EuroHPC Joint Undertaking

Federation Platform

https://my-eurohpc.eu

Introduction to the EuroHPC Federation Platform (EFP)

5th October 2026

VSB TECHNICAL UNIVERSITY OF OSTRAVA | IT4INNOVATIONS NATIONAL SUPERCOMPUTING CENTER

CSC ICT Solutions for Brilliant Minds

GHENT UNIVERSITY

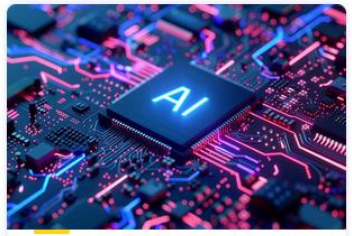
NORDUnet Nordic Gateway for Research & Education

GÉANT Networks • Services • People

TARTU ÜLIKOOL · UNIVERSITAS TARTUENSIS · 1632

EuroHPC Joint Undertaking

https://www.eurohpc-ju.europa.eu



Our AI Factories

Our Supercomputers

Our Quantum Computers

Our Research & Innovation Projects

EuroHPC Key Facts & Figures

19 + 13
AI Factories + Antennas

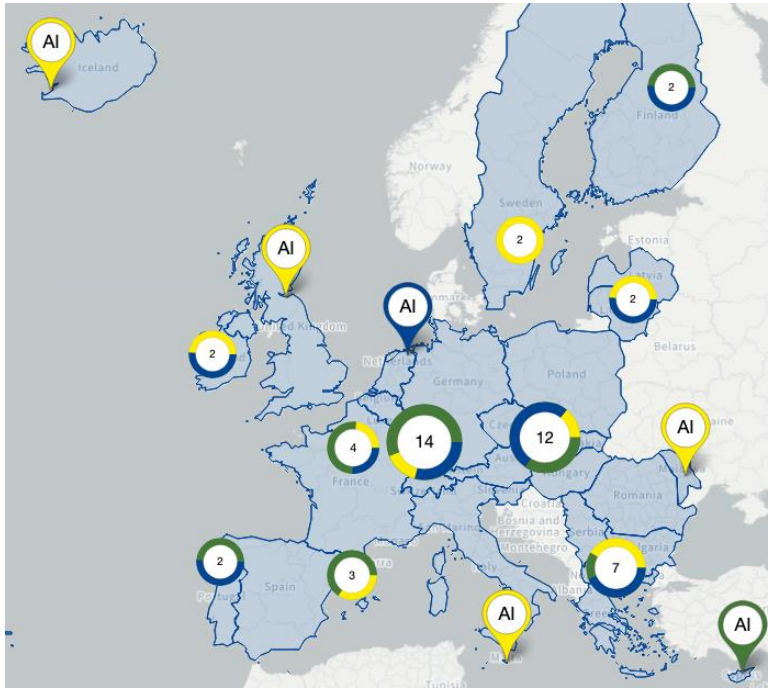
14
Supercomputers

10
Quantum Computers

62
Research & Innovation Projects

38
Participating States

8,2
Billion EUR Total Budget



Type of Systems

S (Supercomputers)

Q (Quantum Computers)

AI (AI Factories)

Status

Operational

Under construction

Pending signature of the procurement contract

The EuroHPC Federation Platform (EFP)

"A one-stop-shop for accessing and utilizing EuroHPC systems and services"

A platform and federation framework which provides **a streamlined, single point of onboarding** and via which user can **access all systems and services** available to them in the EuroHPC ecosystem.

Direct access | Interactive interfaces | Programmatic APIs | Unified software stack

EuroHPC
Joint Undertaking

Federation Platform

EFP Main Features

Federated identity and Single-Sign-On (SSO)

Users utilize the same login and identity (e.g. granted via their home institution or national identity provider) to authenticate to all services and systems. Process for onboarding Industry.

Resource allocation, management and monitoring across systems

Users can view and manage their allocations and project members across all systems using a single interface.

Interactive web-based usage

with e.g., remote desktop, command line, AI training monitoring and Jupiter notebooks. Ability to launch batch jobs and browse files on the supercomputers.

