EOSC & Providers

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

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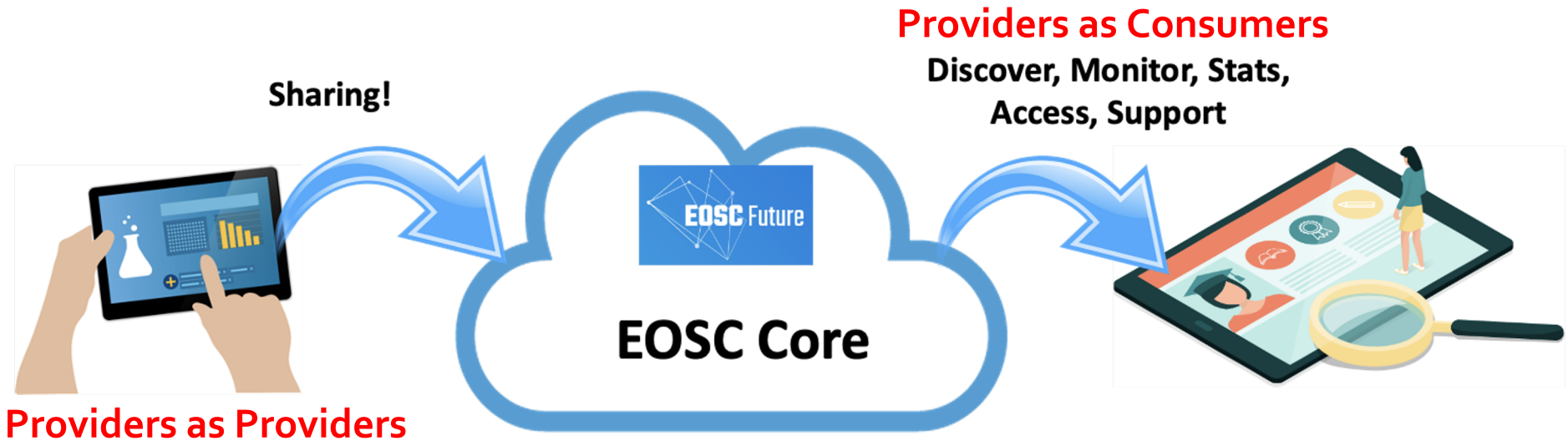
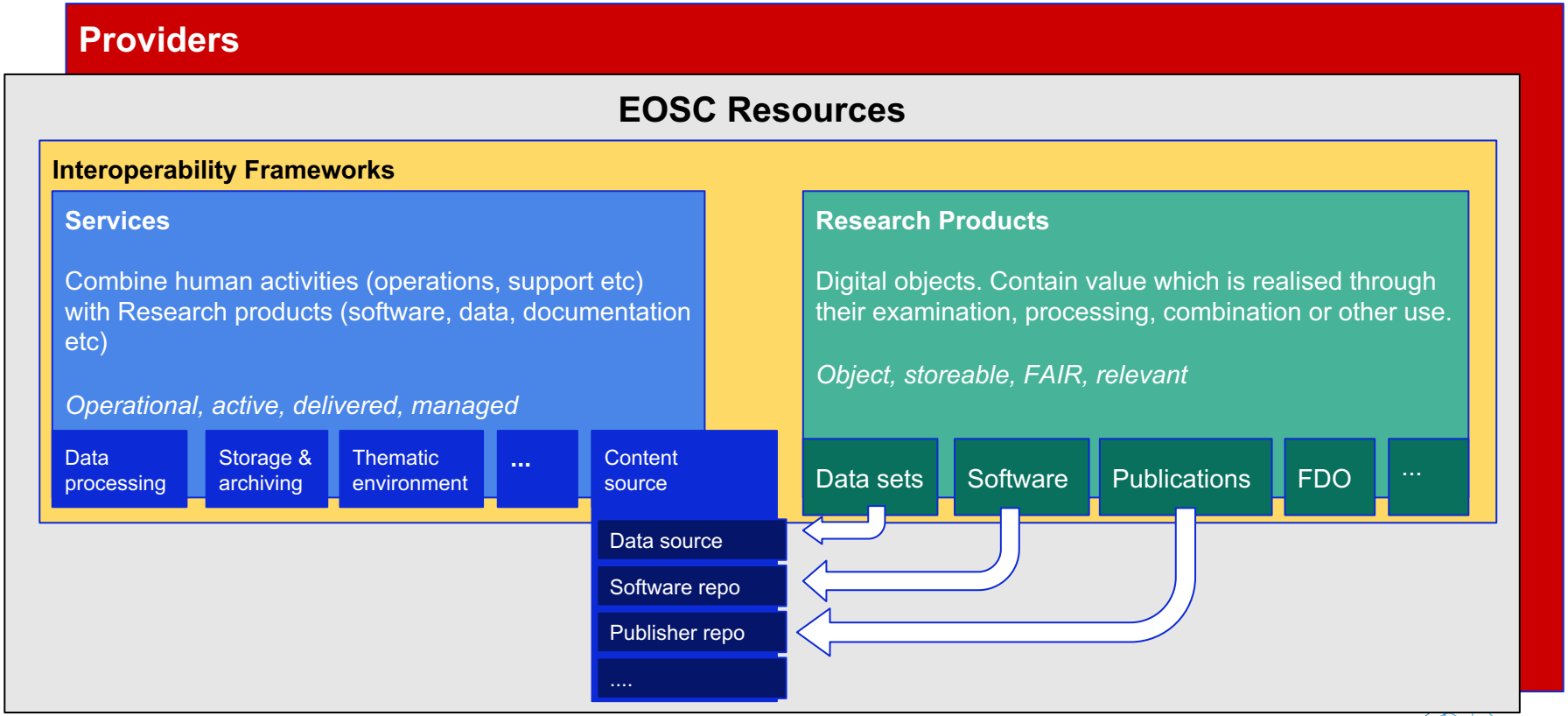
EOSC Core as an enabler of cross-RI, cross-domain resource sharing and management

