

EOSC & Providers

The EOSC Future project is co-funded by the
European Union Horizon Programme call
INFRAEOSC-03-2020, Grant Agreement number 101017536



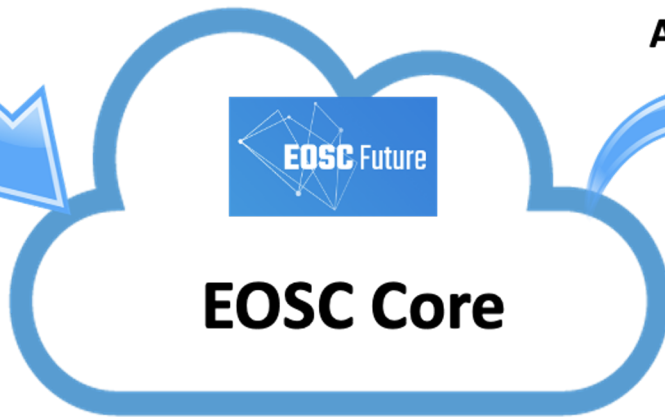


EOSC Core as an enabler of cross-RI, cross-domain resource sharing and management

Sharing!



Providers as Providers



Providers as Consumers

Discover, Monitor, Stats,
Access, Support



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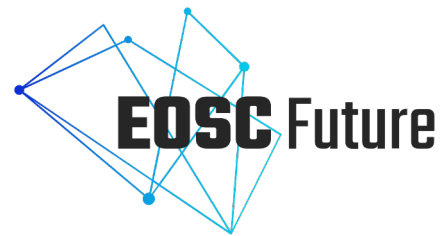


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A series of orange lines forming a complex geometric pattern on the left side of the slide, with some lines ending in small orange dots.

From EOSC services to EOSC Resources

EOSC Resources

Providers

EOSC Resources

Interoperability Frameworks

Services

Combine human activities (operations, support etc) with Research products (software, data, documentation etc)

Operational, active, delivered, managed

Data processing

Storage & archiving

Thematic environment

...

Content source

Research Products

Digital objects. Contain value which is realised through their examination, processing, combination or other use.

Object, storeable, FAIR, relevant

Data sets

Software

Publications

FDO

...

Data source

Software repo

Publisher repo

....



EOSC Resource catalogue

Rules of participation



Onboarding



EOSC Research Graph:
Research Products + Services



OpenAIRE
ResearchGraph



EOSC
ENHANCE

CONNECTING THEMATIC
COMMUNITIES TO
ADVANCE OPEN SCIENCE

APIs

Discover, Access



**EUROPEAN OPEN
SCIENCE CLOUD
Marketplace**



OpenAIRE | **EXPLORE**

EOSC Resource Catalogue



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EOSC Resource catalogue

Rules of participation

300+ services
120Mi+ publications
12.5Mi+ datasets
200K software
7Mi other 3Bi relationships