Federated software catalogue

providing a pre-installed pseudo-uniform software stack on all systems. Advanced discoverability features for available software.

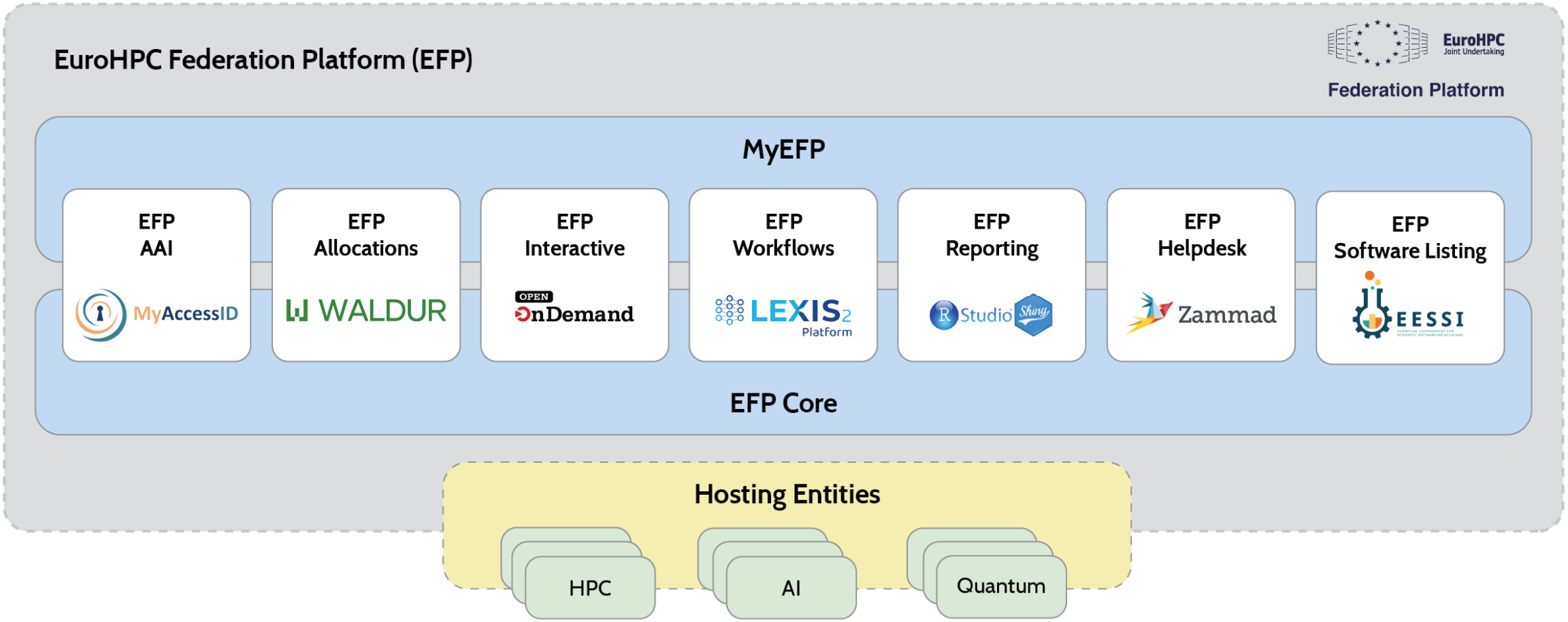
Advanced workflows and data transfer

Workflow execution and data transfers across systems, along with smart scheduling capabilities and high-level graphical interfaces for creating and managing workflows.

