

Connecting research communities through EOSC

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INSPIRING ERA - EOSC Federation implementation

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Life Sciences Connect: Diversity of Infrastructures

Euro-BioImaging ERIC

The European Research Infrastructure enabling Open Access to biological and biomedical imaging technologies and data services to a global user base, through 295 quality managed imaging facilities



ELIXIR

A distributed life science data infrastructure, bringing together 600+ services incl. databases, software and workflows, training, standards, data management and compute

Instruct-ERIC

The leading research infrastructure in structural biology Instruct-ERIC provides access to high-end structural biology services and techniques to researchers around the world



EMBL

Europe's flagship laboratory for the life sciences founded in 1974, pursuing five missions: research, services, training, technology transfer and policy development

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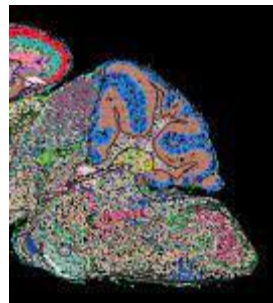
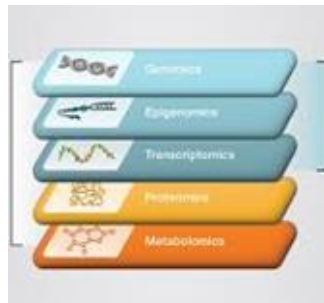
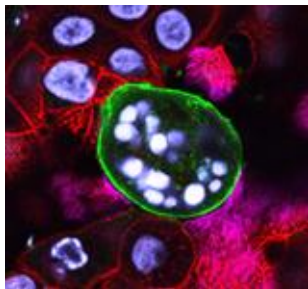
Europe's flagship laboratory for the life sciences founded in 1974, pursuing five missions: research, services, training, technology transfer and policy development

Representation of over **30 member states**

Over **500 research institutes** and service providers

Over **700 services**, from data production, to standardization, curation, analysis and sharing

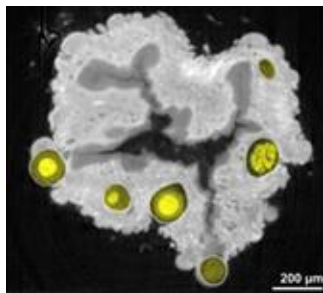
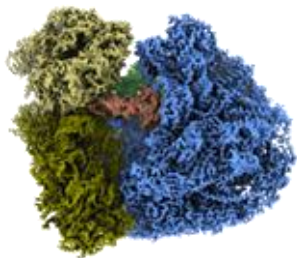
Life Sciences Connect Node - data diversity



Imaging data

Eg: Microscopy, biomedical

Biomolecular and multi-omics data



Structural biology data
Eg: X-ray, cryoEM, NMR

Correlative and multimodal data

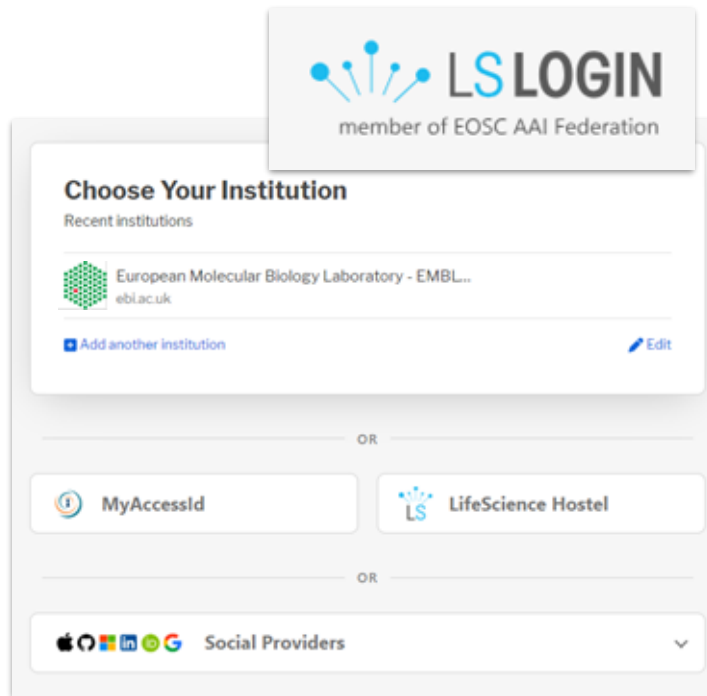
Towards production: technology challenges