Onboarding



EOSC Research Graph:
Research Products + Services



OpenAIRE
ResearchGraph



EOSC
ENHANCE

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EOSC Resource Catalogue



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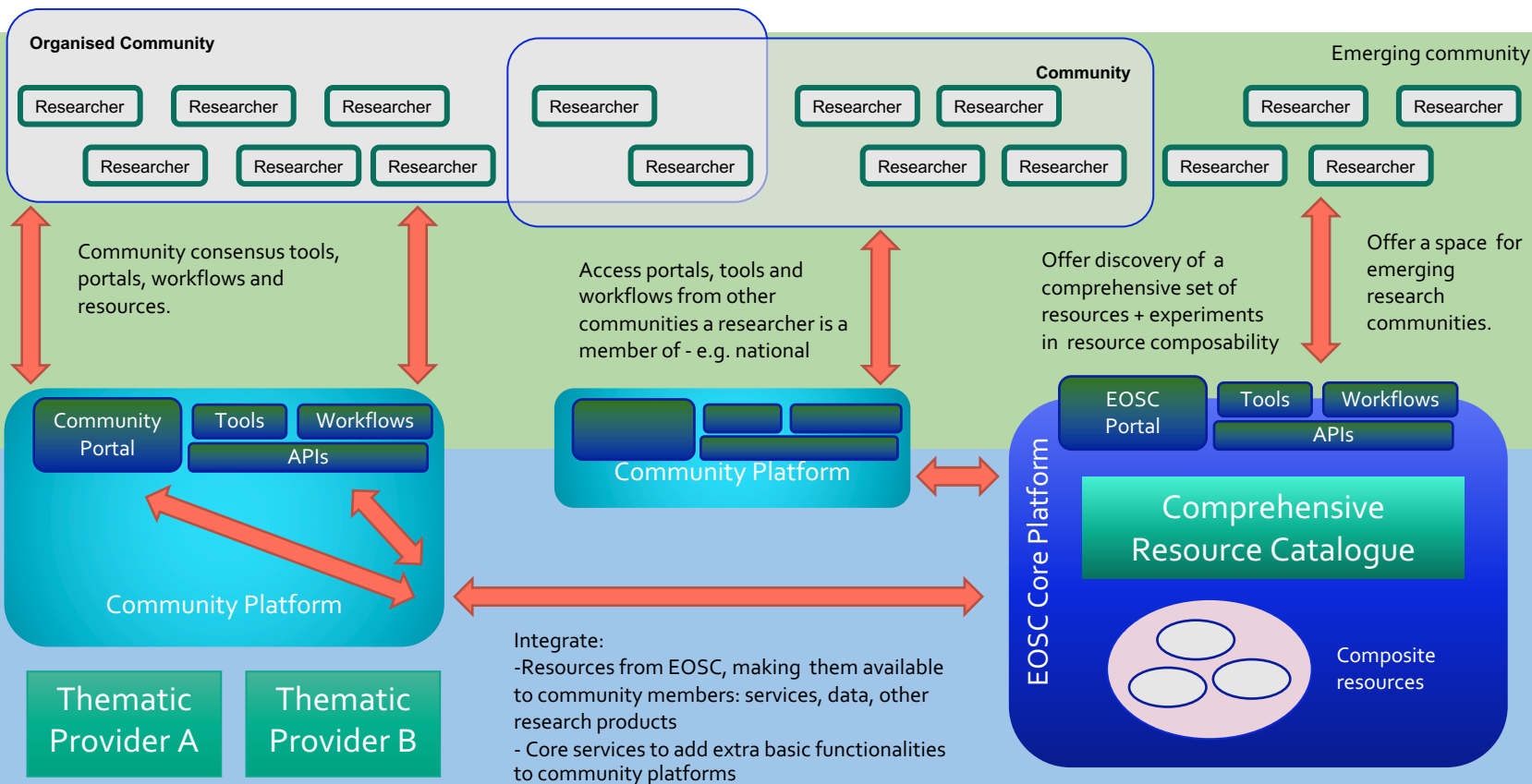




Integration with EOSC catalogue: added values for researchers, RIs, and communities

