



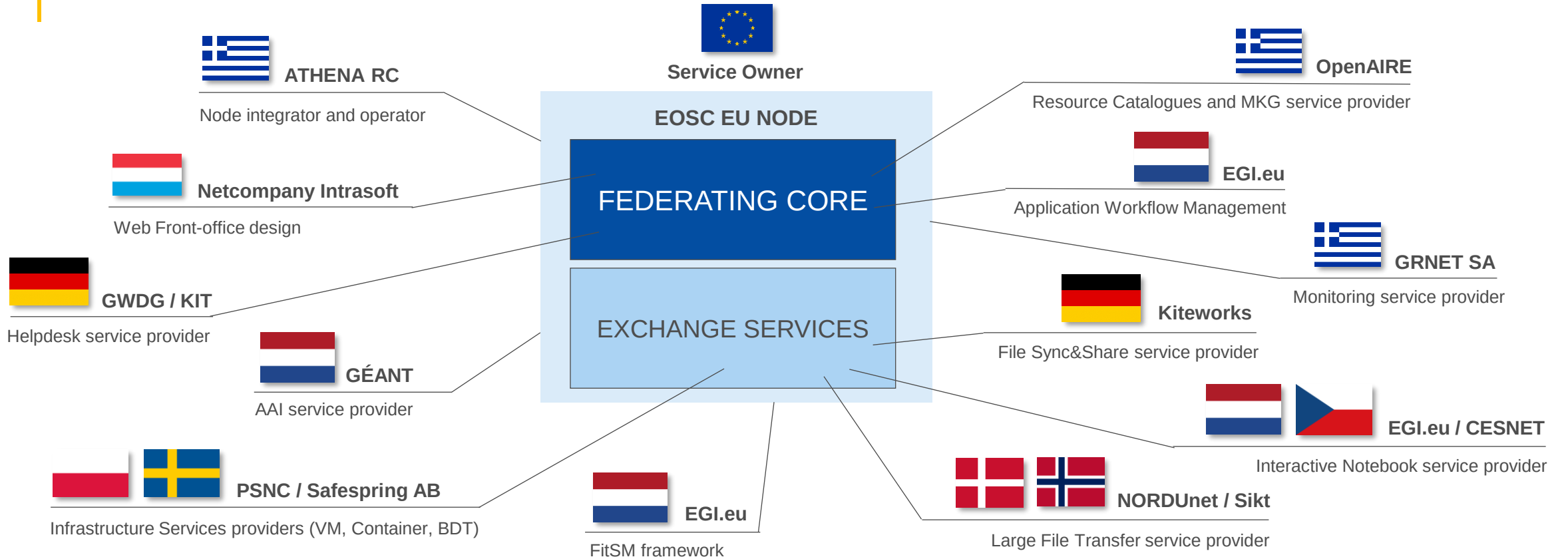
The EOSC EU Node

<https://open-science-cloud.ec.europa.eu/>

Peter Szegedi
DG CNECT C.1



EOSC EU Node



SELECTED NODE CANDIDATES



BBMRI Node



Blue-Cloud Node



CERN Node



Dutch Node



EU Node



EUDAT Node



Finnish Node



French Node



German Node



Italian Node



Life Sciences Node



PaNOSC Node



Polish Node



Slovakian Node

EOSC EU Node Offers to Researchers

Researchers

If you are a researcher or citizen scientist in Europe interested in collaborative, data-driven Open Science, the EOSC EU Node offers easy access to diverse data, publications, software, and services from across Europe's research networks.

- Discover, access and use **tens of millions** of scientific **publications, data** and **software**
- Find and access **services** and **tools** from research infrastructures, technology providers, leading scientific clusters and more.
- **Use integrated** compute, storage as well as interactive collaboration tools, applications and services free at the point of use.
- Create **teams** and **work together** putting Open Science principles in practice

Resource hub

Search resources

All resources | Publications | Data | Software | Other Products | Services | Data Sources | Training | Interoperability Guidelines | Tools

Recommended for you:

- PUBLICATION: Current Perspectives and Progress in Preoperative Portal Vein...
- PUBLICATION: Choc-Tadalafil Fusion: Unlocking Solubility and Taste Harmony with...
- PUBLICATION: Synthesis and Biological Evaluation of Cleistocalone A, an...
- PUBLICATION: OZBEKISTON RESPUBLIKASIDA SAYLOV TIZIMI VA U...
- PUBLICATION: A...

Showing 1 to 20 of 47,345,005 resources

Access right: ☐ Closed (7,667,296) ☐ Embargo (89,554) ☒ Open access (47,345,005) ☐ Restricted (823,498)

Scientific domain:

Document type:

Year: 2010 | Views: 0 | Downloads: 0

The wxacO gene of Xanthor lipopolysaccharide biosynt virulence

Project: Project / Compute / Images

Images: Displaying 8 items

Name	Type	Status	Visibility	Protected	Disk Format	Size
image-0	Image	Active	Public	No	QCOW2	139.25 MB
image-1	Image	Active	Public	No	QCOW2	15.55 MB
image-2	Image	Active	Public	No	QCOW2	217.38 MB
image-3	Image	Active	Public	No	QCOW2	247.50 MB
image-4	Image	Active	Public	No	QCOW2	267.25 MB
image-5	Image	Active	Public	No	QCOW2	611.44 MB
image-6	Image	Active	Public	No	QCOW2	648.25 MB
image-7	Image	Active	Public	No	QCOW2	659.13 MB

Displaying 8 items

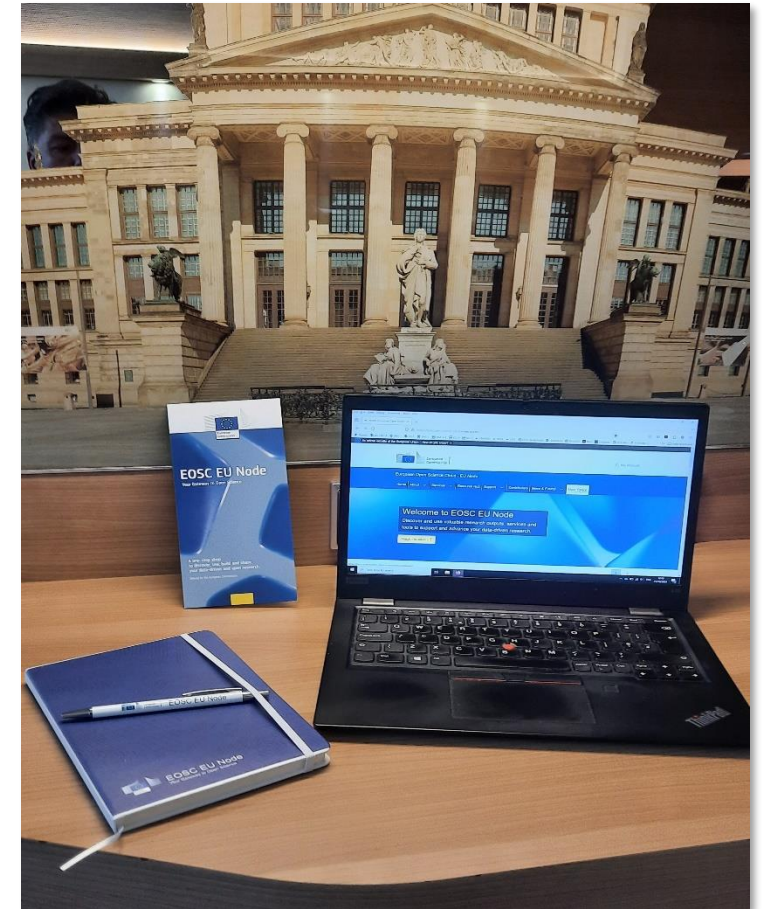
Notebook: Python 3 (Jupyter), Julia 1.10.4, Octave, R, RStudio (Jupyter)

