EOSC EU node

Key concepts

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Authentication

- Users log-in using their **existing home organization** credentials

  - No need to create (yet) another account

  - Seamless and secure experience for all

- **EOSC AAI** Federation

  - **eduGAIN** (world-wide identity federation, 27M)

  - **EU Login + eIDAS** (EC's own authentication service and national federations; option to self-register)

  - **User attributes** (e.g., affiliation, organization) shared by their home organization

  - Single-Sign-On (**SSO**) across all EOSC EU Node services, where possible

  - Offered "**as a Service**" to other Nodes and the community at large

Service Tiers

- **Tier-1 – Native**

  - **Guaranteed** services of the **EOSC EU Node** (application, infrastructure, +)

  - Fully **integrated** into the EOSC EU Node with **automated** access policies and quota

- **Tier 2 – Onboarded (welcome!)**

  - High-quality **third-party** services **onboarded** into the EOSC EU Node

  - Technical and operational **requirements**, quality-assured

  - **Service-specific** ordering, access policies, and/or integration

- **Tier 3 - Discoverable**

  - ~~Third-party services **discoverable** by end-users in the EOSC EU Node~~

  - Other **Node services discoverable** by end users in the EOSC EU Node

effort & cost

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Credits

- How do we manage user **demand** and ensure **fair, equitable and transparent** access to services?

- **Credits** is the virtual 'currency' of the EOSC EU Node

  - Expresses the relative (and actual) cost of services but has **no real monetary value**

  - Users are already familiar with commercial offerings (pay as you go)

- **A service has its cost expressed in credits**

  - Clearly communicated to users, known in advance (how much will it cost?)

- **A user is allocated free credits (wallet)**

  - Users can spend their credits according to their needs

  - Same amount of credits to all users of the same category, replenished every 3 months

- **Credit economy evolves to support users and service providers**

Access Policies

- Authorizing users to access and spend their credits on the EOSC EU Node is an **automated** process based on their **affiliation**

- **AP Level B**

  - **eduGAIN faculty** (EU27 + Horizon Europe AC): **500** credits & access to **all services**

- **AP Level A1**

  - **eduGAIN employee** or s**taff** (EU 27 + Horizon Europe AC) or **EU Login staff**: **100** credits & access to a subset of services

