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

- Helpdesk as-a-service
- Uniform support management across the Exchange
- Resources onboarding (quality assurance and commitment)
- Assessment and impact usage indicators
- Reliability indicators
- Enabling indicators-based resource discovery
- Resource packaging and ordering
- Resource compliance to interoperability guidelines (protocols, APIs, data models, schemas, formats)
- Enabling resource composability
- Resource navigation, discovery and access
- EOSC Explore
- EOSC Order Management
- EOSC MarketPlace
- EOSC Interoperability Framework
- EOSC helpdesk
- EOSC monitoring
- EOSC accounting
- EOSC catalogue
Sharing resources beyond community boundaries

Create and Share resources!

Resource Catalogue & Marketplace

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

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

Community catalogue of resources

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

SMEs, industry
Data Model

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

- **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

Create and Share resources!

EOSC Future

Resource Catalogue

Community catalogue of resources

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

Welcome to EOSC research discovery
Accounting: tracking Open Science, new forms of discovery, assessment

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

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

Sharing usage stats

EOSC Future

Accounting services

Transparency, discovery, and selection by reuse indicators

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

SMEs, industry
Monitoring: support and discovery

- Monitoring probes & Warnings
- Research Communities (e.g. RIs, clusters, e-infra, long tail)
- Sharing monitoring data
- SMEs, industry
- Transparency, discovery and selection by availability indicators
- Researchers & communities: RIs, clusters, e-infra, long tail, libraries, organizations, funders
Helpdesk: support

Helpdesk aaS or Integrated Helpdesk

Monitoring services

SMEs, industry

Technical support requests and interaction

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

Researchers & communities: RIs, clusters, e-infra, 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
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:

1. 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, ...)

![Datasource Profile Information](image-url)
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

**Literature**
- Article
- Thesis
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Institutional/thematic/literature repositories
Journals/publishers
Data repositories
Software repositories
Other Products repositories
CRIS/RIM
Onboarding data-sources and research products

1. Register DataSource Profile
2. Validate by EPOT
3. Onboarding DataSource
   - Configure core service capabilities
4. Onboarding Research Product
   - Monitoring
   - Accounting
   - Helpdesk
5. DataSource endpoint registration
6. Validate of endpoint compliance level (periodically)
7. Harvesting research products from endpoint (periodically)
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 Future, C-Scale, DICE, EGI-ACE, OpenAIRE-Nexus, Reliance and ARCHIVER projects are funded by the European Union Horizon Programme calls INFRAEOSC-03-2020 and INFRAEOSC-07-2020 and H2020-ICT-2018-20
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 utilise 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 MarketPlace Project.
When a researcher enters EOSC Platform

EOSC Catalogue and Marketplace

1. Create
   - Create a Marketplace Project and have access to project management and order status

2. Define
   - Define the Research Scope and how EOSC can support it

3. Browse
   - Browse through the catalog of over the hundreds of services

4. Get Support
   - Gain EOSC experts support in your research

5. Achieve
   - Get access for needed resources tailored to your needs

6. Have more
   - Take the advantage from complementary services and use offer Bundles
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.
This is it! Needed Resource was Found!

I want it!

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

Available offers of a service

For Researchers
B2FIND is a discovery service based on metadata steadily harvested from research data collections from EUDAT data centers and other community repositories. The service offers faceted browsing and it allows in particular to discover data that is stored through the B2SHARE service.

For Data Providers
To enlarge the discovery of existing datasets, data repository owners can make their research data collections stored in existing data repositories harvestable and discoverable via the public...