Our expectations

Our partners have an existing AARC-compliant login system, LS Login

This could mean an easy pathway to EOSC access

Other technical integration would be more challenging



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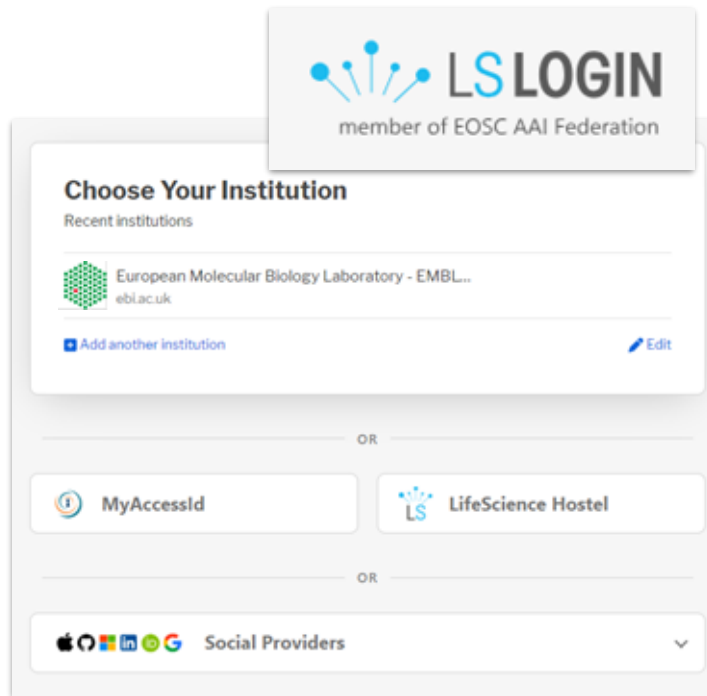
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LS Login authenticates **250+ Services** and is used by 2 EOSC thematic Nodes

We authenticate **13,000+** users in our community

EOSC-wide authentication supports wider access to our services, more integration



The reality

Production requires us to connect to use a single shared AAARC proxy

In practice, an integration pathway between MyAccessID and LS Login

This is now solved (as of last week) - authentication integration is the main gateway to EOSC participation

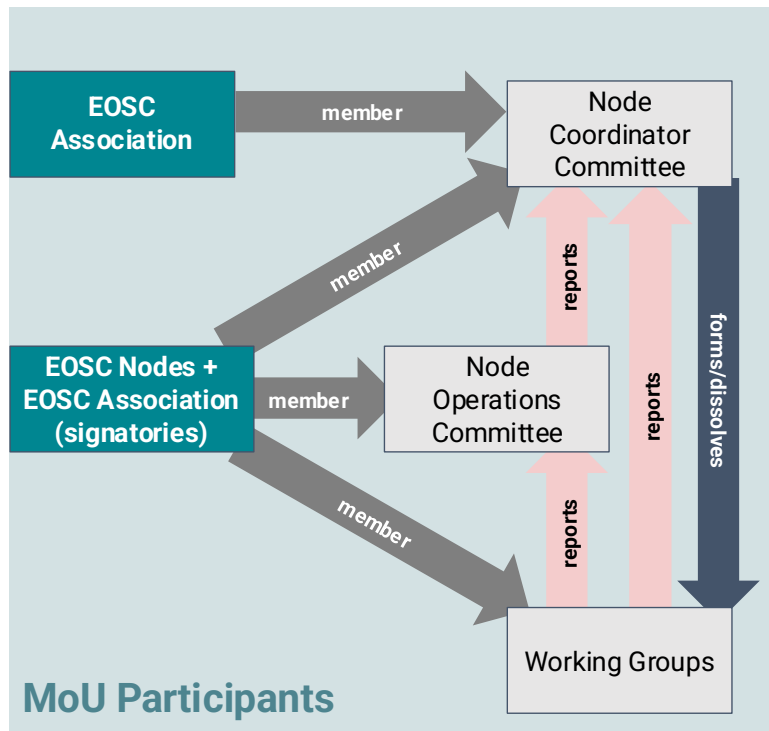
Towards production: governance challenges