- **AP Level A**

  - **View** only access to the services

- **Gatekeeped services (scarce and/or high-demand) via Helpdesk**

- **Access policy levels and characteristics can be easily revised**

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EOSC EU Node

Features and Services

Front Office

- Your **entry point** to the EOSC EU Node

- **Resource Hub**

- **EOSC EU Node Services**

  - Application Services

  - Infrastructure Services

- **Support**

  - Helpdesk

  - FAQ

  - Documentation

  - Training material

- **User Space**
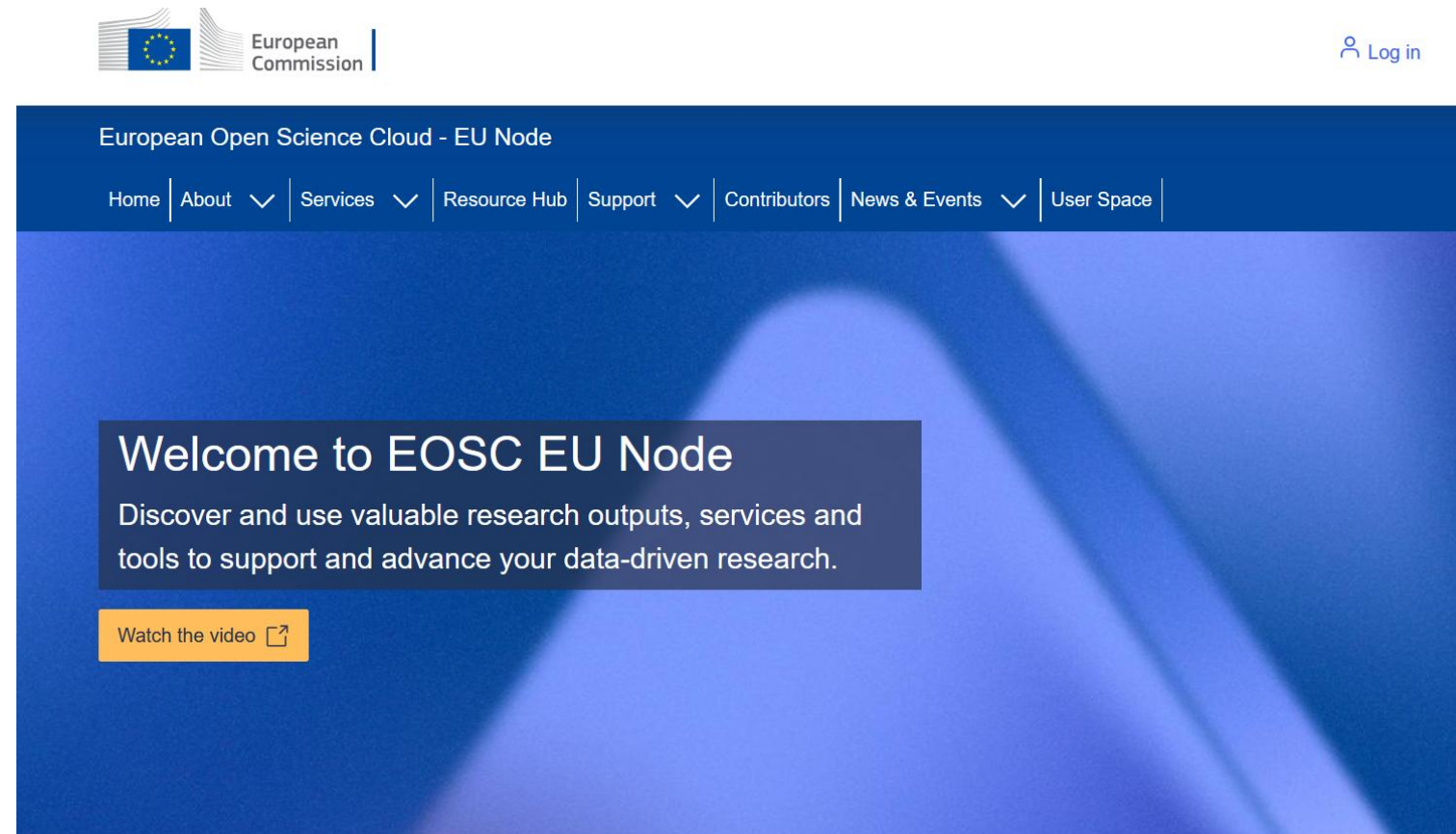
Resource Hub

- **Discover ~140M resources**

  - OpenAIRE, EC data sources

  - Harvested & indexed

- **Resources**

  - Publications

  - Data

  - Software

  - Services

  - Data Sources

  - Training

  - Tools

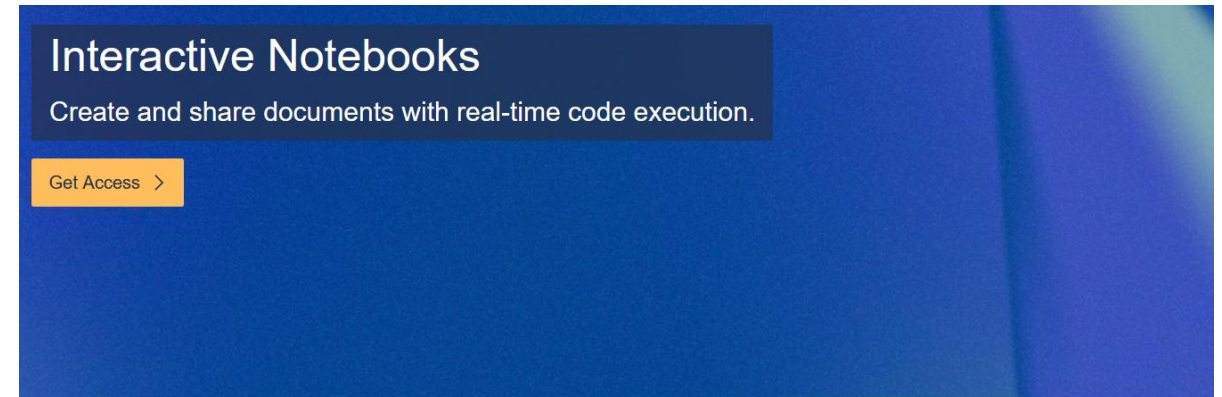# Application Services

- **File Sync and Share**
  - Your personal cloud storage
  - Upload and share files
  - Productivity suite

- **Interactive Notebooks**
  - Jupyter
  - Multiple environments
  - Multiple kernels

- **Large File Transfer**
  - Securely share files

Interactive Notebooks
Create and share documents with real-time code execution.

