Unlocking the Treasure Trove of Science: An Exciting Tour of the EOSC Portal

Discover, Collaborate, and Build with the European Open Science Cloud

John Shepherdson, Anca Hienola, Bartosz Walter, Roksana Wilk, and Giulia Malaguarnera
Q&A and Polls

Slido.com

#UnlockingEOSC
Agenda

- Introduction to the EOSC Portal – John Shepherdson
- Presentation on the Research Activities features of the Portal – Anca Hienola
- Resource Recommendations to help Users find what they need - Bartosz Walter
- Gaps and Research Community feedback on the EOSC Portal – Roksana Wilk, Kasia Lechowska, Aleksandra Hojszyk
- Wrap Up – Giulia Malaguarnera
Ambition of the European Open Science Cloud (EOSC)

To provide European researchers, innovators, companies and citizens with a federated and open multi-disciplinary environment where they can publish, find and reuse data, tools and services for research, innovation and educational purposes.
Introduction to the EOSC Portal

The ‘What and Why and Who and When and How and Where’

But not necessarily in that order ...
What is the EOSC portal?

- A component of the federated and open multi-disciplinary environment that is EOSC
- A single access point for digital services and resources for scientific research in Europe
- Offers a user-friendly interface for easy search, discovery, and access to scientific resources and services
- Supports open science practices and promotes collaboration and knowledge exchange among the scientific community

Functions of the EOSC Portal

• Discover resources
• Access resources
• Manage data
• User dashboard
• Training and learning
• Recommender System
• Helpdesk
Where is the EOSC portal?

Portal
https://eosc-portal.eu/

Also the Marketplace
Why is the EOSC Portal?

Many disparate EC funded initiatives

With many resource types
- research products, data sources, catalogues ...

In many different locations

Needed to be joined up, to save researchers’ time

When is the EOSC Portal?

Image source: https://www.wallpaperflare.com/search?wallpaper=past%2C+present+and+future
How is the EOSC Portal?

Who is the EOSC Portal for?

**LEVEL OF SENIORITY**
- 1. Ph.D. students / Junior researchers
- 2. Post-doc researchers / investigators
- 3. Senior researcher / associate professor
- 4. Chief scientist / professor

**SCIENTIFIC DISCIPLINES**
- 1. Natural Sciences
- 2. Engineering and Technology
- 3. Medical and Health Sciences
- 4. Agricultural Sciences
- 5. Social Sciences
- 6. Humanities

**Consumers**
- Research (ers)
  - Individual
  - Informal research groups
  - Research communities - advanced in operations and supporting tools - lacking tools to support operations
  - National Project
  - Cross-border Project
- Non-research
  - Public sector (administration etc)
  - Citizen scientists
  - Citizens

**Providers**
- Content providers
- Private sector
- Tool providers
- European e-Infrastructures
- Research Infrastructures

**Facilitators**
- Research administrators
- Research Funders
- Data/Research Initiatives
- Libraries
- Policy makers
- Institutions

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eoscfuture.eu  @EOSCFuture  EOSCfuture
Some statistics

Just to give a picture of what has been achieved so far by EOSC projects

<table>
<thead>
<tr>
<th>3m+</th>
<th>300+</th>
<th>340k+</th>
<th>200k+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets in Marketplace</td>
<td>Content Providers</td>
<td>Software Tools</td>
<td>Research Data</td>
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**Federated and open multi-disciplinary environment**

**The European Open Science Cloud**

Providing 1.8 million European researchers and 70 million professionals in science and technology a virtual environment with open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines.
Research Activities features of the Portal

Anca Hienola
Are you ready to embark on an exciting adventure of scientific discovery?

Grab your lab coat, goggles, and a trusty sidekick, the EOSC portal, and let's set off on a wild ride!
The EOSC portal is like a superhero that empowers researchers to access research data, tools, and services all in one place.
Let’s take it step by step

Go to eosc-portal.eu
Let’s take it step by step

Login…. or not.
Let’s take it step by step

Chose what you want to do

Explore and Contribute
- Discover Research Outputs
  Find datasets, scientific publications and software for your research activities
- Publish Research Outputs
  Store, backup, archive your data, publications, software
- Find Funding Opportunities
  EOSC Future’s procurement calls, RDA/EOSC Future open calls, EOSC DIH support schemes

Tools
- Access Computing and Storage Resource
  Find HPC, IT centres for science, cloud computing, online storage
- Process and Analyse
  Verify, organise, transform and integrate data, then export it in the format you need
- Access Training Materials
  Find lessons, courses, videos

More
- Research Data Management
- Research Infrastructures
- Instruments & Equipments
- Services & Resources

Get inspired
Let's take it step by step

Discover research output

By keywords

By title

By author

Now includes

Boolean search
Let's take it step by step
Impacts of emergency health protection measures upon air quality, traffic and public health: Evidence from Oxford, UK.