Research

EOSC

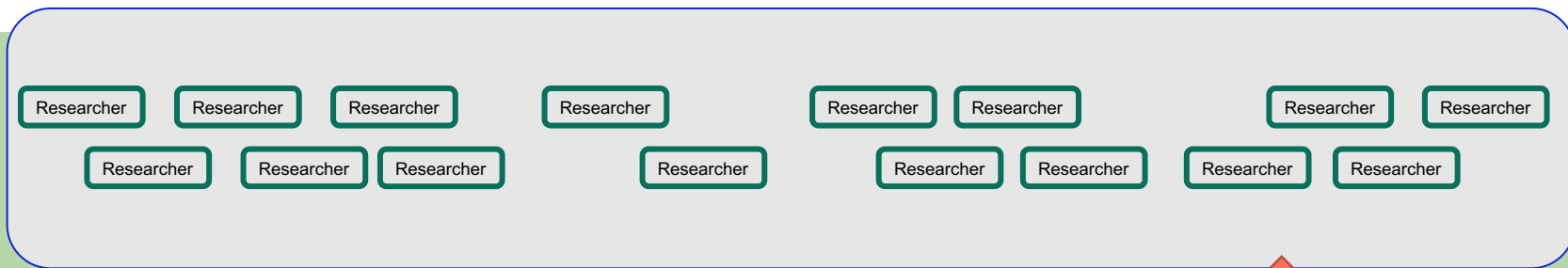




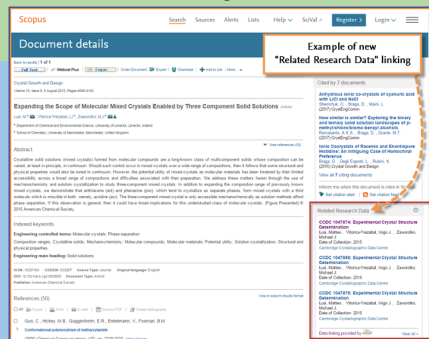
Integration with EOSC catalogue: added values for researchers, RIs, and communities

Research

EOSC



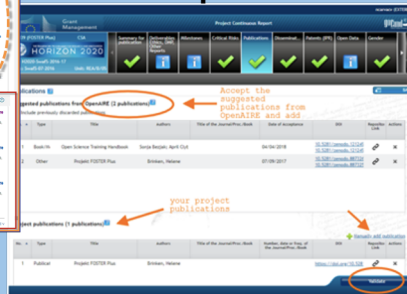
Scopus



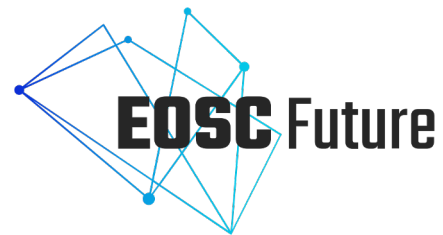
SMEs

ORCID

EC Participant Portal



EOSC Core Platform



From EOSC Portal for Services Providers to EOSC Portal for Resource Providers

EOSC Service Catalogue - Onboarding Process

- Self service process for Providers & Catalogues
 - Via Web Forms
 - Via APIs
- User Friendliness
 - Show progress, save as draft & preview, validation messages
- Interaction with Onboarding Team
 - Comments Online
 - Email notification after each action
 - Periodical Auditing for improving the quality of your offerings

The screenshot displays the 'Add New Resource Provider' web form. The form is titled 'Provider Name' and includes a progress bar at the top indicating the current step. A modal dialog box is open, prompting the user to agree to the Privacy Policy and confirm they are an authorized representative of the Resource Provider. The form fields are organized into 'Resource Profile Information Blocks' and include:

- 1. Basic *** (Required fields):
 - 2. Marketing *
 - 3. Classification *
 - 4. Availability *
 - 5. Location *
 - 6. Contact *
 - 7. Maturity *
 - 8. Dependencies
 - 9. Attribution
 - 10. Management
 - 11. Order *
 - 12. Financial
- Name (*)**: Full Name of the Provider/Organization. Suggested length is 100 characters.
- Abbreviation (*)**: Abbreviation or short name of the Provider. Suggested length is 30 characters.
- Website (*)**: Suggested length is 80 characters.
- Resource Organisation (*)**: The name (or abbreviation) of the organisation that manages or delivers the resource, or that coordinates resource delivery in a federated scenario. Example: Athena Research and Innovation Center in Information and Communication Technologies.
- Resource Providers**: The name(s) (or abbreviation(s)) of Provider(s) that manage or deliver the Resource in federated scenarios.



EOSC Provider Portal

Manage and Get insights about your resources in a single place.

