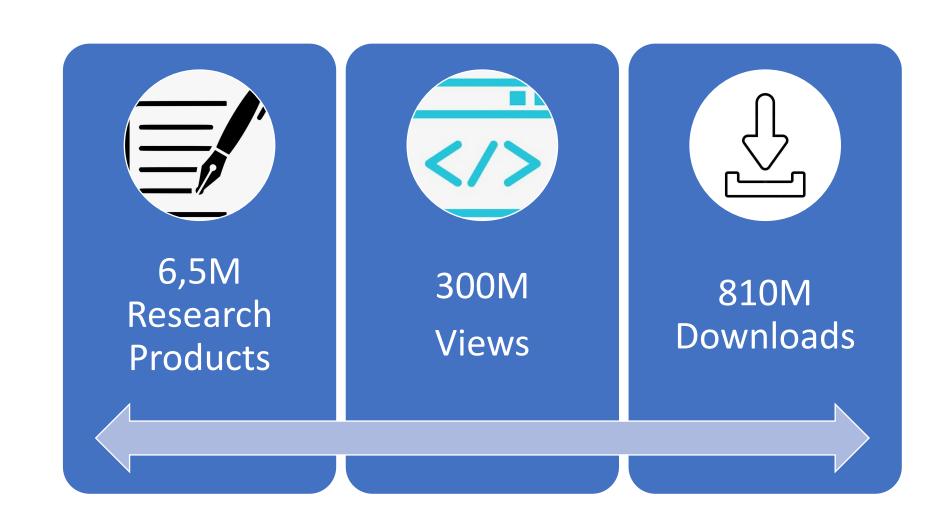
Benefits

- For data source providers: an "umbrella system" that provides information on the overall impact of the data source
- For research product providers: provides aggregated usage statistics of the research products (at PID level) by collecting data from data sources all over the world (beyond the EOSC)

Join via EOSC Research Product Provider Dashboard



UsageCounts in Numbers (October 2022)



The EOSC Helpdesk

Pavel Weber (KIT)























Helpdesk - what it is?

The **Helpdesk** in the EOSC ecosystem is a backbone service which facilitates:

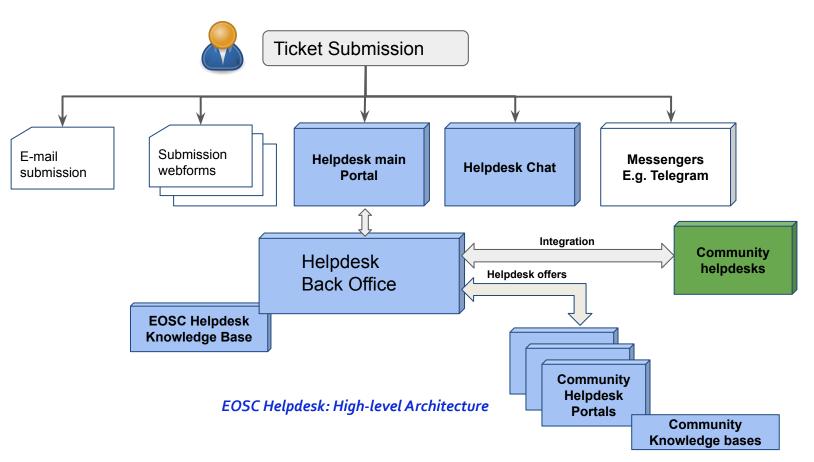
- Instant communication
- Proactive support for the EOSC customers/users
- Stable operation of the EOSC Services
- Support for service providers and research communities of the EOSC.



Communicate, Assist, Co-create

Helpdesk Architecture and Capabilities

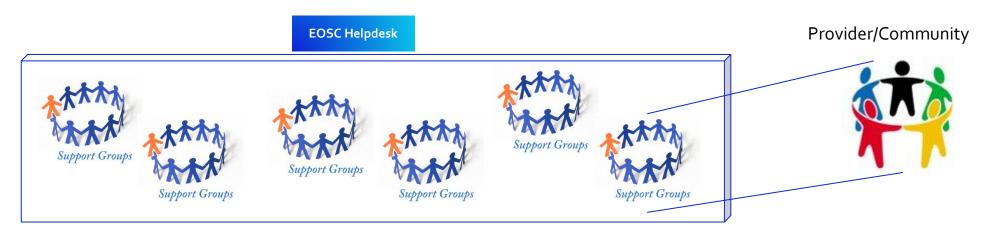
- Multiple ways to submit tickets
- Capabilities of Helpdesk BO:
 - Dashboard
 - Support groups
 - Smart search
 - Escalation procedure
 - Customizable Notifications



- Helpdesk as-a-Service
- Integration with Community Helpdesks via REST API

Benefits for Providers

- Providers can benefit from all EOSC Helpdesk platform features, integration with central EOSC Support, still having isolated environment, multiple support groups, use the EOSC Helpdesk as-a-service to support their own users.
- Multiple ways for users to contact provider (email, via helpdesk portal, webform, chat if requested)
- Focus on efficient support and workflows, and not on service hosting and administration



Integration Options for Provider

Three main integration options for Providers:

- Direct usage (as-a-service):
 - Support group or multiple groups
 - Implementation of custom workflows