Decoupling impacts of weather conditions on interannual variations in concentrations of criteria air pollutants in South China - constraining analysis using a typical industrial city region.
Let's take it step by step

Chose what you want to do

Introduction to Persistent Identifiers

Authors: Kálmán Tibor
Resource type: Recorded Lesson
Content type: Video
- Data management

As part of the DARIAH Friday Frontiers in-house webinar series Dr. Kálmán Tibor (GWDC) gives an introduction to Persistent Identifiers. Why do we need them? how do we apply them and how do digital arts and humanities scholars benefit from them in pa...

EOSC Architecture

Authors: Tehtunen Ville, Chen Yin, Provost Lottie, Di Donato Francesco
Resource type: Recorded Lesson
Content type: Video
- Open Science

This webinar is part of the TRIPLE Open Science Training Series. The training session is dedicated to the EOSC Architecture and is presented by Ville Tehtunen Data Solutions Architect at the EGI Foundation. Ville Tehtunen first presents the EOSC and it...

An Editorial and Technical Journey into Post-Publication Peer Review (PPPR)

Authors: Romary Laurent
Resource type: Recorded Lesson
Content type: Video
- Open access

As part of the DARIAH In-House Webinar sessions the ‘Friday Frontiers’ programme included a presentation on Post-Publication Peer Review (PPPR) from former President of the DARIAH Board of Directors, Laurent Romary. Laurent who is based at INRA in Fr...
Using the EOSC portal is like winning a trophy in a scientific race. It gives you increased access, visibility, and impact.
This could be very well a project title

Created at 23.02.2023

Representing a project

PROJECT DETAILS

Project name
This could be very well a project title

Email
anca.hienola@fmi.fi

Project website url
http://www.startrek.eu

CUSTOMER DETAILS

Customer Typology
Representing a project

Scientific Domains
Natural Sciences

Project name
Darth Vadert

Project website url
http://www.startrek.eu

Collaboration countries
Finland

USAGE

Reason to request access to the EOSC services
Because it's awesome and I can find anything I want.

Additional information
bla bla
This could be very well a project title
Created at 23.02.2023
Representing a project

Open access services

Data Service Portal Aila

Add service to this project
Collaboration is the key to unlocking the secrets of science. The EOSC portal brings researchers together to swap ideas and build on each other's work.

- Field of science
- Punctual interests
- **OPEN FOR COLLABORATION**
- List of projects
How has the COVID-19 pandemic affected air quality in France?

**ANNE FOUILLOUX**, Climate data scientist

**SEARCH**
Anne starts by checking OpenAIRE | EXPLORE for existing research outputs that can help her on her way.

**ORDERING AND ACCESS**
Anne is eager to dive in. To request access to the Jupiter notebook, she'll need to place an order through EOSC. With just a few clicks she makes the request for an EGI Notebook* and B2Drop** package.

**DISCOVERY**
She's in luck! She finds a Jupiter notebook with atmospheric data from Copernicus, the EU's Earth Observation Programme, that can be accessed through EOSC.

**USING RESOURCES**
Anne can adapt the Jupiter notebook to output results for France in the years before and during the COVID-19 pandemic.

**SHARING RESULTS**
Anne also uses the Jupiter notebook and B2Drop to make her outputs accessible through EOSC and Zenodo.

**FINDING COMPATIBLE TOOLS**
When she takes a closer look, EOSC recommends tools to help Anne process the Jupiter notebook and share her outputs.

Find out for yourself what’s available on EOSC:
marketplace.eosc-portal.eu

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*EGI Notebook: A browser-based tool for interactive data analysis using EGI storage.**B2DROP: A low-barrier, user-friendly storage environment provided by EUDAT.
Resource Recommendations to help Users find what they need

Bartosz Walter
Resource Recommendations

Recommendation System is a module for enhancing user experience by supporting other modules with AI/ML:

- Personalized recommendations
- Smart search

Therefore, recommendations are present in:

- User Dashboard (UD)
- Smart Search (SS)

Quality of recommendations strongly depends on availability of data for training and will improve over time with growing number of users.
LINDAT/CLARIAH-CZ Repository

Type: Data source  Language: English, Czech  Date: 23.05.2023

Digital humanities  Repository  Social sciences

LINDAT/CLARIAH-CZ Repository provides a platform for researchers to access and share resources and advanced tools from humanities and social sciences. The repository allows anyone to deposit safely store and share their research data.
Resource Recommendations in Search Service

Resources selected for you

**CorpusExplorer**

- **01 January 2018**
- **Type:** other
- **Author names:** Rüdiger Jan Oliver
- **Categories:**
  - CommonCrawl
  - Computational Linguistics
  - Corpus Linguistics
  - DSpin
  - DTA
  - ElasticSearch
  - JSON
  - Linguistics
  - MySQL
  - NLP
  - Natural Language Processing
  - POS tagger
  - Pandoc
  - TextGrid
  - Tiger/XML
  - Twitter
  - Weblicht/XML
  - Wikipedia
  - XML
  - conll
  - corpus
  - processing
  - digital
  - data
  - epub
  - lemmatization
  - linguistics
  - nip
  - tagger
  - tei
  - text
  - cleaning
  - text corpora
  - Linguistics

Software for corpus linguists and text/data mining enthusiasts. The CorpusExplorer combines over 45 interactive visualizations under a user-friendly interface. Routine tasks such as text acquisition, cleaning or tagging are completely automated. The sim...