- Status of onboarding
- Manage your entire service portfolio in EOSC catalogue
 - Filter, Search, Update
 - Publish\unpublish
 - View history of your data
- Improve composability of your offerings
- View usage engagement
- Explore Catalogue content and statistics



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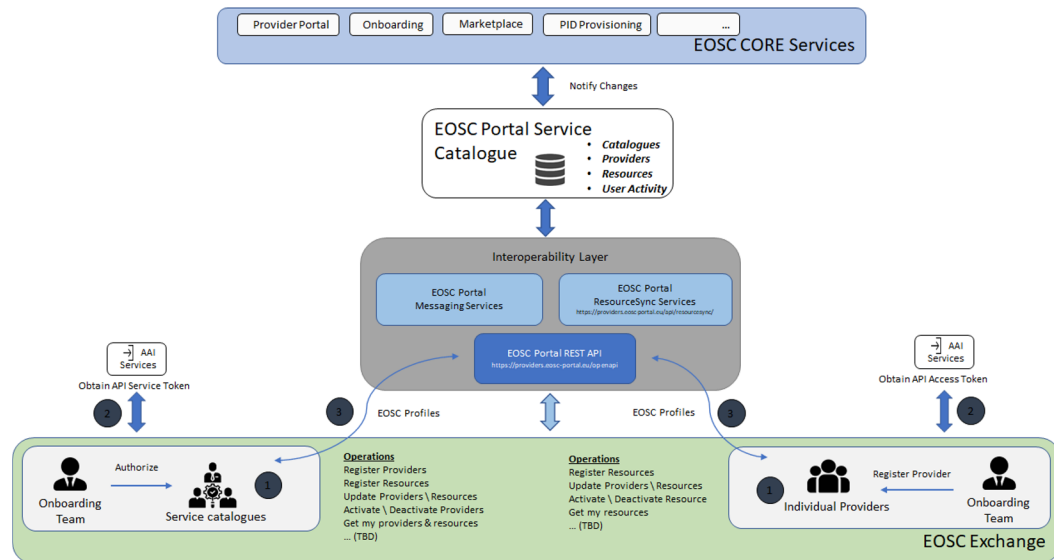
EOSC Service & Provider APIs

For individual **providers**:

- Register a provider
- Register & Update resources
- Publish \ Unpublish
- Search Entire Catalogue

For **catalogues**:

- Register a catalogue
- Register & Update providers & resources
- Manage edit access to resources
- Sync with EOSC portal Catalogue





From Core services to Exchange services - EOSC Monitoring, Accounting, Order Management and Helpdesk



EOSC Core Added Value Services

- Monitoring
 - Core Monitoring
 - Exchange Monitoring
- Accounting
 - Service Accounting
 - Research Product Accounting
- Order Management
 - SOMBO (Service Order Management Back-Office)
 - Order management systems integration for Exchange
- Helpdesk



EOSC Core Monitoring

The Service to monitor the EOSC-Core Services. It provides:

- Service Status
- Availability and Reliability reports
- Notifications

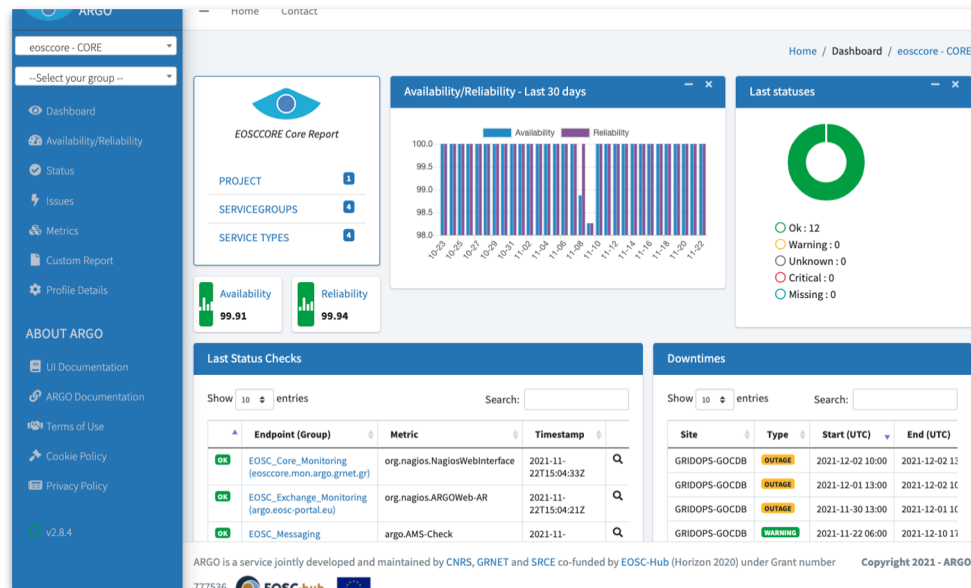
It is integrated with EOSC Core Service Level Monitoring (SLM)



NEXT
STEPS

Integrate more EOSC Core services.