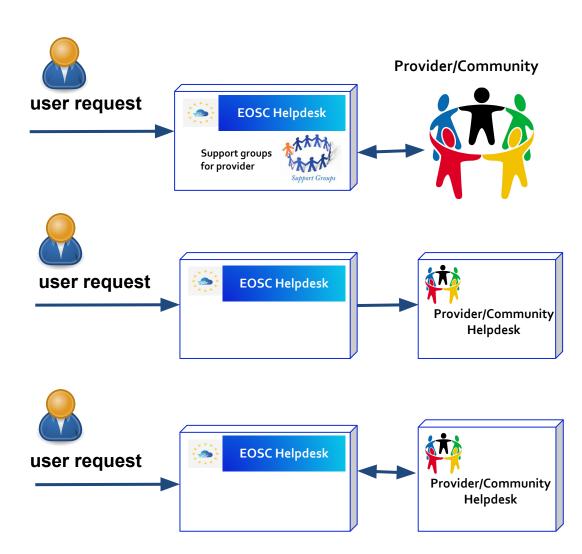
Use case: CESSDA

- Ticket redirection:
 - EOSC Helpdesk just a contact point which redirects tickets to provider's mailing list or ticket system

Use case: EUDAT

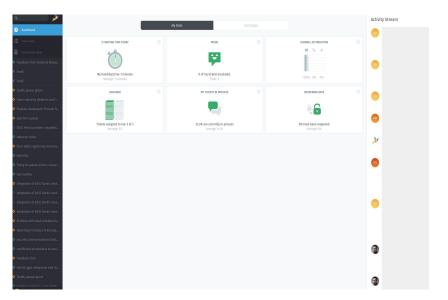
- Full integration
 - Bidirectional synchronization of tickets in EOSC and provider's helpdesk
 Prerequisite: provider's helpdesk API in place

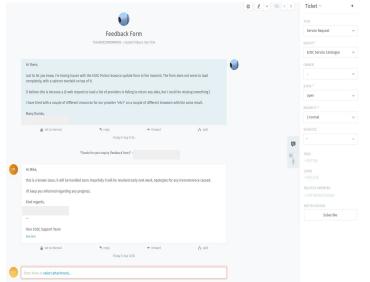
Use case: EGI GGUS

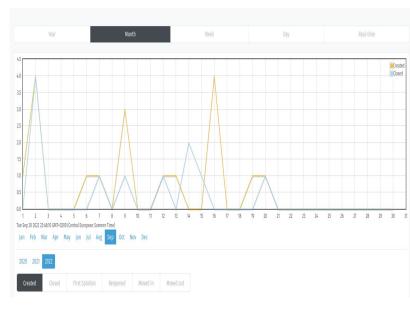


Direct Usage (as-a-service): What you get now

- Central dashboard for users and for agents
 - Multiple ways to submit and manage the tickets
 - Overviews (open, closed etc.)
 - Statistics
 - Custom workflows (filters, automatic assignment to different groups, automatic escalation procedure, notifications)
 - Integrations with messagers: Telegram, Slack, Mattermost, RocketChat etc.







Benefits for Users

EOSC Helpdesk:

- Enables self-service for the users.
- Channel of instant communication with supporters of any service integrated with helpdesk.
- Increases the level of support that is available, as well as giving users access to an increasingly common and consistent helpdesk experience.

The users are more satisfied with community services and could focus better on their main tasks



Onboarding/integration with Helpdesk in practice

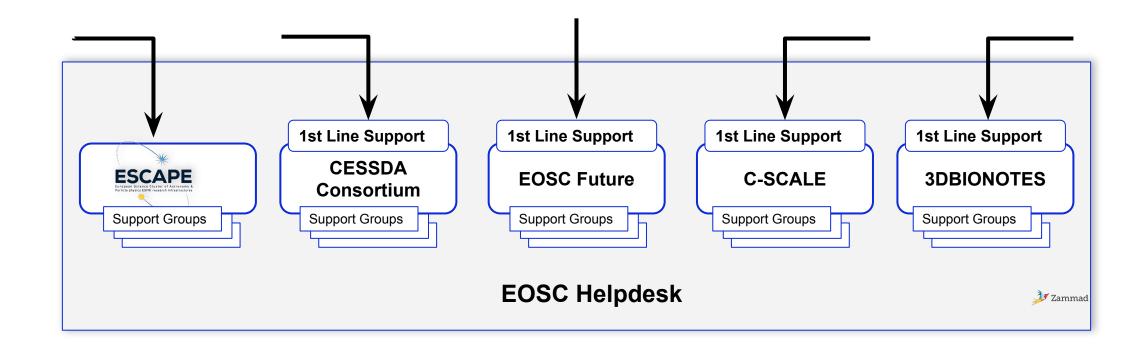
- Check KB documentation and integration options: <u>https://eosc-helpdesk.eosc-portal.eu/help/</u>
- Choose an integration option
- Send initial request:
 - via Providers Dashboard extension (providing initial information via form)
 - o via helpdesk dashboard at https://eosc-helpdesk.eosc-portal.eu
 - via E-mail: <u>help@eosc-portal.eu</u>
 - Webform at https://eosc-portal.eu/contact-us
 - via Telegram: @EOSC Helpdesk https://t.me/EOSCHelpdesk bot
- Implementation phase



EOSC Helpdesk: Now

EOSC Helpdesk is in production since March, 2022.

- Communities: EOSC Future, CESSDA, C-SCALE (implementation), ESCAPE Projects (implementation), 3DBIONotes (implementation)
- Over 300 registered users, 60 agents



EOSC Helpdesk: 2023

- Integrate more communities and EOSC Providers in EOSC Helpdesk
- More customization capabilities for Helpdesk as-a-service integration
- Analysis and implementation of further requirements of EOSC communities