Console: Python 3 (Jupyter), Julia 1.10.4, Octave, R

Launcher: Jupyter File, Python File, R File, Jupyter Notebook

Users in numbers*

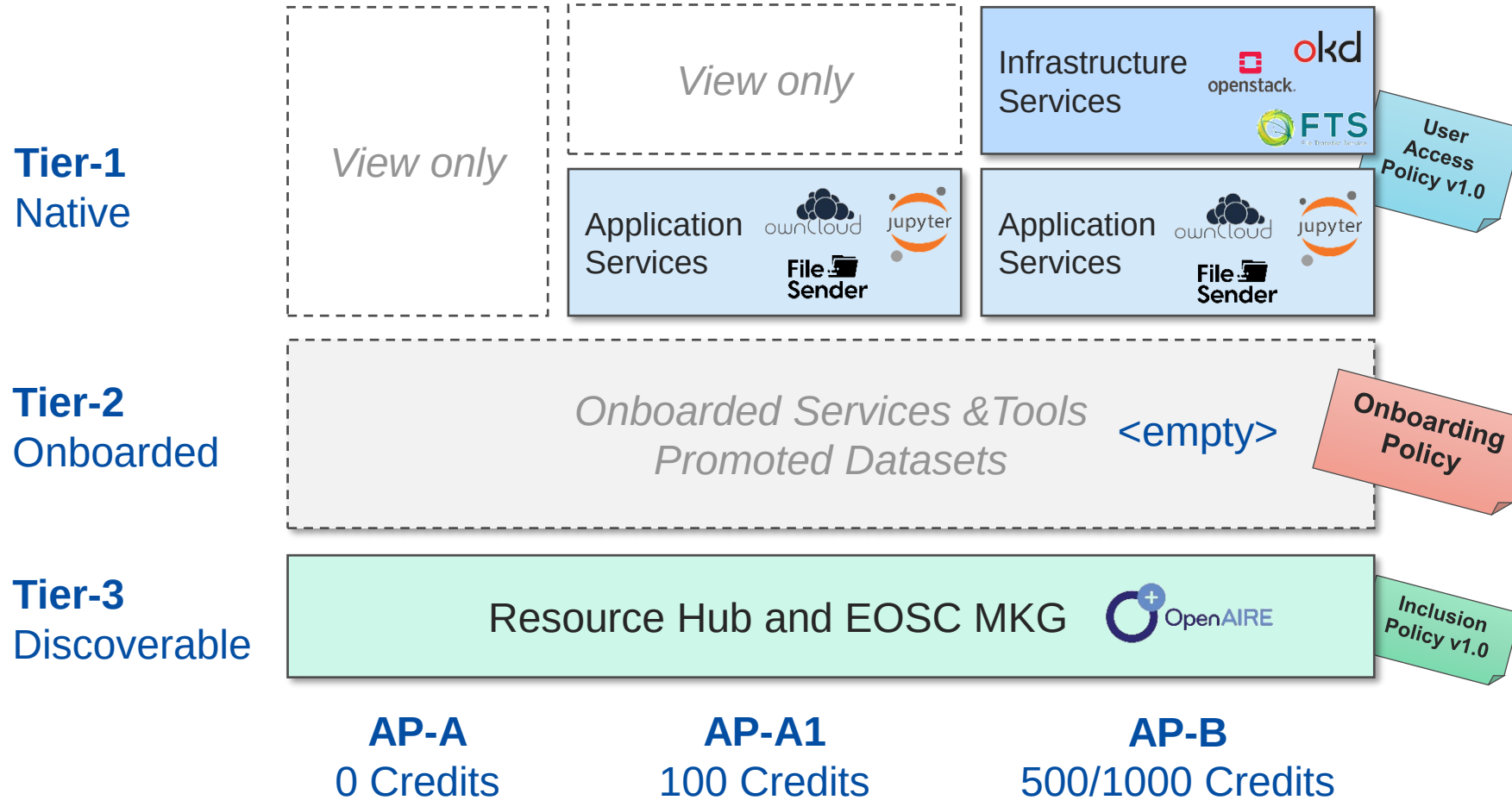
- **15k** visitors / **3180** registered users / **65** project groups
 - **Top countries of users:** Germany, France, Italy, Spain, Sweden, Netherlands
- **974k** Virtual Credits allocated / **59k** consumed (~6%)
 - **Most popular services:** EFSS, LFT, Notebooks, Infrastructure (VM/OKD/BDT)
 - **Helpdesk tickets:** decreasing from 150 to 50 per month (healthy)
- **824k** Virtual Credits currently in circulation unused
- Access Policy Groups:
 - AP-0 – **EXPLORER** (not logged in) slight increase in visitors
 - AP-A – **OBSERVER** (view only): 29% decreased
 - AP-A1 – **COLLABORATOR** (limited): 51% constant
 - **AP-B – INVESTIGATOR (full access): 20% increased**
- *New credit allocation policy (gradually rolled out):*
 - AP-A1 from 100 to **500** virtual credits + access to infrastructure services
 - AP-B from 500 to **1500** virtual credits (**3000** for groups) + no gated resources