Monitor EOSC Core Services functionalities



<https://eosccore.ui.argo.grnet.gr/>



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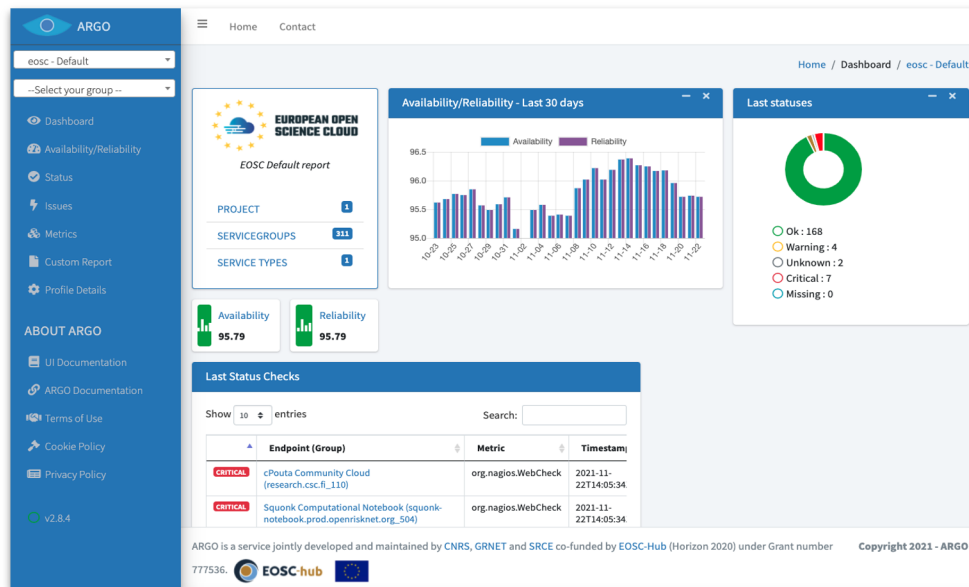
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EOSC Exchange Monitoring

The Service to monitor the new EOSC Onboarded Services. It provides:

- Service Status
- Availability and Reliability reports
- Notifications



NEXT
STEPS

- Integrate with Marketplace to display monitoring data
- Integrate with Providers Portal to display monitoring data
- Integrate with Recommender System for better results