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
## EGI Notebook

**Resource name:** EGI Notebook

**Resource offer:** EGI Notebook + B2DROP

**Order date:** 11.10.2022

**Resource access:** Order Required

**Project name:** My scientific project2

**Resource Organisation:** EGI Foundation

**Resource Providers:** CESNET

### PARAMETERS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of RAM</td>
<td>1 GB</td>
</tr>
<tr>
<td>Number of cores</td>
<td>2</td>
</tr>
<tr>
<td>Persistent storage</td>
<td>10 GB</td>
</tr>
</tbody>
</table>

This resource was ordered with resources below (Bundle):

**B2DROP**
So I can use it
So I can use it
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
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.
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 MP → SOMBO

trigger

EOSC MP → JIRA Adapter

trigger → webhook

JIRA Adapter → Community JIRA

Order Management System

Community

managed by community/resource provider
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

1. ‘Composability indicators’ associated to EOSC resources
2. Researchers can access fully integrated/end-to-end workflows for various research topics
3. Execution framework
The EOSC Future, C-SCALE, DICE, EGI-ACE, OpenAIRE-Nexus, Reliance and ARCHIVER projects are funded by the European Union Horizon Programme calls INFRAEOSC-03-2020 and INFRAEOSC-07-2020 and H2020-ICT-2018-20

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**

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BUT lets focus on the story
Researchers are looking for services to cover their daily needs.
What is the need for Monitoring

Common Steps for all

1. Search based on some criteria
2. Evaluates FOR Features Availability
3. Start using it

Researchers are looking for services to cover their daily needs.
What is the need for Monitoring

Common Steps for all

1. **Search** based on some criteria

2. **Evaluates**

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

Researchers are looking for services to cover their daily needs.
What is the need for Monitoring

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.
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.
What is the need for Monitoring

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.

Common Steps for all

1. **Search** based on some criteria
2. **Evaluates** the service

EOSC enhancement to Step 2
EOSC Monitoring checks and reports 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
Provider onboards the service to the Marketplace

Publish your service
Provider onboards the service to the Marketplace

**Onboard Your Service**

Publish your service

**Base Monitoring Starts**

Automatically

**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**

**ONBOARD YOUR SERVICE**

1. **Base Monitoring starts**
   - Automatically
   - Base Monitoring of the service (simple health check)
     - Does your service respond in a request?
     - Is the service certificate valid?

2. **Enable user perspective monitoring**
   - On Provider demand
   - 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

3. **Added Value**
   - Diagnose and prevent internal, or user related issues.
   - Increase UP-time of the service
   - 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**
EOSC Monitoring UI  
Marketplace
Architecture picture

- Monitoring box
- EOSC Messaging
- Data Analytics
- API
- EOSC UI
- Providers Portal
- Marketplace

Monitoring enabled

ONBOARDED

Providers Portal

Connector
4 Integration Options

Monitor an Onboarded Service (central one)

Monitor an Infrastructure (community)

Integrate External Monitoring service

Third-party services exploiting EOSC Monitoring data

Integration Option 1

Integration Option 2

Integration Option 3

Integration Option 4
The EOSC Future, C-Scale, DICE, EGI-ACE, OpenAIRE-Nexus, Reliance and ARCHIVER projects are funded by the European Union Horizon Programme calls INFRAEOSC-03-2020 and INFRAEOSC-07-2020 and H2020-ICT-2018-20.
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).
Essentially, the main functions of the service are expressed by a REST API that 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.

https://argoeu.github.io/argo-accounting/
Accounting for Services: What is it? - UI

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

- grnet
- cnrs
- OpenAIRE

Projects testing the Service

- NEXUS
- DICE
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.
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 SUSHI-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

EOSC Service Provider Dashboard

Step 1. Register Service Profile
Step 2. Validate Service (EPOT)
Step 3. Onboard Service
Configure service core capabilities

OpenDOAR
FAIRSharing
Re3data

Step 4. Research products
Monitoring
Accounting
Helpdesk

EOSC Research Catalogue

EOSC Research Product Provider Dashboard (OpenAIRE PROVIDE)

Step 5. Register Data Source profile
Step 6. Validate compliance of products from the Data Source (periodic)
Step 7. Onboard (harvest) products from Data Sources (periodic)

UsageCounts registration
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: https://eosc-helpdesk.eosc-portal.eu/help/
- Choose an integration option
- Send initial request:
  - via Providers Dashboard extension (providing initial information via form)
  - via helpdesk dashboard at https://eosc-helpdesk.eosc-portal.eu
  - via E-mail: help@eosc-portal.eu
  - 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