* 20 June 2025

Access Policy and Contributor tiers

Contributor Tiers



Services procured for the EOSC EU Node

ORDERING FUNCTION FOR GATED RESOURCES

Piloted with Candidate Nodes in 2025

Virtual credits and access model

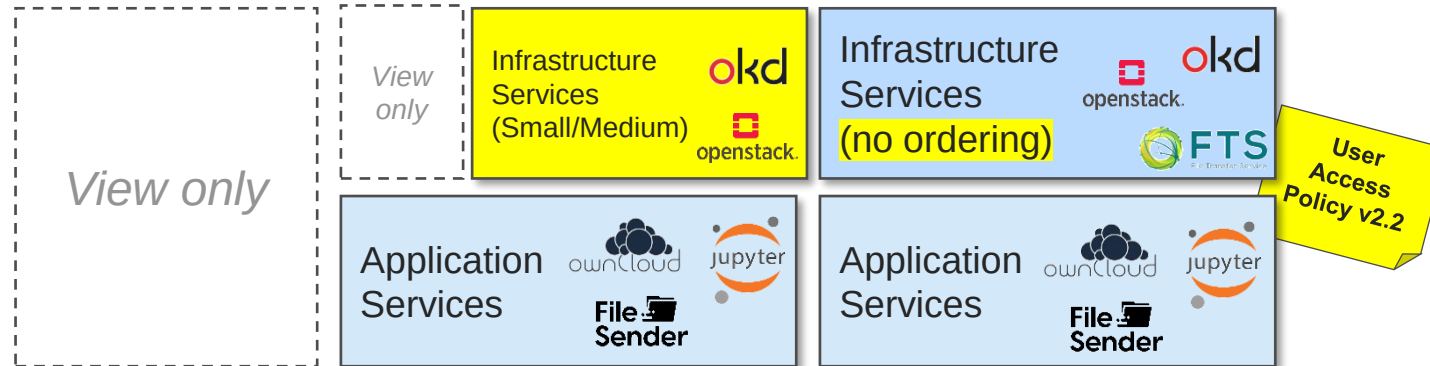
ATTRIBUTE-BASED AAA

Access Policy Groups

Access Policy and Contributor tiers updates

Contributor Tiers

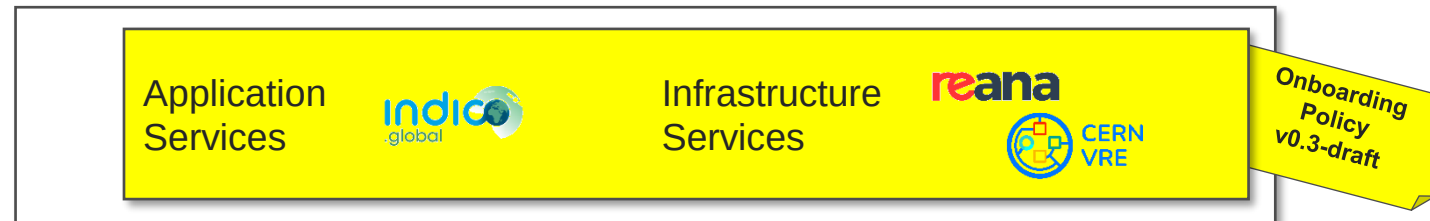
Tier-1
Native



Services procured for the EOSC EU Node

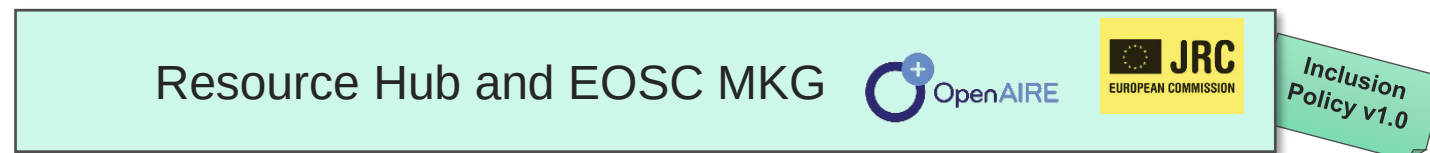
ORDERING FUNCTION FOR GATED RESOURCES

Tier-2
Onboarded



Piloted with Candidate Nodes in 2025

Tier-3
Discoverable



Virtual credits and access model

ATTRIBUTE-BASED AAA

AP-A
0 Credits

AP-A1
500 Credits

AP-B
1500/3000 Credits

Access Policy Groups

Communications and promotions



| 10 June 2025

The EOSC EU Node Prepares for the Next Phase: Adapting to the upcoming EOSC Federation policies and sustainable services

The EOSC EU Node is entering a new phase to align with upcoming EOSC Federation policies. Read on to see how it's adapting to the emerging community policies and frameworks.



| 30 May 2025

EOSC EU Node Access Policy Updated: Clearer roles, more credits, smarter access

The EOSC EU Node is taking a major leap forward! After six months of enabling cutting-edge research across Europe, we are excited to unveil an updated User Access Policy that makes accessing EOSC services simpler, fairer, and more powerful. Read on to get all the details.



| 28 April 2025

EOSC EU Node Information & Training Workshop: Connecting with the French Research Community

On 7 April 2025, the EOSC EU Node held an online information and training workshop tailored specifically for the French research community, marking an important milestone in connecting national research efforts with the EOSC EU Node and the broader EOSC Federation. Read the recap to learn more.



| 1 April 2025

The First EOSC EU Node "Ask Me Anything" Session Unpacked

On 26 March 2025, the EOSC EU Node team hosted an "Ask Me Anything" (AMA) session that attracted 116 participants working in Open Science, data-driven research, and collaborative projects from across the EU and associated countries. See the session's key takeaways and next steps.



| 26 March 2025

EOSC Federation in the Making: First Node Candidates Workshop Sets the Pace

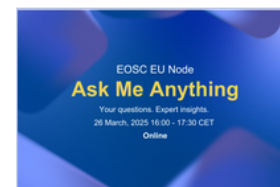
Last week's Kick-off EOSC Node Federation Workshop brought together national and thematic EOSC Node candidates, technical experts, and the EU Node team to focus on one shared goal: building EOSC together. Read the recap to learn more about the discussions.



| 18 March 2025

EOSC EU Node All Hands Meeting: Progress and Next Steps

At the All-Hands Meeting in Poznań, hosted by PSNC, EU Node Contractors and the European Commission came together to assess progress and set bold priorities for 2025 and beyond. Read on to see the meeting's key takeaways.



| 17 March 2025

Join our first Ask Me Anything (AMA) session: Unlock the full potential of the EOSC EU Node for your research

Are you a researcher, data scientist, or computational expert working in Open Science? This interactive Ask Me Anything (AMA) session is your opportunity to explore how the EOSC EU Node can enhance your research.



| 5 March 2025

Building the EOSC Federation: Kick-off workshop for the build-up phase of the EOSC Federation

Learn about the upcoming Kick-off Workshop for the build-up phase of the EOSC Federation! Here, the EOSC EU Node, 12 invited organisations, the European Commission with EOSC EU Node contractors, and the EOSC Association will come together to shape the early phase of the EOSC Federation build-up.

Communications and promotions

NEW TRAINING MATERIALS



[Home](#) [All Courses](#) [Guides & Policies](#)

English (en) ▾

[Log in](#)

Courses Catalogue

Fundamentals of eLearning for successful Open Science experiences

EOSC EU Node 19

Getting started



HOW TO CREATE A USER ACCOUNT IN EOSC EU NODE

How to create a User Account in EOSC EU Node

Welcome to this course on how to create a user account in the EOSC EU Node. The ...

[View](#)

TUTORIAL Getting started



HOW TO CREATE GROUPS: INTRODUCTION FOR RESEARCHERS

How to create Groups: Short Tutorial

Welcome to this course on how to create a user account in the EOSC EU Node. The ...

[View](#)

TUTORIAL Resource Hub



RESOURCE HUB: INTRODUCTION FOR RESEARCHERS

Resource Hub: Introductory Tutorial

Welcome to this tutorial on how to create a user account in the EOSC EU Node. Th...

[View](#)

Resource Hub



HOW TO USE THE EOSC EU NODE RESOURCE HUB: A COMPLETE GUIDE

How to use the EOSC EU Node Resource Hub: A Complete Guide

Welcome to this course on how to create a user account in the EOSC EU Node. The ...

[View](#)



European
Commission

EOSC EU Node Offers as a Hub of the Federation

The screenshot displays the EOSC EU Node user interface. At the top, there's a header with 'Terms of Use', 'Contact us', and 'Privacy Policy'. Below it, the main heading is 'European Open Science Cloud EU Node', followed by a sub-header 'Access your account and take advantage of the free resources, perform research and collaborate.' The 'Log in' section prompts the user to 'Select identity provider' and shows a list of providers including Budapest Metropolitan University, Corvinus University of Budapest, Eötvös Loránd University, and University of Veterinary Medicine. A search bar is also present. The 'Services' sidebar on the left lists options like File Sync & Share, Interactive Notebooks, Large File Transfer, Cloud Container Platform, and Virtual Machines. The main content area shows 'Core Services Monitoring' and 'Core Services Status' with a 'LOT-1-MS1' identifier. A 'Helpdesk' form is visible in the foreground, and a 'Credits' section shows various service usage metrics.