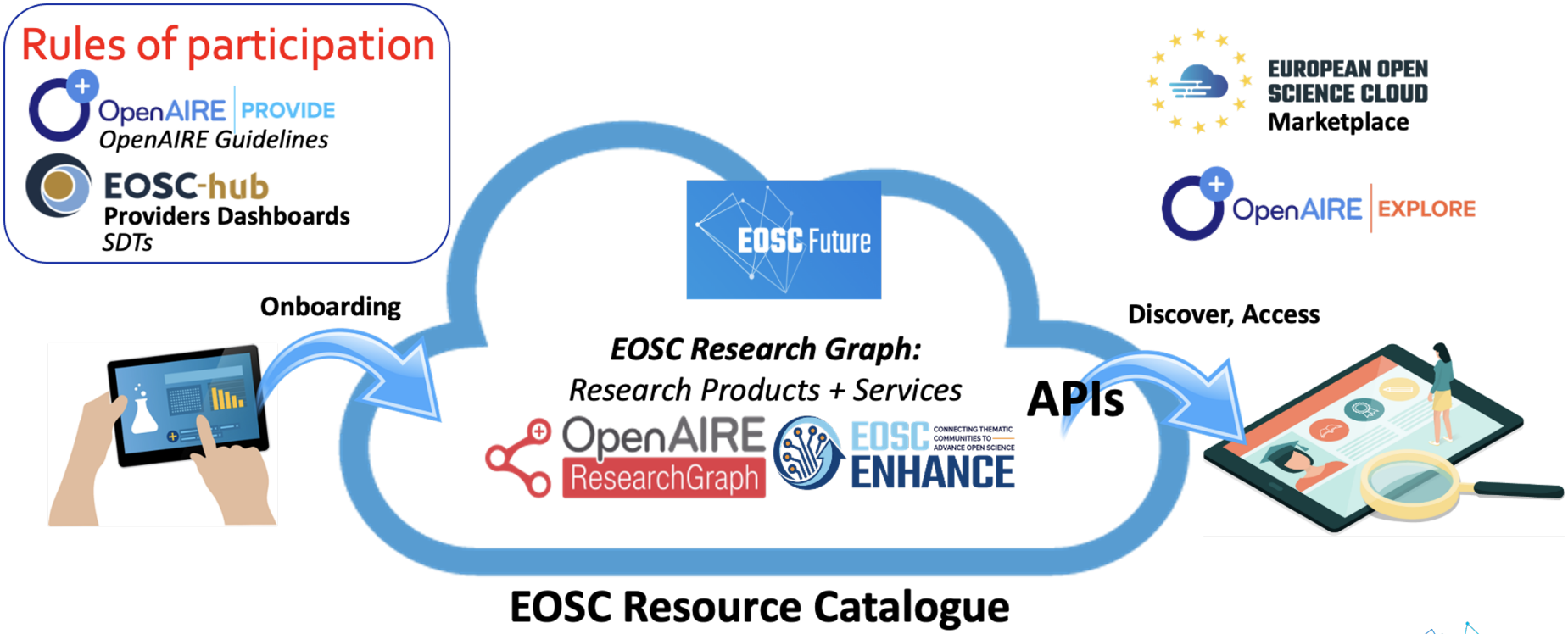


From EOSC services to EOSC Resources

EOSC Resources



EOSC Resource catalogue



EOSC Resource catalogue

Rules of participation

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

EUROPEAN OPEN SCIENCE CLOUD Marketplace

OpenAIRE EXPLORE

EOSC Future

Onboarding

EOSC Research Graph:
Research Products + Services

OpenAIRE ResearchGraph