Direct access utilizing SSH certificates

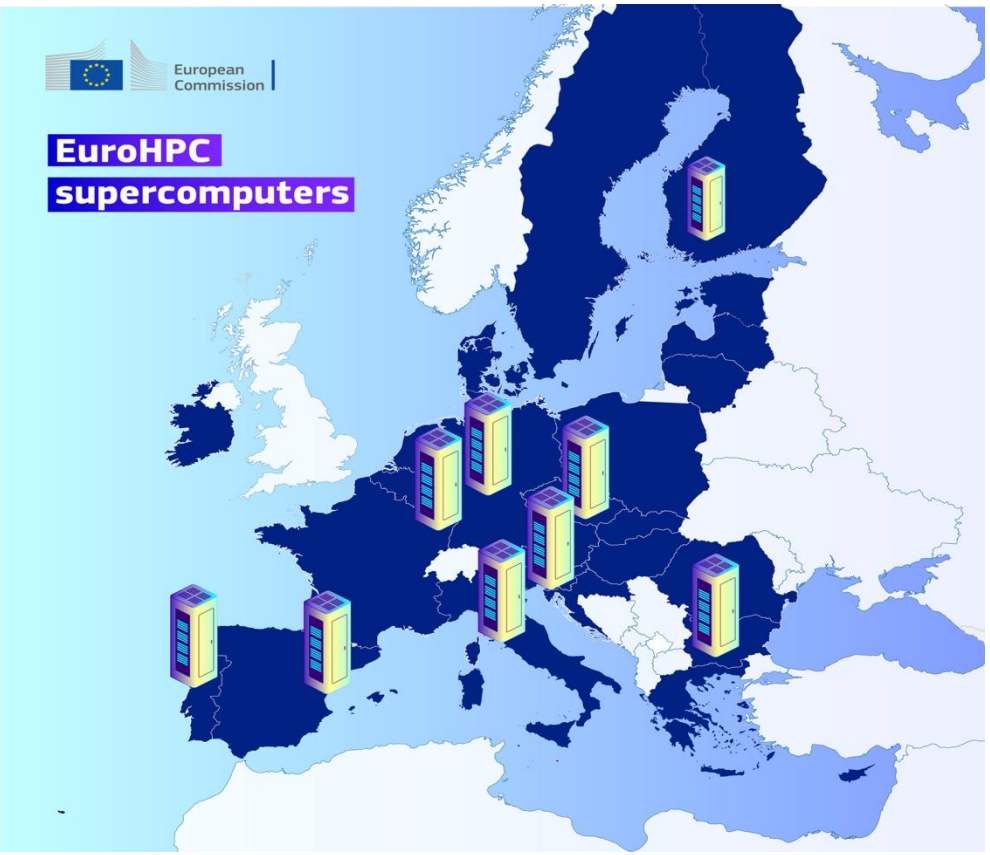
Short lived certificates which are obtained via a login flow with Multi-Factor Authentication (MFA) for increased security.

Technologies used for EFP



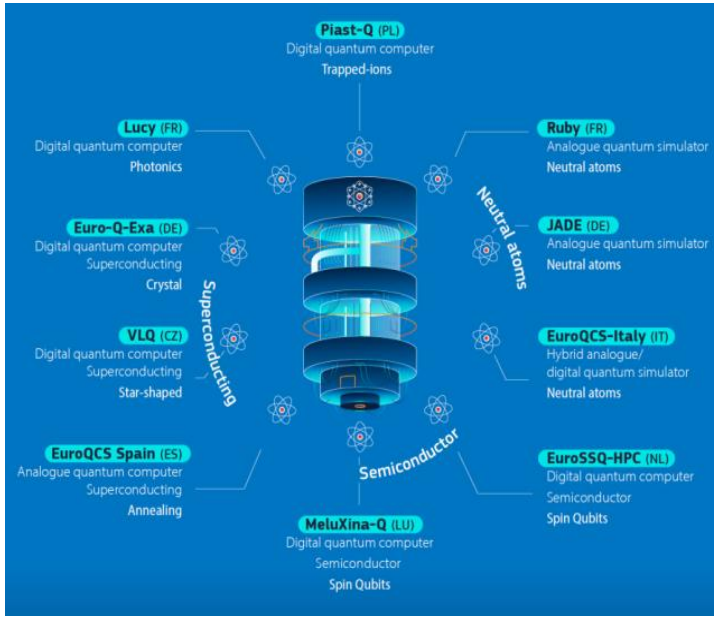
Contributions to existing open source projects are upstreamed when possible