Contributors

If you are a scientific resource provider in Europe, the EOSC EU Node invites you to contribute your research objects - such as data, software, services, and tools - to support the mission of promoting Open Science.

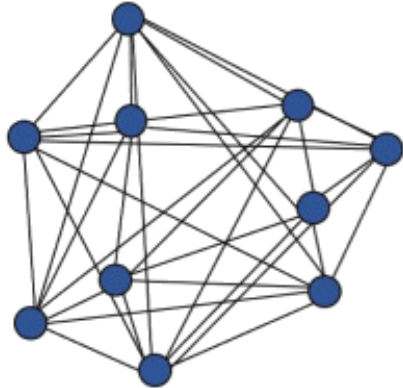
- Benefit from the **federated AAI** capability, get single user identity and group membership attributes
- Get user entitlements for automated **authorization** decisions
- Utilize **virtual credit** allocations in multiple **wallets** across applications and services
- Harvest curated **catalogues** and connect to metadata **knowledge graph**
- Share **deployment templates** across infrastructures, get **monitoring** probes and first-level support via **helpdesk**

Node Enrolment

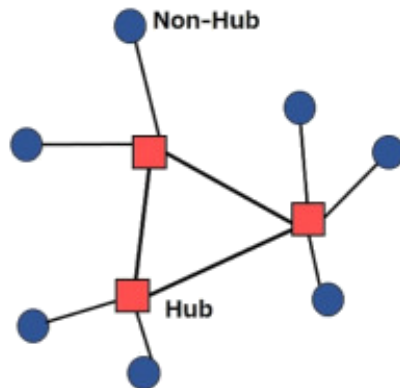
Onboarding to EOSC AAI and EOSC Service Catalogue

EOSC Federation model is fluid

*EOSC Federation
Vision*



Point-to-Point



Hub-and-Spoke

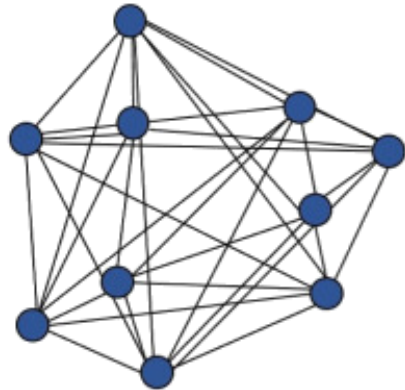
*EOSC Federation
Potential Reality*

Node Enrolment

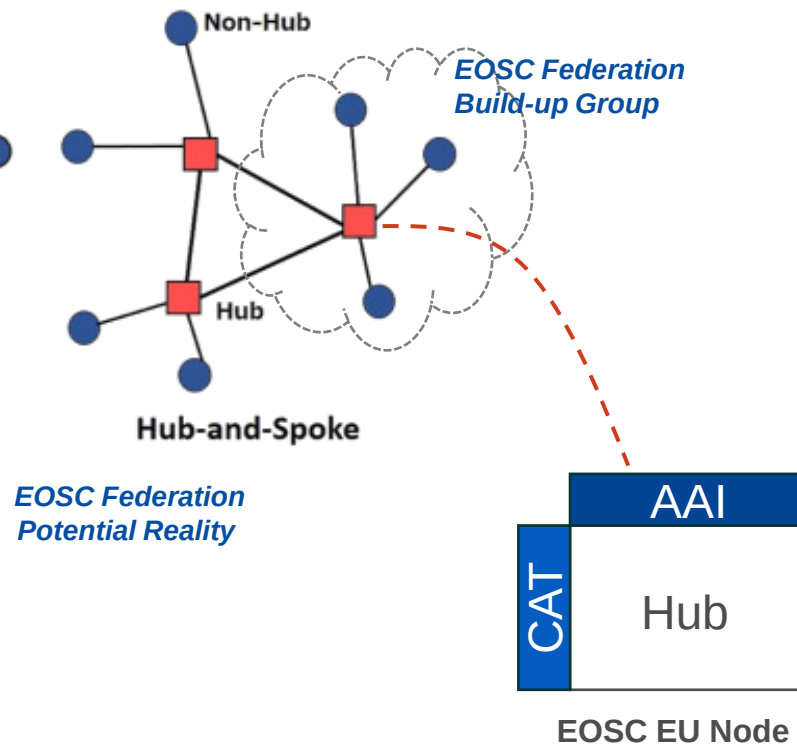
Onboarding to EOSC AAI and EOSC Service Catalogue

EOSC Federation model is fluid

*EOSC Federation
Vision*



Point-to-Point



*EOSC Federation
Potential Reality*

Hub-and-Spoke

*EOSC Federation
Build-up Group*

AAI

Hub

CAT

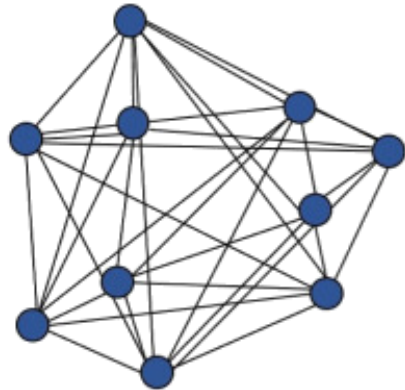
EOSC EU Node

Node Enrolment

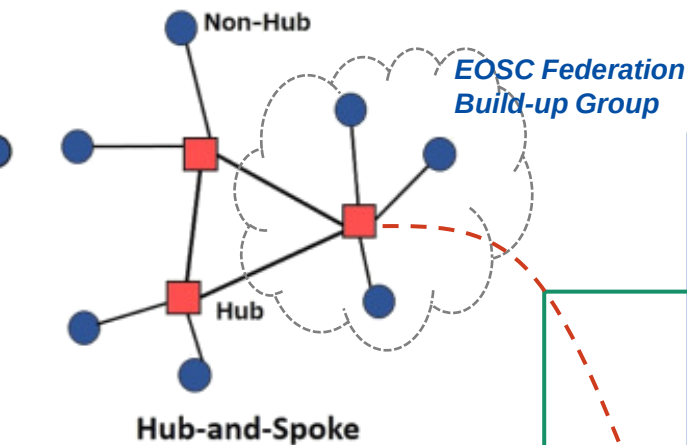
Onboarding to EOSC AAI and EOSC Service Catalogue