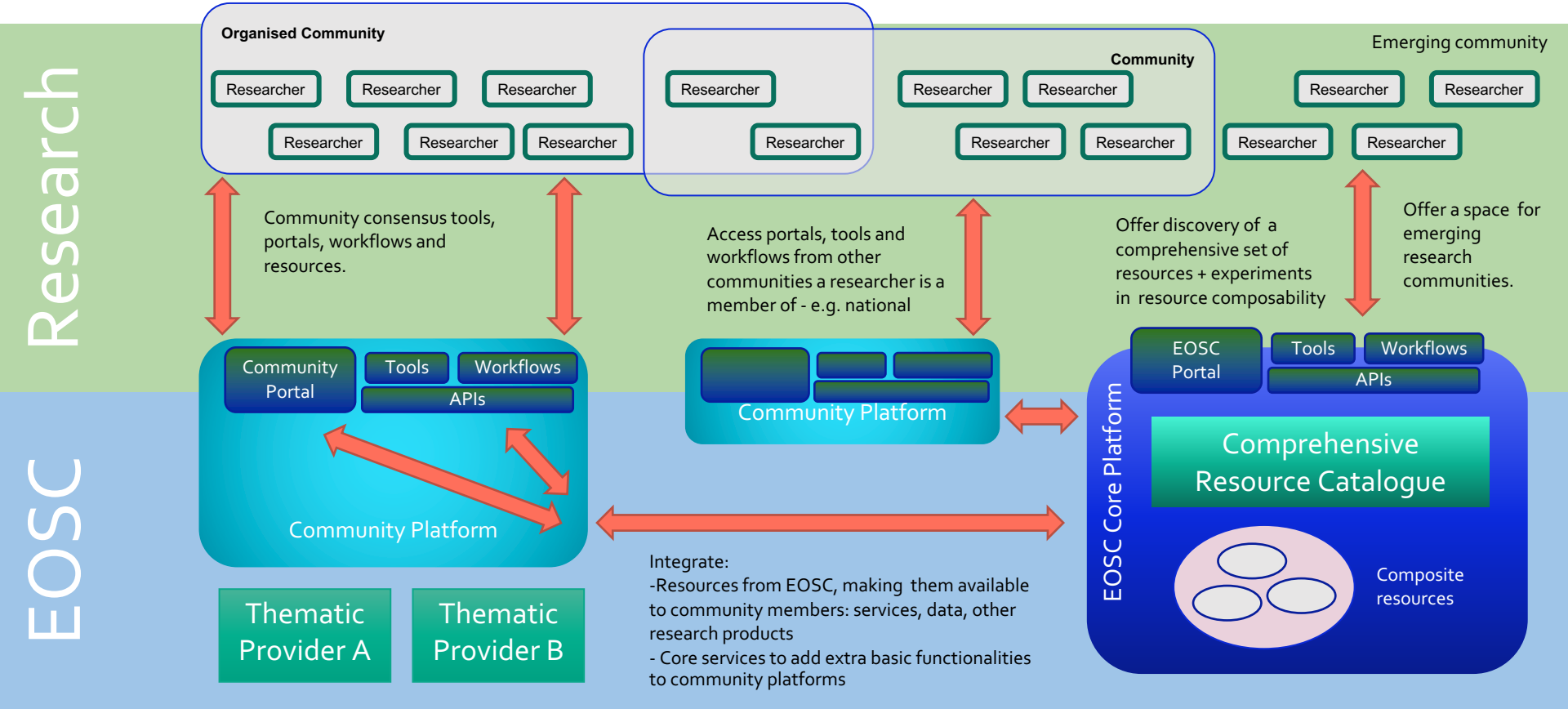
EOSC ENHANCE — CONNECTING THEMATIC COMMUNITIES TO ADVANCE OPEN SCIENCE

APIs

Discover, Access

EOSC Resource Catalogue

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



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

Research

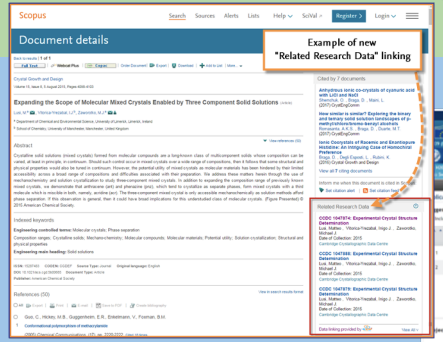
EOSC

Researcher Researcher Researcher Researcher Researcher Researcher Researcher Researcher