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We would be invited to join the membership body for the EOSC Nodes

We would learn & adopt the technical standards that make up EOSC

EU projects have developed the framework we adopt



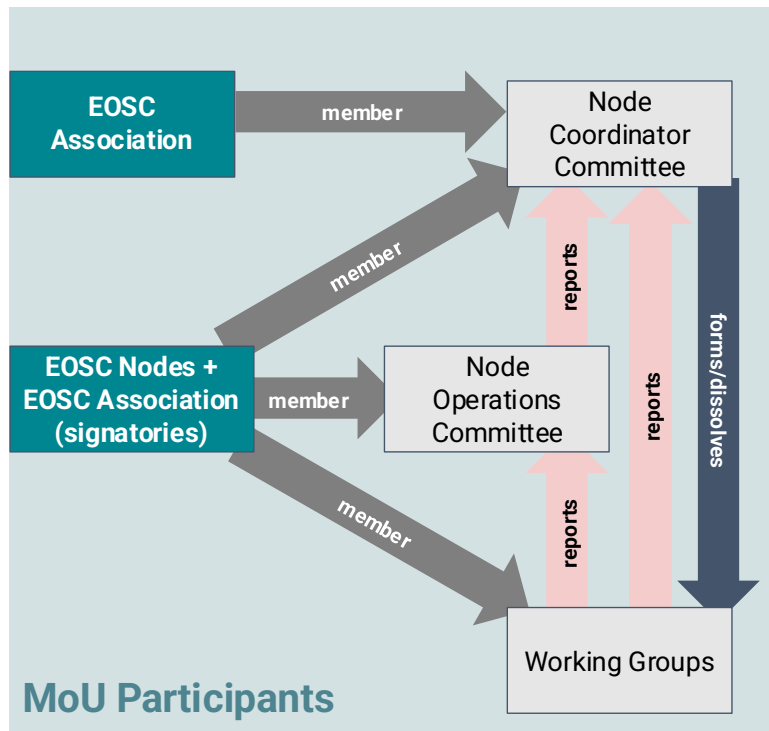
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The reality

The Federation governance is in the hands of the Nodes and the Build-up group

We need to join, lead and define the practices of the shared governance

Projects develop material, but the Federation committees and Working Groups have to evaluate and adopt a working subset

Participation in Node **Coordinators'** Committee, Node **Operations** Committee

LSC co-chairing of NOC and **Working Groups** on MoU, Legal, Architecture

Quarterly face to face meetings, **monthly** online meetings, and the **Symposium**

Life Sciences Connect: Diversity of use cases

EOSC

The ocean has vast potential
to mitigate climate change.
EOSC unlocks the research data.

EOSC.eu

Watch the EOSC Federation use case video

Biological sequestration
of carbon in the ocean

EOSC GRAVITY

EOSC

From cancer cells to galaxies, breakthroughs
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EOSC GRAVITY

LSC partners provide **100's of PB** of diverse biological data types

Virtual research environments
with **7,500+** regular users

Mature production solutions
integrating services from
multiple EOSC Nodes

<https://eosc-lifesciences-connect.eu/home>

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