EOSC Federation model is fluid

EOSC Federation Vision

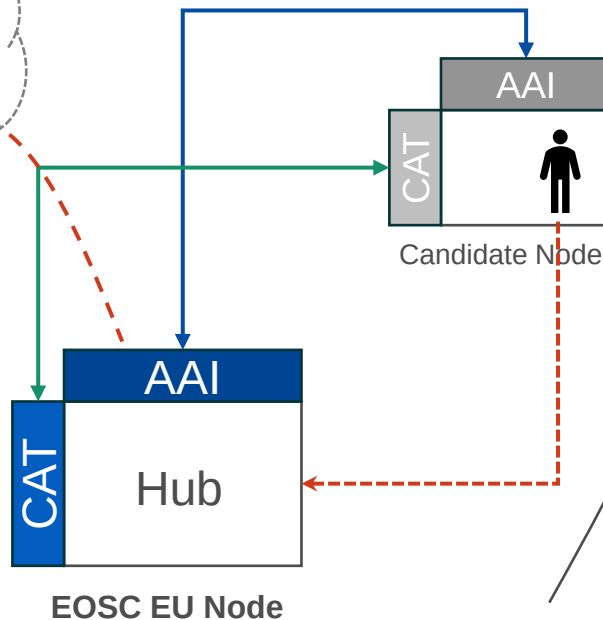


Point-to-Point



EOSC Federation Potential Reality

Hub-and-Spoke



1. Connect to EOSC AAI Federation

EOSC AAI Architecture

<https://zenodo.org/records/15388270>

2. Connect to EOSC Catalogues

Federating Capabilities for the EOSC Catalogues

<https://docs.google.com/document/d/1JJjIjIiCHi6YSDAygDncp4OFADelxy0ll/edit?usp=sharing&oid=116737697103843444769&rtpof=true&sd=true>

3. Node Owner registers at EEN

EOSC EU Node

[DEV - https://open-science-cloud.ec.europa.eu/dashboard](https://open-science-cloud.ec.europa.eu/dashboard)

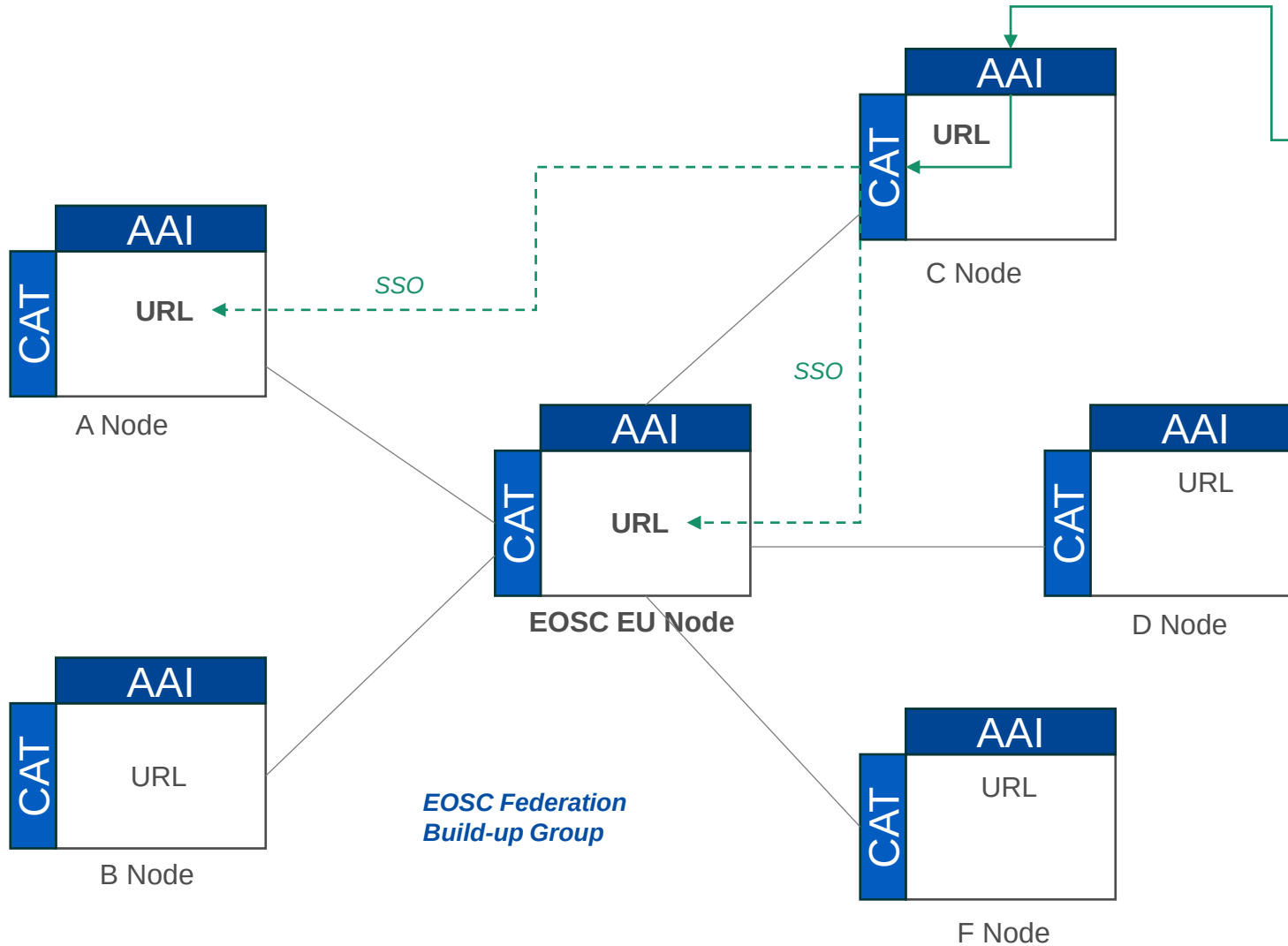
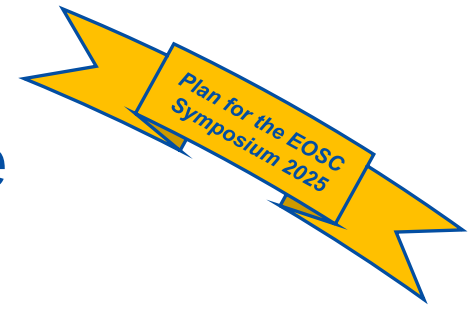
PUBLIC