Researcher Researcher Researcher Researcher Researcher Researcher Researcher Researcher

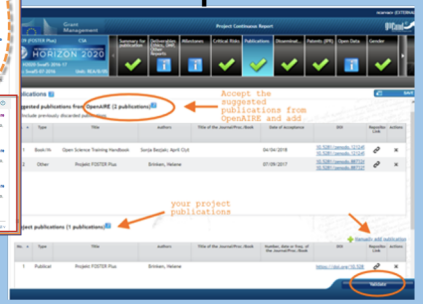
ORCID

Scopus



SMEs

EC Participant Portal



EOSC Core Platform

EOSC Portal

Tools

Workflows

APIs

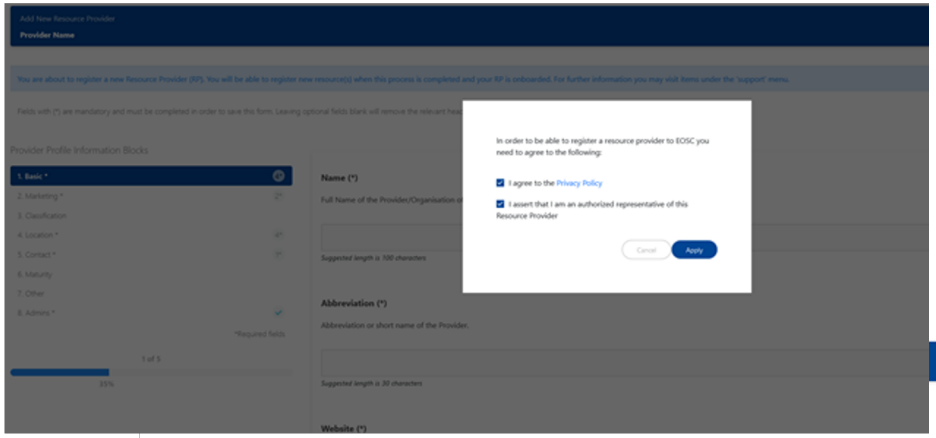
Comprehensive Resource Catalogue

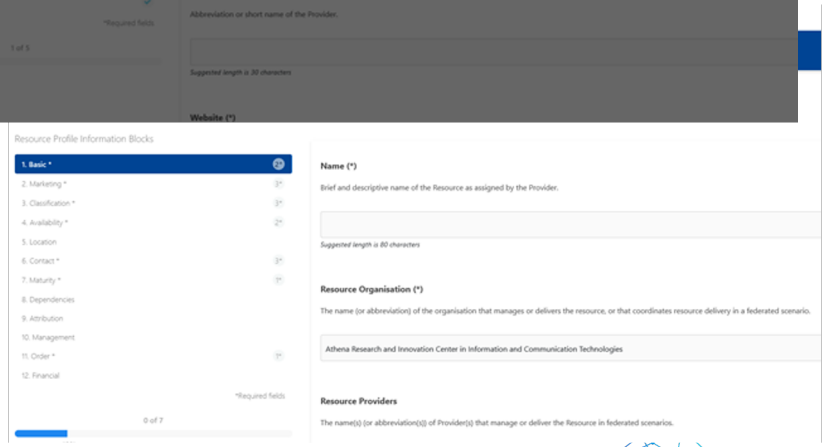
Composite resources

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

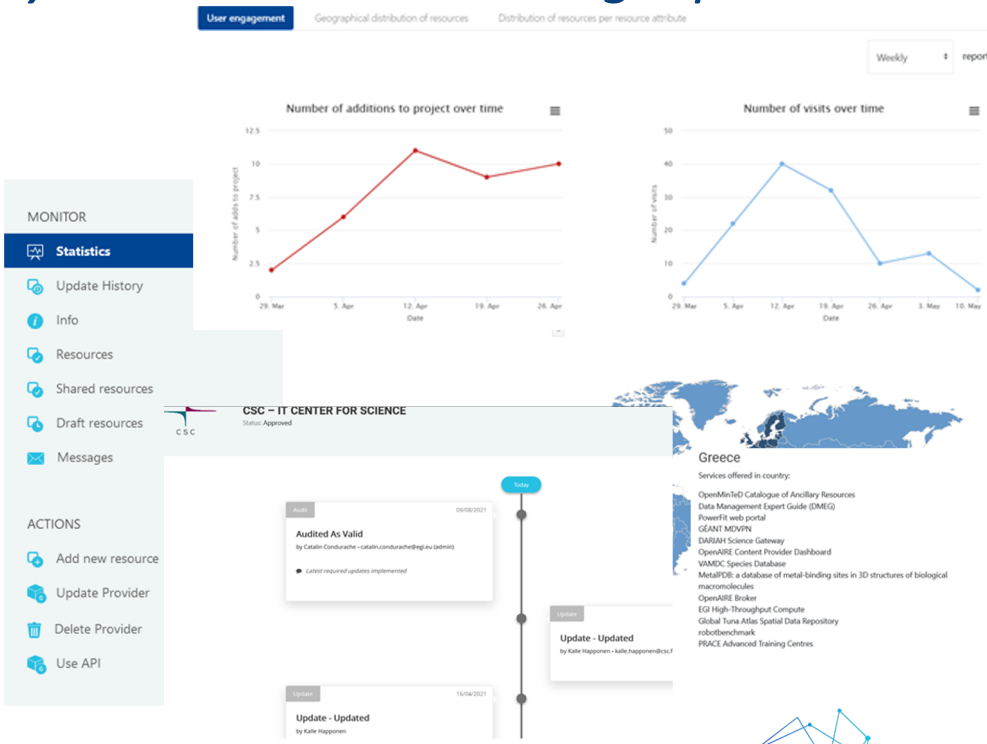




EOSC Provider Portal

