European Commission

EOSC EU Node
Virtual Machines

Design and conduct experiments with flexibility while ensuring reproducibility

EOSC EU **NODE**

open-science-cloud.ec.europa.eu

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The EOSC Virtual Machines service provides on-demand, customisable cloud computing environments for researchers, projects, and institutions. It enables scalable, secure execution of complex workflows without local infrastructure, supporting FAIR and Open Science across disciplines.

KEY FEATURES

- **Provision virtual machines on demand**
- **Choose from flexible configurations to meet your needs**
- **Connect to persistent* storage with secure data access**
- **Manage VMs via an easy-to-use web interface**

WHO IS IT FOR

- **Researchers**
- **EU-Funded Research Projects**
- **Research Performing Organisations**
- **Research Infrastructures**

*persistent during experimentation time

BENEFITS

- **European-hosted for data sovereignty & trust**
- **Flexibility to run custom workflows**
- **Supports Open Science & FAIR Principles**
- **Easy onboarding & user management**
- **Available via your virtual credits**

Cloud-Based Reliability: The Virtual Machines service is supported by a robust cloud infrastructure powered by OpenStack, ensuring scalable and on-demand computing resources.

High Availability: Designed for near-continuous usage, the service offers high uptime with regular maintenance and resource credit refresh cycles that help minimise downtime.

Real-Time Access: Users can remotely manage, monitor, and scale their virtual machines in real time, ensuring seamless availability for research, development, and production workloads.

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USE CASES

Used by a pan-European research consortium for scalable, **cloud-based simulations** and **real-time data processing** in environmental studies.

Adopted by leading universities in Europe to establish **virtual labs** that enable **cross-institutional collaboration** and **hands-on cloud computing** education.

Employed by multinational soware development teams for isolated testing and continuous integration across **diverse operating systems** in a **flexible cloud environment.**

Implemented by research institutes for **high-performance computing**, empowering **advanced big data analysis** and **AI model training** using GPU-enabled virtual machines.

SERVICE PROVIDER

The Virtual Machines service is provided by the **Poznan Super-computing and Networking Center (PSNC)** and **Nordic Public cloud platform (Safespring)**, which delivers cloud computing resources powered by OpenStack.

As an integral component of the **EOSC Federation**, this service seamlessly integrates with other EOSC services, supporting interoperable, pan-European research infrastructures.

GETTING STARTED

01

Visit: the EOSC EU Node Portal open-science-cloud.ec.europa.eu

02

Authenticate: Go to the User Space and sign in using your institutional credentials, or EU or eIDAS login.

03

Enable & Launch: From your dashboard, locate the Virtual Machines service, click “Get Access,” and begin your experiments.

To use the service you must be logged in and affiliated as faculty, employee or staff with eduGAIN or eIDAS credentials

CONTACT EOSC EU NODE HELPDESK
open-science-cloud.ec.europa.eu/support/helpdesk

ACCESS DOCUMENTATION
open-science-cloud.ec.europa.eu/services/virtual-machines#documentation

TRAINING RESOURCES
openplato.eu/eosceunode