EOSC WG level

EEN Test/Dev

Node Enrolment

Onboarding to EOSC AAI and EOSC Service Catalogue

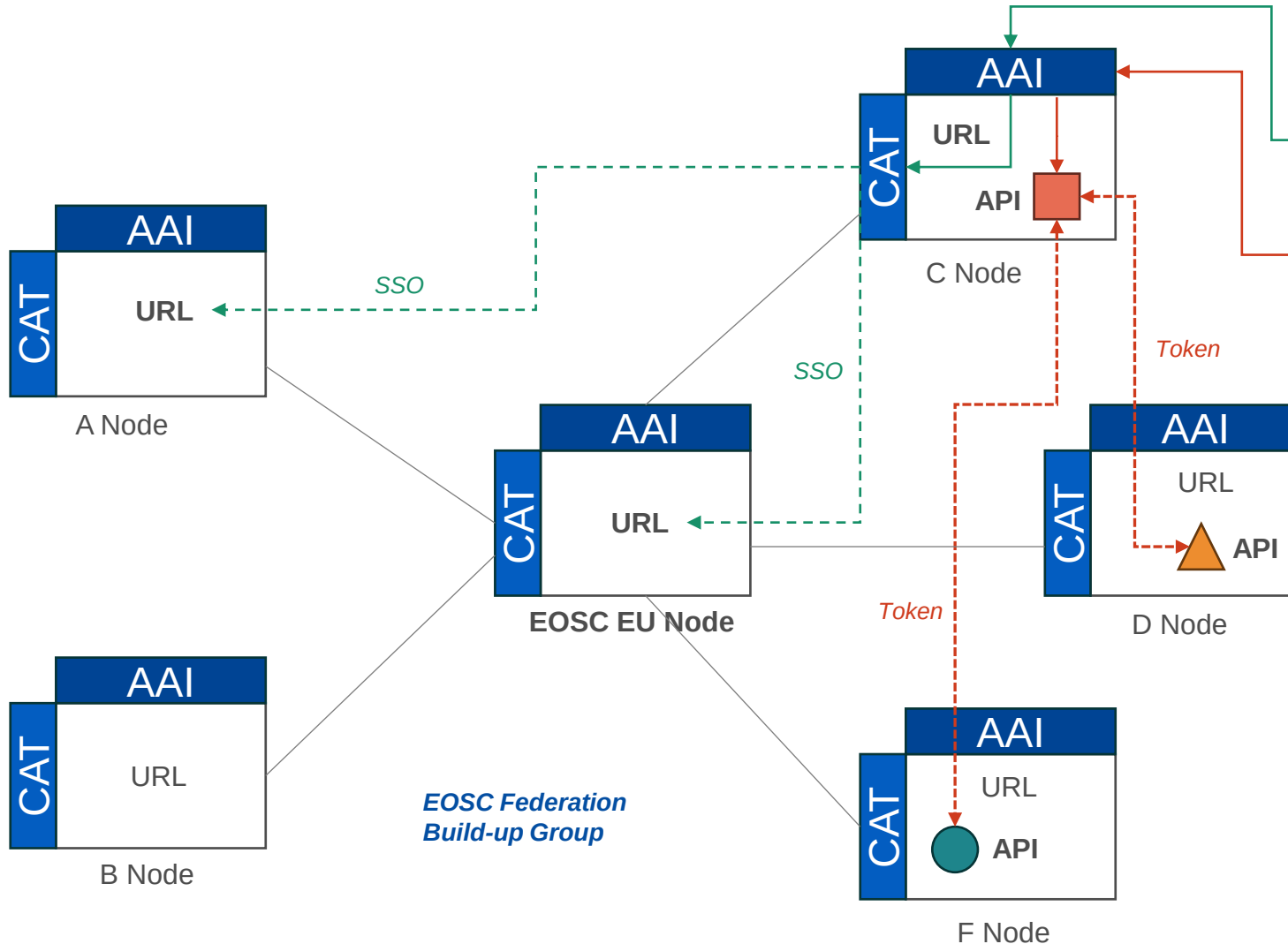
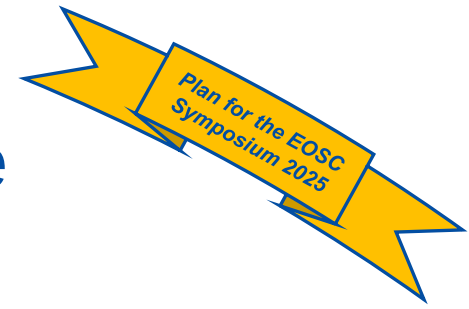


1. EOSC AAI SSO

User logs in to C Node and can visit data/services on all other nodes without re-authentication needed.

Node Enrolment

Onboarding to EOSC AAI and EOSC Service Catalogue



1. EOSC AAI SSO

User logs in to C Node and can visit data/services on all other nodes without re-authentication needed.

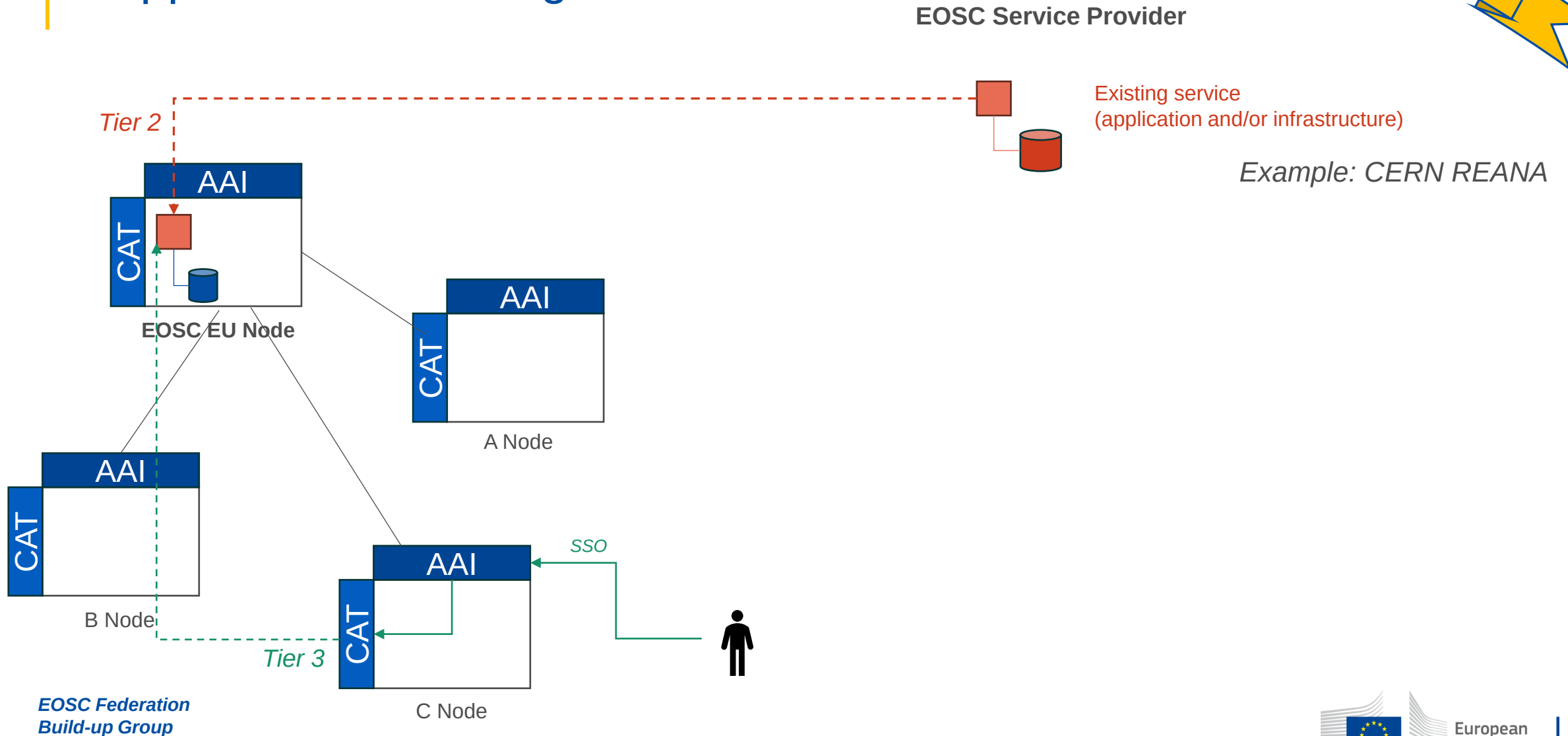
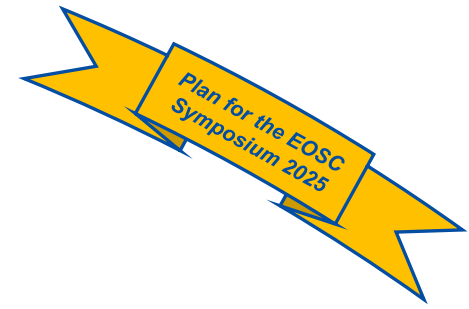
2. AAI Auth Token Exchange

User initiates application workflow in C Node that calls service in D and F Nodes by passing user Auth Token automatically

Expecting ~10 nodes being able to demonstrate SSO of which ~4 nodes could demonstrate Auth Token exchange too.