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



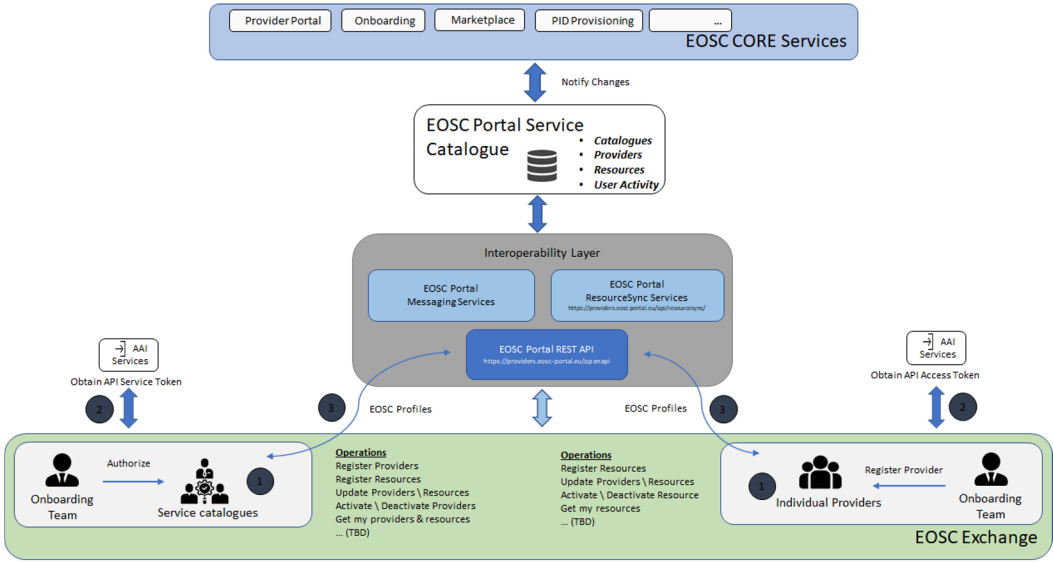
EOSC Service & Provider APIs

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

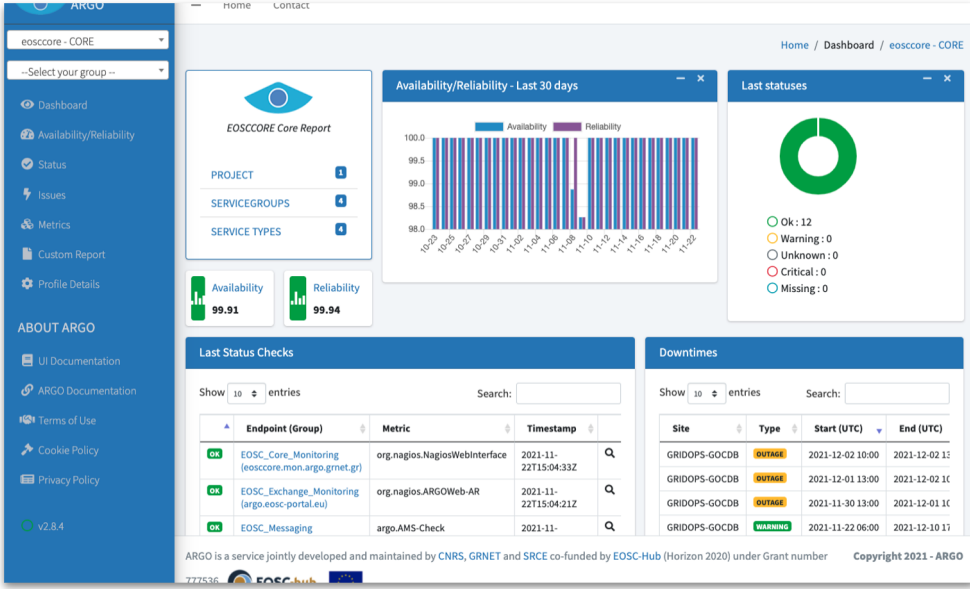
- Monitoring
  - Core Monitoring
  - Exchange Monitoring
- Accounting
  - Service Accounting
  - Research Product Accounting
- Order Management
  - SOMBO (Service Order Management Back-Office)
  - Order management systems integration for Exchange
- Helpdesk