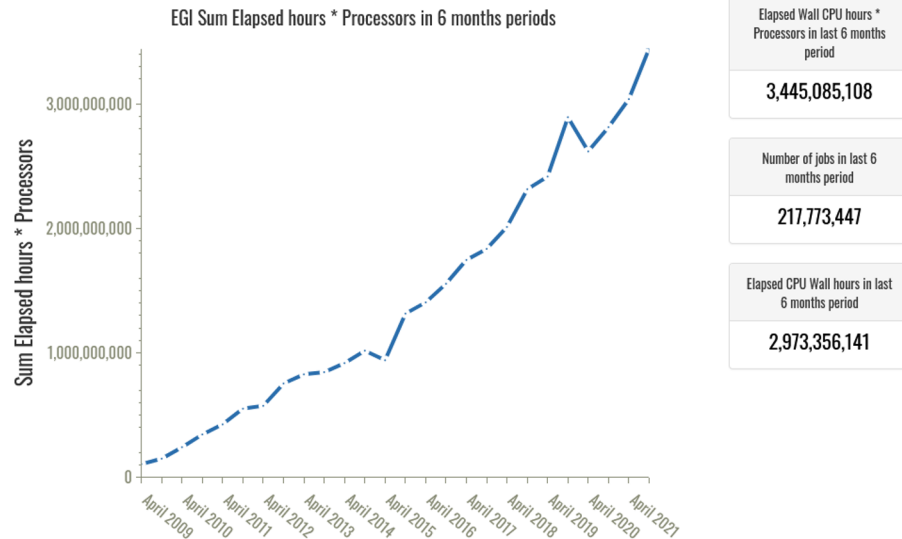
<https://argo.eosc-portal.eu>

EOSC Service Accounting

- EOSC Service Accounting can collect, process, store and display resource usage data from the following types of service:
 - High Throughput Compute
 - Infrastructure-as-a-Service cloud virtual machines
 - Storage space providers
 - Data set providers
- A messaging system transfers usage data from provider sites to a central Accounting Repository. The data is handled securely and can be consulted online through the Accounting Portal. EOSC Service Accounting gives:
 - Increased control over resource consumption
 - Reduced overhead of defining data models, architecture and setup of an accounting system
 - Reduced cost of maintaining an accounting infrastructure
 - Access to a reliable, highly available, high-performance service
 - User friendly web interface and API
- During EOSC Future, usage tracking to support virtual access reimbursement by the EC will be implemented.**



This graph shows the Sum Elapsed hours * Processors in the whole EGI infrastructure. Only non-local jobs on official EGI VO's are accounted. Each point represents a period of 6 months counting backwards from the last complete period.



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EOSC Research Product Accounting: added value

Collects anonymized usage data or usage statistics reports for EOSC Research Graph products using open standards and protocols.

Offers trusted metrics, COUNTER CoP compliant, for all aspects of research results to shift to an open rewards and incentives mechanism.

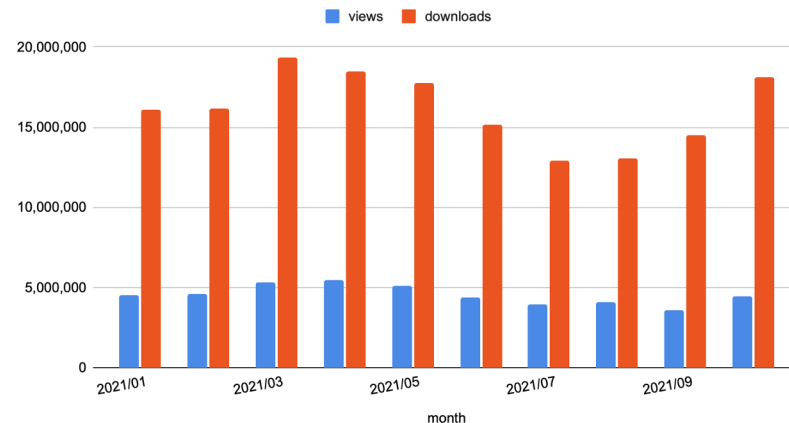
Provides indicators that complement other (traditional and alternative) bibliometric indicators to provide a comprehensive and recent view of the impact of academic resources.

On the content provider level: a tool to evaluate the success of the Content provider platform.

On the individual item level: it can demonstrate popularity and considered an important indicator to analyze trends.

Allows the aggregation of usage information about research products which are published in several places.

Worldwide Indicators (October 2021):
~Usage events for 3,8M Research Products
~ 210 Content Providers
~ 140M metadata views
~ 540M downloads



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EOSC Research Product Accounting: how to

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.

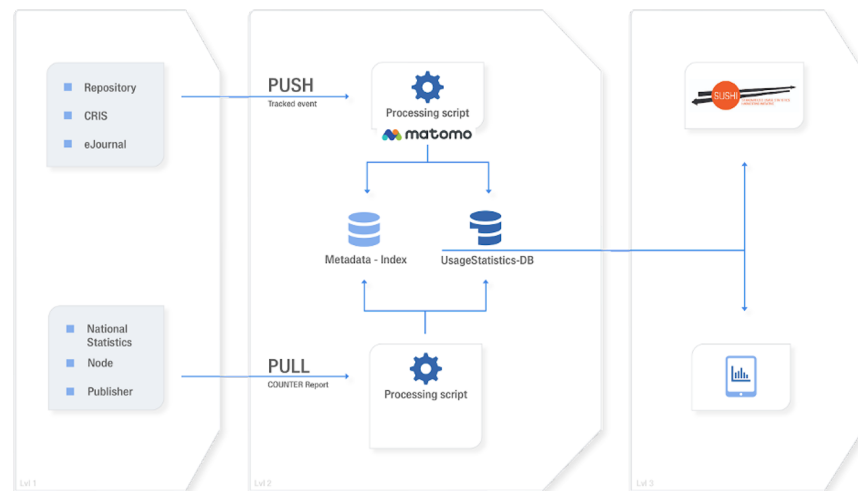
Service architecture comprises two approaches or workflows:

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.