EFP Target Systems



Alice Recoque, Arrhenius, DAEDALUS, Deucalion, Discoverer, JUPITER, Karolina, Leonardo, LUMI, MareNostrum 5, MeluXina, Vega, CASPIr, Levente, …

BSC AIF, HammerHAI, IT4LIA, LUMI AIF, Meluxina-AI, MIMER, Pharos, AI2F, AIF Austria, BRAIN++, JAIF, PIAST AIF, SLAIF, CZAI, LitAI Factory, NLAIF, Gaia AI Factory, RO AI Factory, 1HealthAI, …



Euro-Q-Exa, EuroQCS-France, EuroQCS-Italy, EuroQCS-Spain, EuroQCS-Poland, VLQ, …

Impact of EFP on User Journey

Before (without EFP)

1. Apply for a project in the EuroHPC review portal
2. Accepted projects are **manually transferred** to each EuroHPC system
3. User is invited to complete a **separate registration process** at each EuroHPC system
4. User uses **separate portal and credentials** to access and manage project at each EuroHPC System

Now (with EFP)

1. Apply for a project in the EuroHPC review portal
2. Accepted projects **automatically flow to the EFP** and to each EuroHPC system
3. User is invited to join a project and **registers through the EFP**
4. User **manages access and projects** using **just the EFP**

There are no changes to the services and capabilities offered by the diverse set of EuroHPC systems.

Onboarding and managing projects across all available systems just becomes much easier through EFP.

MyEFP: the One-Stop Shop for Accessing EuroHPC Resources

https://my-eurohpc.eu

MyEFP

System

Documentation

Overview

Overview

Projects

Direct Access

Requested SSH Credentials

Software Catalog

Workflows

Interactive

EuroHPC Joint Undertaking

Federation Platform

Support

Log out

Welcome

Full name:

Email:

Organization:

Project Events

No events

View Projects

Locations

Maintenance announcements

No current / upcoming announcements

Show completed

Timeline & current status

- **1st phase (2025 – 2026):**
  - ✅ Initial release of EuroHPC Federation Platform, available since mid April 2026
  - ✅ Core functionality
  - ✅ Integration with the currently online EuroHPC systems: partially done, work-in-progress
    - ✅ 9 systems integrated: LUMI, JUPITER, Leonardo, MareNostrum 5, Karolina, Vega, Deucalion, Discoverer, MeluXina
    - ☑️ Arrhenius partially integrated (AAI and Allocations)
  - Further improvements planned **throughout 2026**
    - Updates deployed continuously when ready
    - Integration with upcoming EuroHPC systems
    - Authorization extended to web APIs
    - Smart scheduler
    - Initial connection to other federations (EOSC)
    - Quality and usability improvements

Reporting

All time | 6 months | 12 months

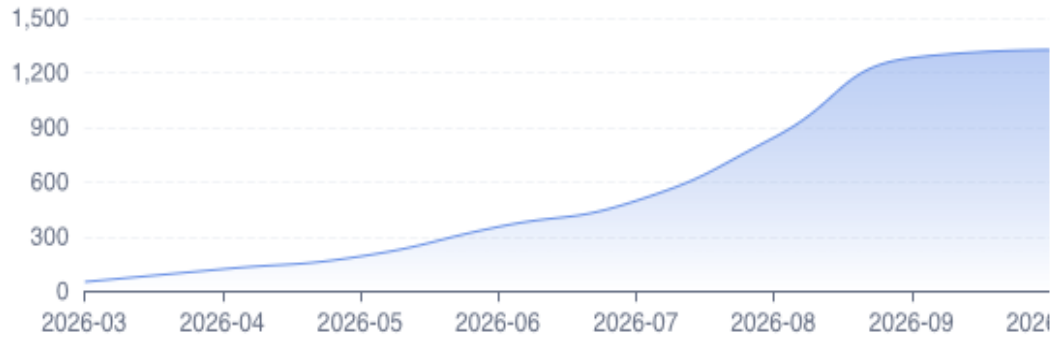
Overview | Resources | Users | Operations