**TextGrid Repository (TextGridRep)**

- **01 January 2014**
- **Type:** other
- **Categories:**
  - Germanistik
  - Linguistics

TextGrid has purchased the Zeno.org online library (literary, historical, scientific, ... texts) and successively converts it to TEI. TextGrid hat die Online-Bibliothek von Zeno.org (literarische, naturwissenschaftliche, historische, ... Texte) erworben...

**EUDAT B2FIND Service**

- **Open access**
- **01 January 2016**
- **Type:** other
- **Author names:** EUDAT
- **Categories:**
  - B2FIND
  - B2SERVICES
  - EUDAT
  - Other

B2FIND is a simple, user-friendly discovery service based on metadata steadily harvested from research data collections from EUDAT data centres and other repositories.
Gaps and Research Community feedback
Roksana Wilk, Kasia Lechowska, Aleksandra Hojszyk

- Better representation of the access policies (what policy aspects do you know? Like: country, community of origin, access type: download/use on premise etc.)
- Possibility to look for computing resources using their technical parameters (amount of CPU, RAM etc.)
- Capability to include scientific outputs (datasets, publications, experiment templates) in the “Marketplace Projects” to create a research digital environment with all relevant objects
- What scientific outputs (research products) do you know, use and PRODUCE and PUBLISH
- Researchers’ Forum
- Other gaps?
THANK YOU for joining us on this exciting adventure called the EOSC Portal!

Don’t forget to visit eosc-portal.eu
It’s built for you, the researchers!

Keep on researching and have fun!
Q&A and Polls

Slido.com

#UnlockingEOSC
Sli.do questions

The following questions are intended to find out about the user's needs, expectations and routine regarding research products.

Marketplace repository / Research resources

1. What kind of resources do you use mostly in your research? (Multiple choice list with our types of resources)
2. How do you use resources for your research? Do you use a cloud storage to keep them for later, download or transfer somewhere else? How do you use them? Please, describe your actions with resources in a short answer.
3. Do you keep all of the research products in one repository? Do you find that solution useful?
4. How do you usually work on your research? Individually or in a group of fellow researchers?
5. What are a pain points while using the research resources from the internet? What would you like to change?
6. Do you have any suggestions on what should be provided in marketplace for researchers to make conducting research more effective?
Closing and Wrap Up

- EOSC ambitions and introduction to the EOSC Portal and Marketplace
- EOSC empower researchers to cover the research journey
  - Research Activities in the Portal:
    - login
    - search engine to access the services and research output. You can also search for related research product and with simple button you can share and link research output
    - Workspace where store, process and manage data. For example, search for tools like publishing in Zenodo and B2Share, storage in jupiter notebooks or other tools, analysis and services
    - trainings and support
    - User dashboard: you can add your project and (soon to come) share it with collaborators. In the framework of this project, you can save the tools you are using, and the list of data and research products.
Closing and Wrap Up

- Finding services and tools is easy when you know what to find, but you may not! Thanks to machine learning, we are able to suggest resource recommendations.
- Recommendations are coming via:
  - Smart search
  - User Dashboard
- Quality of the recommender depends on the number of users
- Gaps: Is the EOSC Portal covering the research cycle?
  - Focus on the provision of the resources
  - The data are not included in EOSC because there are archives that are autonomous and won’t be in EOSC
  - Datasets outside Europe would be helpful in the Portal
  - It’s a question of trust in metadata quality and a training on this is requested
  - Searching per field may help in building the trust and finding everything in one go
Closing and Wrap Up

- EOSC ask an integration with the accounting of the system: the EOSC providers needs to add an integration so we can increase the popularity of the data
- Build the bricks to import the data based on the community metadata schema
- Feedback button is present, we may need to make it more evident in the UX/UI
- Investment in storage system are agreed that are needed
- Showing specification on interoperability are of great value for the research community
- We are working on the set of features on the user profile. Would be of interest having a social media part as a forum to exchange opinion? Some liked the idea. Some others the social part may not been structured and not reinvent the wheel
- Important is to focus on other efforts in this futuristic project.
EOSC SYMPOSIUM 23

ONE EVENT, MANY DIFFERENT EOSC STAKEHOLDERS

From 20-22 September 2023, the EOSC Symposium will take place in Madrid, in the context of the Spanish Presidency of the Council of the European Union.

This year’s event will be fully hybrid, facilitating broader exchanges between stakeholders from ministries, policy makers, research organisations, service providers, research infrastructures and research communities driving the development of – and engagement with – the European Open Science Cloud. In the context of the EOSC Future project, the EOSC Symposium will also be a critical platform to showcase project achievements and key exploitable results.

SIGN UP FOR THE PRE-REGISTRATION WAITING LIST