Get Access ❯

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Benefits

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Service Capabilities

How it works

User Resources

Service Overview

Interactive Notebooks are a browser-based tool designed for interactively analysing data. Based off the Jupyter Hub, they enable you to create and share documents that include live code, equations, visualisations, and explanatory text. With Jupyter's support of all programming languages, including R and Python, the service seamlessly integrates text, mathematical equations, computational code, and multimedia outputs. Capable of scaling to accommodate multiple users and servers, the Notebooks are key in facilitating collaboration.

These Notebooks provide a versatile and interactive platform that facilitates different aspects of the research process, fostering transparency, collaboration, and reproducibility across diverse research fields. With the Interactive Notebooks, you can collaborate more effectively, streamline your workflows, and enhance the transparency and reproducibility of your research. Empower your research endeavours with real-time collaboration and visualisation capabilities, revolutionising the way you analyse and share data.

Infrastructure Services
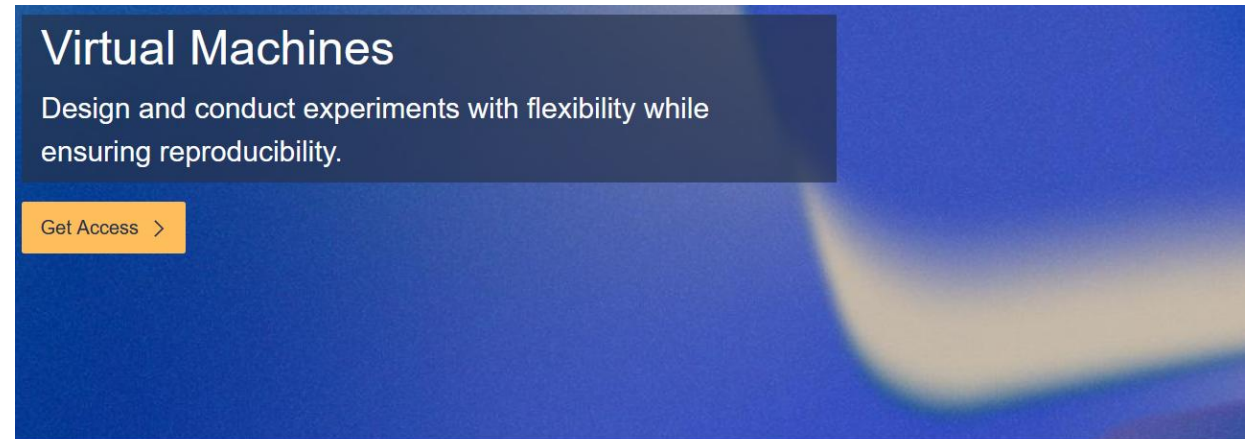
- **Virtual Machines**

  - Open Stack

  - Multiple environments

  - VM templates

  - GPU support

- **Cloud Container Platform**

  - OKD

  - Multiple environments

  - GPU support

- **Bulk Data Transfer**

  - Site-to-site large data transfer

Virtual Machines

Design and conduct experiments with flexibility while ensuring reproducibility.

Get Access >

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Service Overview

Virtual Machines (VM) offer a dynamic approach to computing and storing data in the cloud. The service is delivered through the industry standard open-source implementation OpenStack. Researchers are provided compute resources to launch their own VMs to create isolated environments for experimenting with different configurations, software setups, or algorithms. The compute resources can be used to create reproducible research environments. By packaging the entire software stack and data dependencies within a VM image, researchers can ensure that their experiments can be easily replicated by others, enhancing the credibility and transparency of their research.

Virtual Machines offer researchers a flexible, scalable, and secure computing environment for conducting experiments, analyzing data, and collaborating with colleagues in various research disciplines.

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Log in

- **Home organization credentials**

  - eduGAIN

  - EU Login

- **Automated Access Policies**

  - 0 credits; view only (AP-A)

  - 100 credits; FSS, NBs (small) (AP-A1)

  - 500 credits (AP-B)

European Open Science Cloud EU Node

Access your account and take advantage of the free resources, perform research and collaborate.

Log in

Find your home institution

Search for your home institution and use your existing credentials to login

Example: Athena Research Center   🔍 Search

OR

If you have EU Login credentials, you may click on the link below

🇪🇺 EU Login

If you do not have an EU Login, you can click HERE and create one

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User Space

- **Your personal environment**

- Application Services

- Infrastructure Services

- Wallet (Credits)

- Orders

- Groups

- Favorites

- Notifications

- Settings