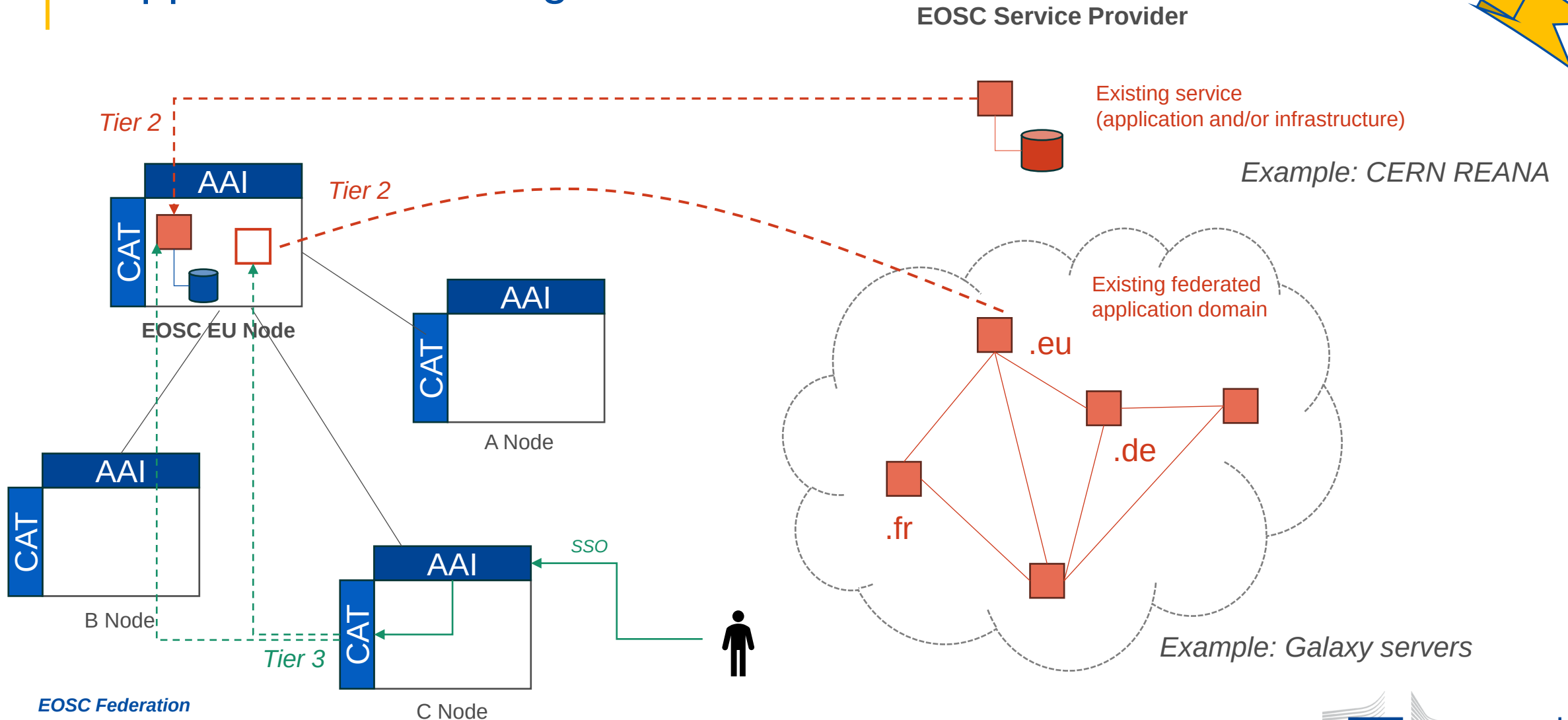
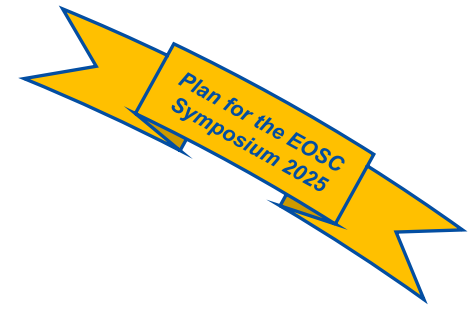
Service Onboarding EEN

Supported onboarding modalities



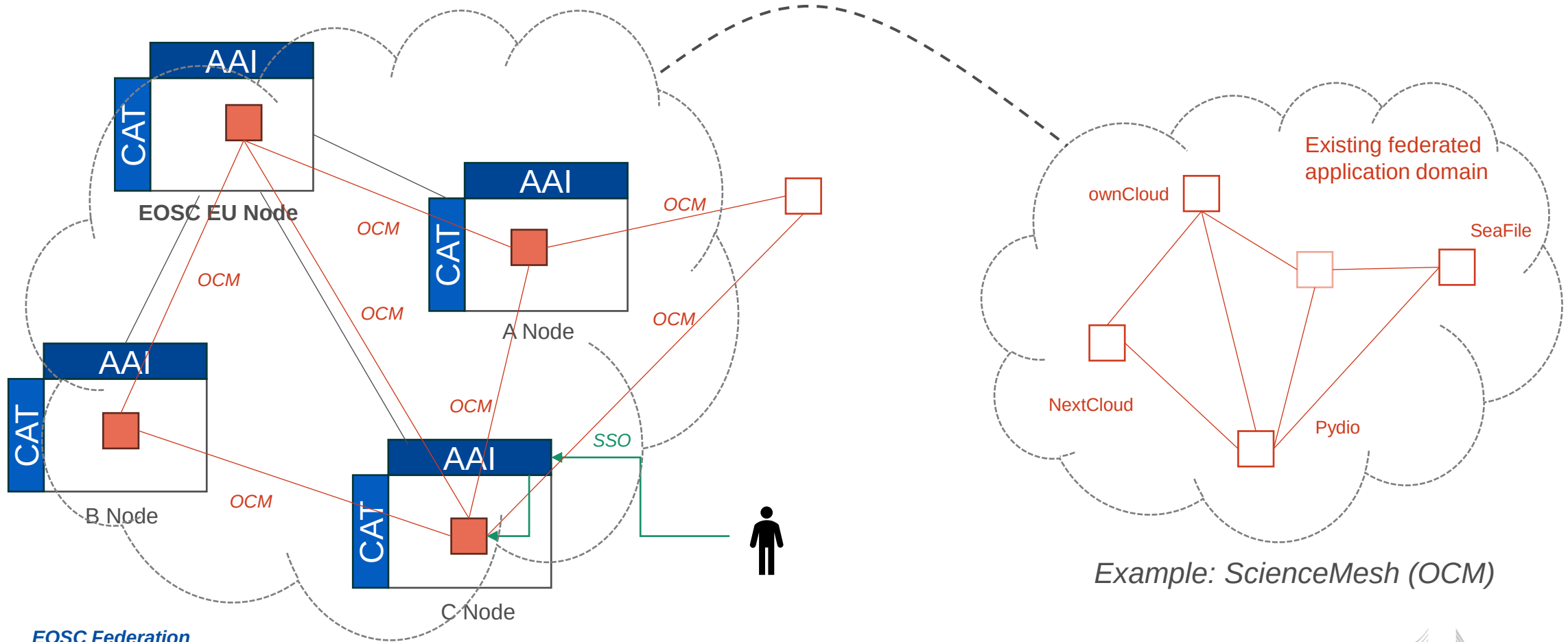
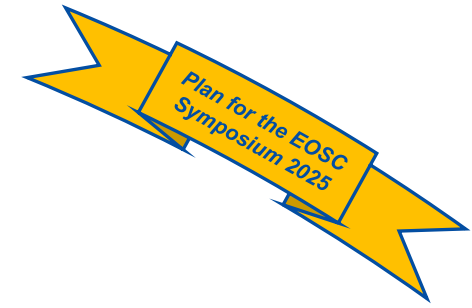
Service Onboarding EEN