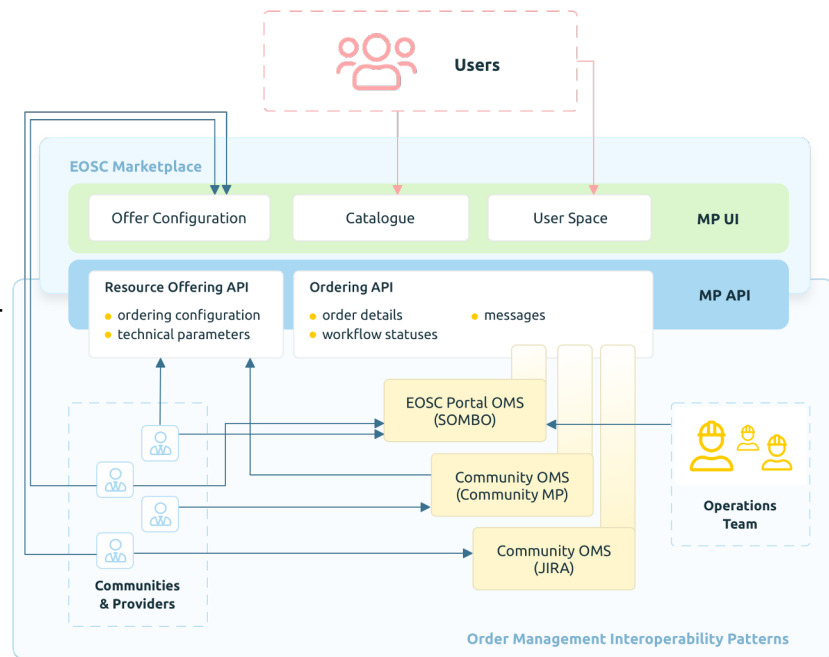
PULL Workflow

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



EOSC Order Management

- For EOSC Exchange **providers** and **provider communities** to attract, support and serve the EOSC users
- Various interoperability patterns available:
 - SOMBO - a service with no adoption cost to manage resource orders
 - On-premise Jira integration - a reference for other integrations
 - Tailor-made provider / community order management system - with the use of REST API, or a reference Python client
 - Support for custom order processing workflows
- Management of offering/technical parameters integrated in the EOSC Marketplace and available for programmatic use (API, client)
- Support for multi-provider resource composition by bundling resource offers and the inter-provider communication mechanism
- A support from the EOSC Portal Operations Team in delivering mature CRM
- For **EOSC users** a unified channel to discover, access, order and compose EOSC Resources gaining support from their providers



https://marketplace.eosc-portal.eu/api_docs

NEXT
STEPS

- Virtual Access and other procurement models support
- EOSC Service Accounting Integration
- Secure authority exchange



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EOSC Helpdesk

Helpdesk established in EOSC-hub project

- Support and communication channel for EOSC users & providers of EOSC-Core services
- **Offering for users:**
 - Submission service request, ask question
 - Option to access all tickets
 - Easy ticket submission without login
 - Notification on ticket change
 - Integrated access with AAI
- **Offering for providers:**
 - Ticket management (inc. notification, classification, escalation)
 - Support unit management
 - Multiple integration scenarios

The screenshot displays the EOSC-hub Helpdesk interface. At the top, there are logos for the European Open Science Cloud and EOSC-hub, followed by the text 'Helpdesk'. Below this is a navigation bar with links: Home, Submit ticket, Search ticket, Support staff, My data, Contact, and Logout. The main section is titled 'Ticket search engine' and contains several search filters: Ticket ID, Support Unit, Status, creation date, and UNTOUCHED SINCE. There are also advanced search attributes for Ticket category, Priority, Special attributes, User, and Pattern search. A 'Search' button and a 'Reset' button are at the bottom of the search section. Below the search section, there is a table showing 23 tickets. The table has columns for Ticket-ID, Priority, Resp. Unit, Status, Last Update, and Subject.