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)



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

NEXT STEPs

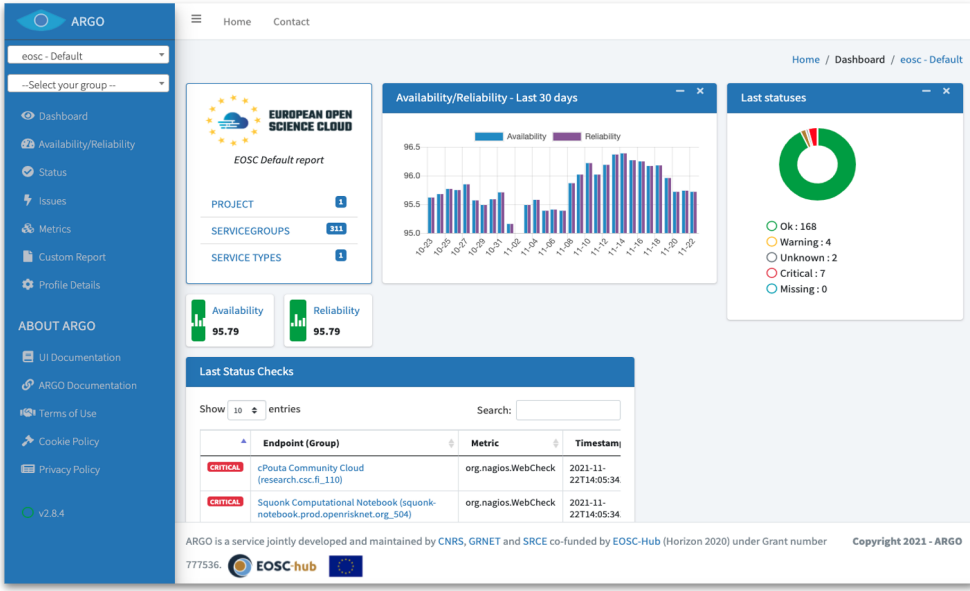
Integrate more EOSC Core services.

Monitor EOSC Core Services functionalities

EOSC Exchange Monitoring

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

- Service Status
- Availability and Reliability reports
- Notifications



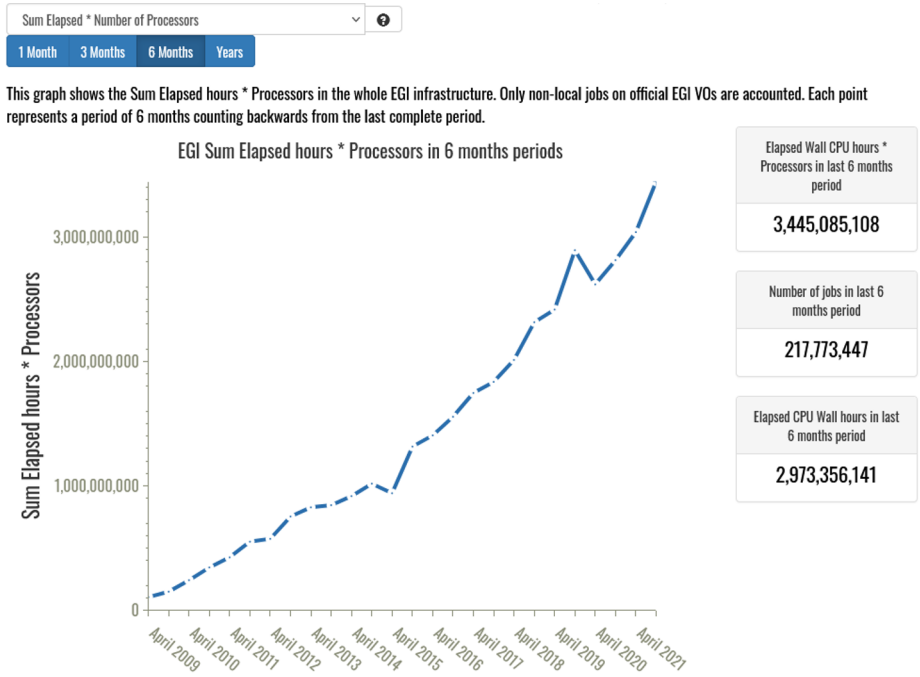
https://argo.eosc-portal.eu

NEXT STEPs

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

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.**



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.