Supported onboarding modalities



Service Onboarding (multiple nodes)

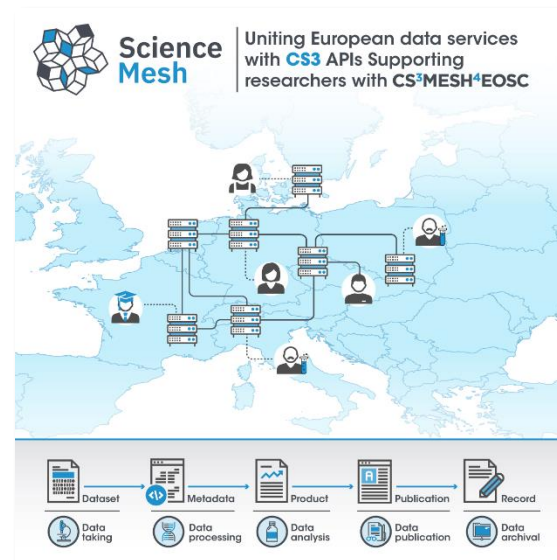
Supported onboarding modalities



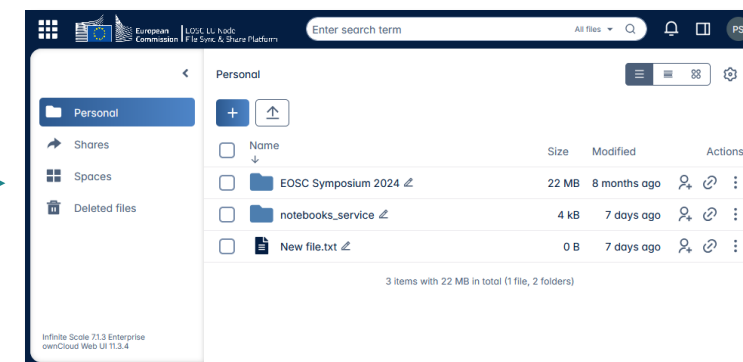
Example: ScienceMesh (OCM)

INFRAEOSC projects' impact

INFRAEOSC-02-2019: Prototyping new innovative services



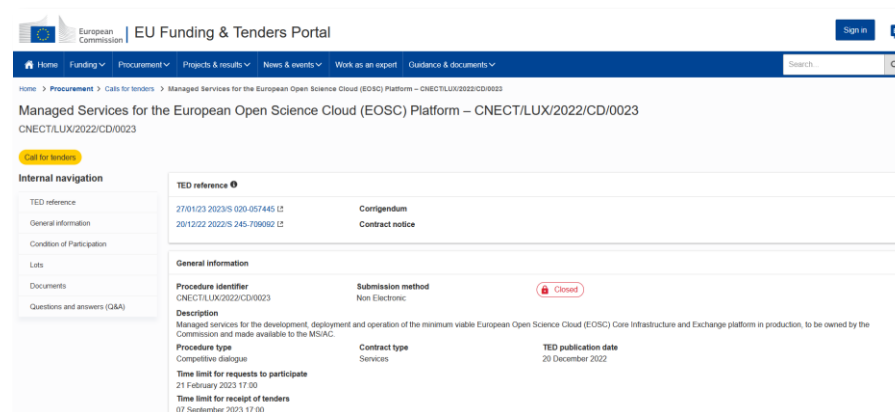
EEN File Sync & Share with OCM



INFRAEOSC-03-2020: INTEGRATION AND CONSOLIDATION OF PAN-EUROPEAN ACCESS MECHANISMS TO PUBLIC RESEARCH INFRASTRUCTURES AND COMMERCIAL SERVICES THROUGH THE EOSC PORTAL



EOSC Procurement Action

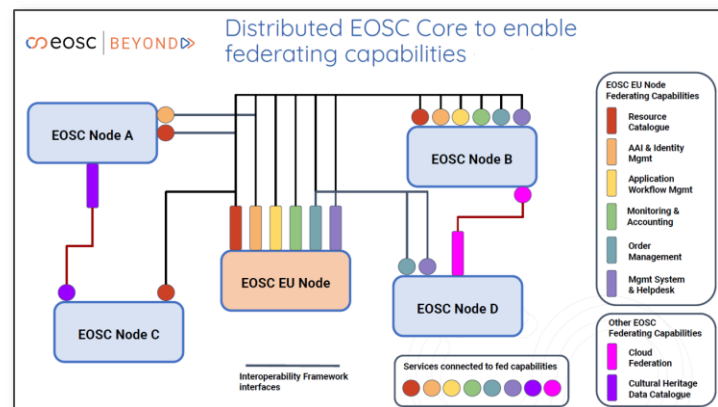


EOSC EU Node

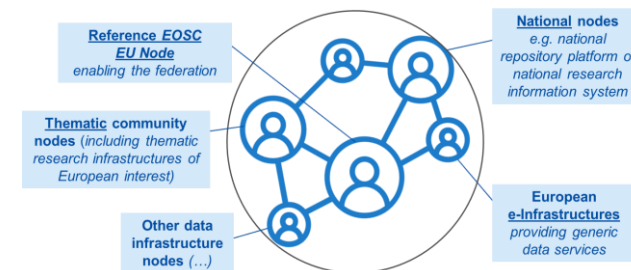


INFRAEOSC projects' impact

HORIZON-INFRA-2023-EOSC-01-04: Next generation services for operational and sustainable EOSC Core Infrastructure



EOSC Federation model

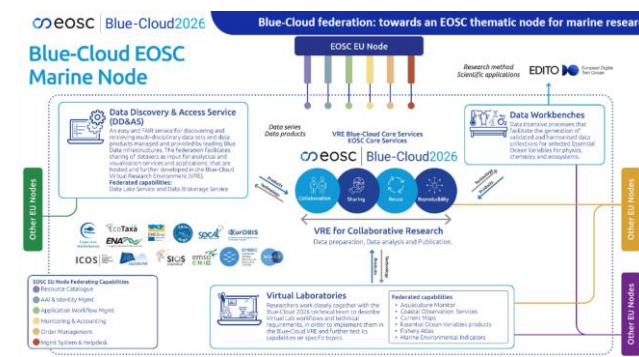


HORIZON-INFRA-2022-EOSC-01-03: FAIR and open data sharing in support of healthy oceans, seas, coastal and inland waters



Blue-Cloud2026

EOSC Node Candidate



HORIZON-INFRA-2023-EOSC-01-06: Trusted environments for sensitive data management in EOSC



European Network of Trusted Research Environments

EOSC Node Cluster of Trusted Parties



Thank You!

Peter SZEGEDI

DG CNECT C.1