Ticket-ID	Priority	Resp. Unit	Status	Last Update	Subject
1640	less urgent	EOSC-hub First Level Support	in progress	2021-11-03	North South Ireland Research ...
1639	less urgent	EOSC-hub First Level Support	new	2021-10-28	TRUSTS Invitation to Data Market ...
1638	less urgent	EOSC-hub First Level Support	in progress	2021-11-02	TRUSTS Invitation to Data Market ...
1564	less urgent	EOSC AAI	in progress	2021-10-26	Integration of EOSC Future helpdesk ...
1560	urgent	EOSC-hub First Level Support	in progress	2021-10-13	EOSC
1559	less urgent	EOSC-hub First Level Support	in progress	2021-10-19	Linguistic and non linguistic databases
1557	less urgent	EOSC-hub First Level Support	in progress	2021-10-19	Hosting Lab Science SOPs
1551	less urgent	EOSC-hub First Level Support	new	2021-10-03	Materials Zone in EOSC Marketplace
1550	less urgent	EOSC-hub First Level Support	new	2021-10-03	Materials Zone in EOSC Marketplace
1549	less urgent	EOSC Service Onboarding	assigned	2021-10-04	Materials Zone in EOSC Marketplace
1540	less urgent	EOSC Portal Content Component	assigned	2021-09-17	EOSC Portal website appears as maybe ...
1452	less urgent	EOSC Service Onboarding	assigned	2021-09-04	Error in registration form



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EOSC Helpdesk in EOSC Future

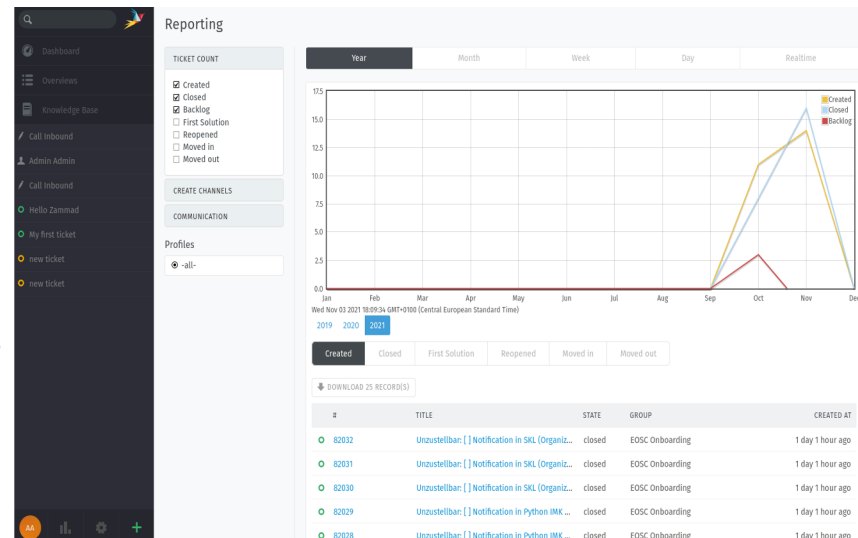
Objectives in EOSC Future:

- Deliver Helpdesk for EOSC-Core Services
 - Support of EOSC SMS processes
- Deliver Helpdesk for Exchange Layer
 - providers can request a helpdesk environment as-a-service in the EOSC Helpdesk (full access control and ticket management rights) providers
 - can integrate their own helpdesk with EOSC Helpdesk (full synchronisation).
 - providers could use EOSC Helpdesk to receive requests

Enhanced Helpdesk in Future

- Fast, modern interface
- Dashboards for statistics and KPIs
- Many integration possibilities for providers

Delivery of first prototype Q1 2022



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Thank you for your attention