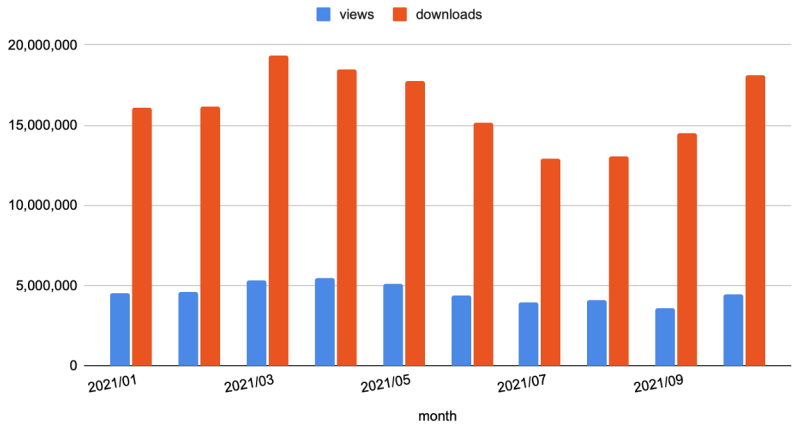
Worldwide Indicators (October 2021):

~Usage events for 3,8M Research Products

~ 210 Content Providers

~ 140M metadata views

~ 540M downloads



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.

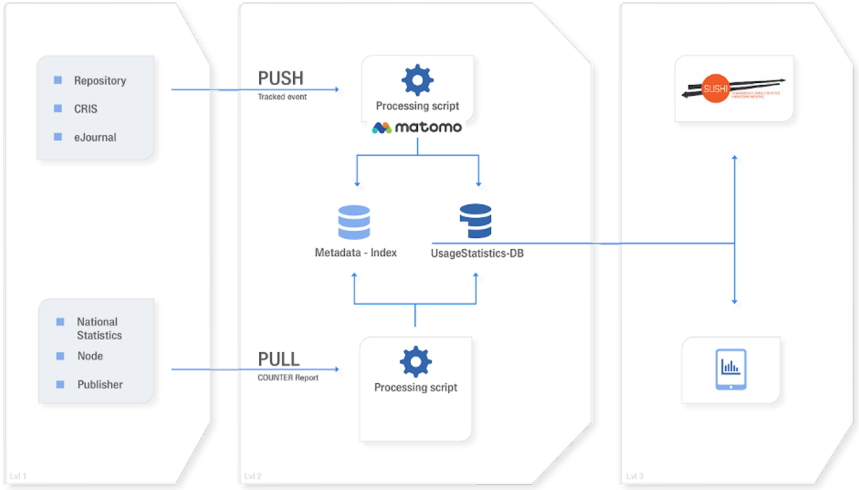
Service architecture comprises two approaches or workflows:

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.