Service providers	Offerings	Active users	Active projects	Active resources
12	25	1324	903	892

Users over time

Total: 1324

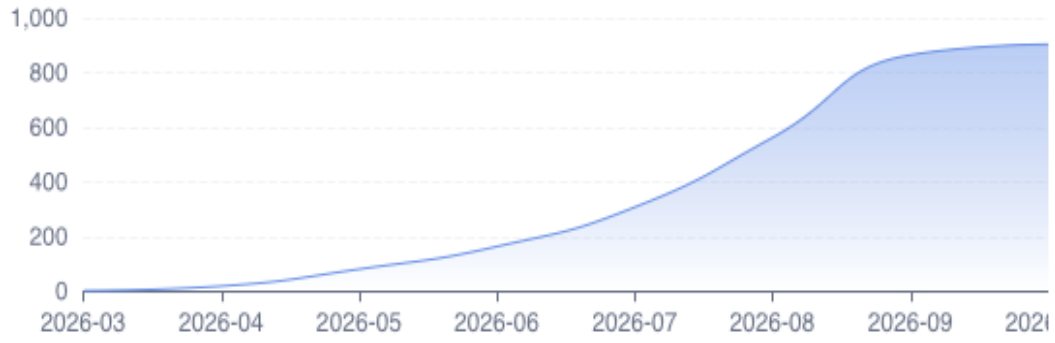
Export



Projects over time

Total: 903

Export



Timeline & current status

- **2nd phase (2027 – 2029):**
  - Integration with all EuroHPC (HPC, AI, Quantum) systems
  - Improved integration with other federations
  - Advanced features

Unique aspects of EFP

- **One-stop shop for users of EuroHPC systems**
- **Single-Sign On w/ MFA** + **strong identity vetting** when onboarding PIs and project members (MyAccessID)
- **Uniform onboarding procedure** across EuroHPC systems
- **Centralized project management** for your EuroHPC project allocations, based on Waldur
- **Uniform direct SSH access** to EuroHPC systems, using short-lived SSH certificates issued by SSH CA in EFP
- **Federated Open OnDemand instance** that can be used to access EuroHPC systems
- **Uniform software environment** based on EESSI, which also powers interactive apps
- **Cross-system workflows** supported via EFP Workflows component, based on LEXIS

EFP webinars

Initial series of 5 webinars introduction the EuroHPC Federation Platform (Feb-June 2026) - **Recordings are available: https://docs.my-eurohpc.eu/training**

New series of webinars scheduled for October 2026:

Mon 5 Oct 2026, 14:00 CEST — **Introduction to the EuroHPC Federation Platform (EFP)**
speaker: Alberto Lanzanova (CSC - IT Center for Science)

Mon 12 Oct 2026, 14:00 CEST — **Getting Started with EFP: Registration and On-Boarding**
speakers: Josh Howlett (GÉANT), Ahti Saar (University of Tartu)

Mon 19 Oct 2026, 14:00 CEST — **EFP Features Showcase: Managing projects, direct SSH, federated software catalog, interactive web interface**
speaker: Alan O'Cais (Ghent University)

Mon 25 October 2026, 14:00 CET — **EFP Workflows: use cases**
speaker: Martin Golasowski (IT4Innovations)

Scan for more information on the EFP webinars!

EFP Documentation + Helpdesk

- **Documentation on the EuroHPC Federation Platform is available at https://docs.my-eurohpc.eu**
  - Regularly updated, use the search feature to help you find the relevant information

- **Questions? Problems?**

  Contact contact EFP consortium via: helpdesk@my-eurohpc.eu

  - For any questions related to EuroHPC Federation Platform
  - In scope: problems with onboarding, using specific EFP features, questions related directly to EFP, …
  - For questions specific to using a particular EuroHPC system, contact helpdesk of corresponding Hosting Entity
  - EFP helpdesk team will coordinate with EuroHPC Hosting Entity where needed

Thank you!