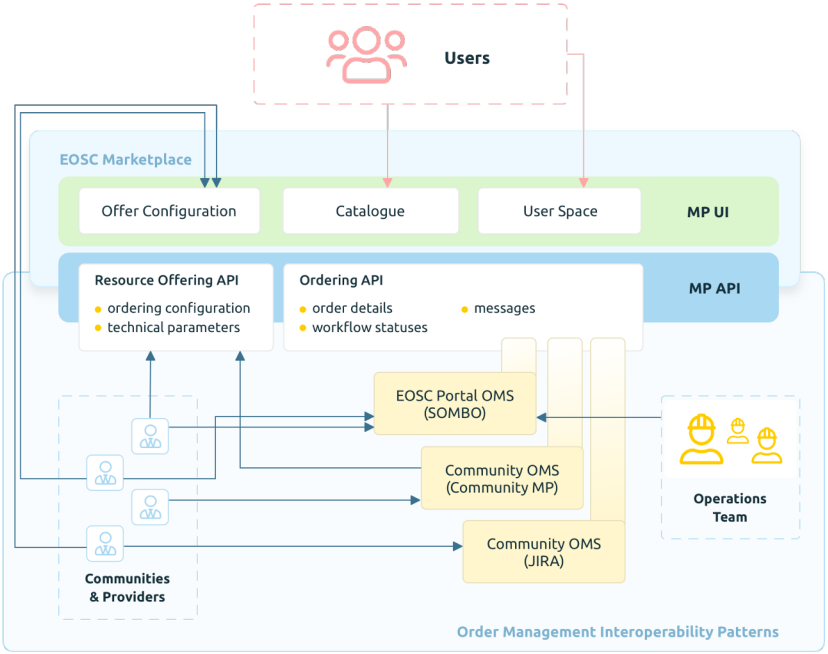
PULL Workflow

- 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

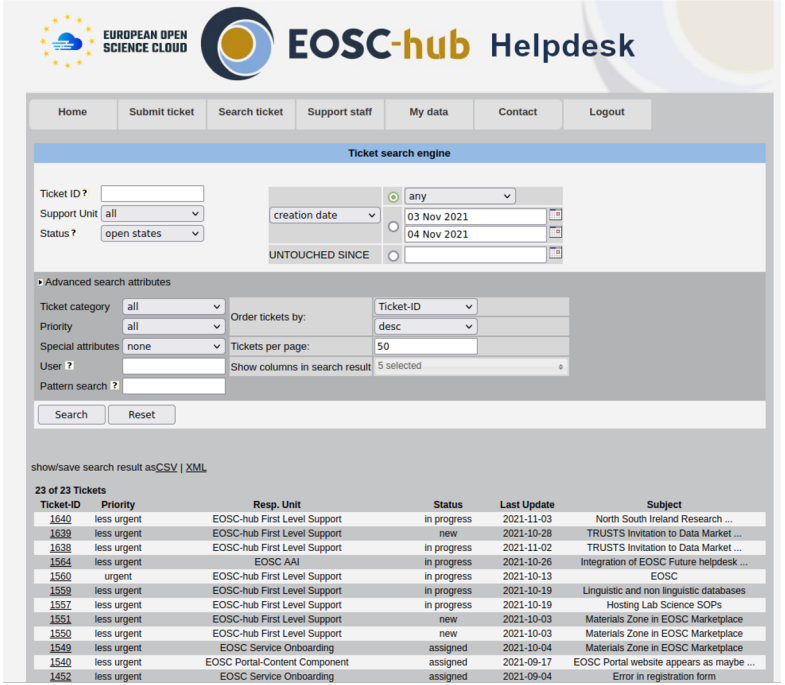
- **Virtual Access and other procurement models support**
- **EOSC Service Accounting Integration**
- **Secure authority exchange**

EOSC Helpdesk

Helpdesk established in EOSC-hub project

- Support and communication channel for EOSC users & providers of EOSC-Core services

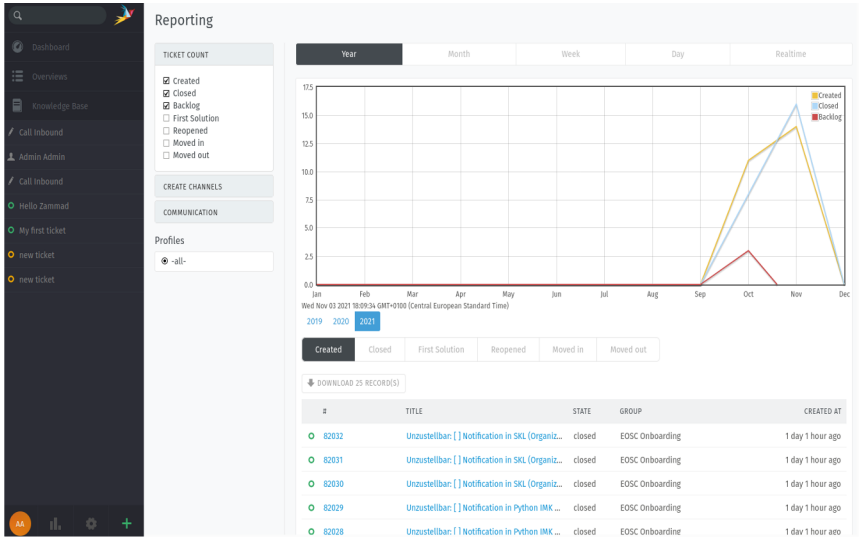
- **Offering for users:**
  - Submission service request, ask question
  - Option to access all tickets
  - Easy ticket submission without login
  - Notification on ticket change
  - Integrated access with AAI
- **Offering for providers:**
  - Ticket management (inc. notification, classification, escalation)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



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

Thank you for your attention

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