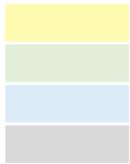


**EuroHPC**  
Joint Undertaking



# EuroHPC Federation Platform

Introductory webinar

4 February 2026

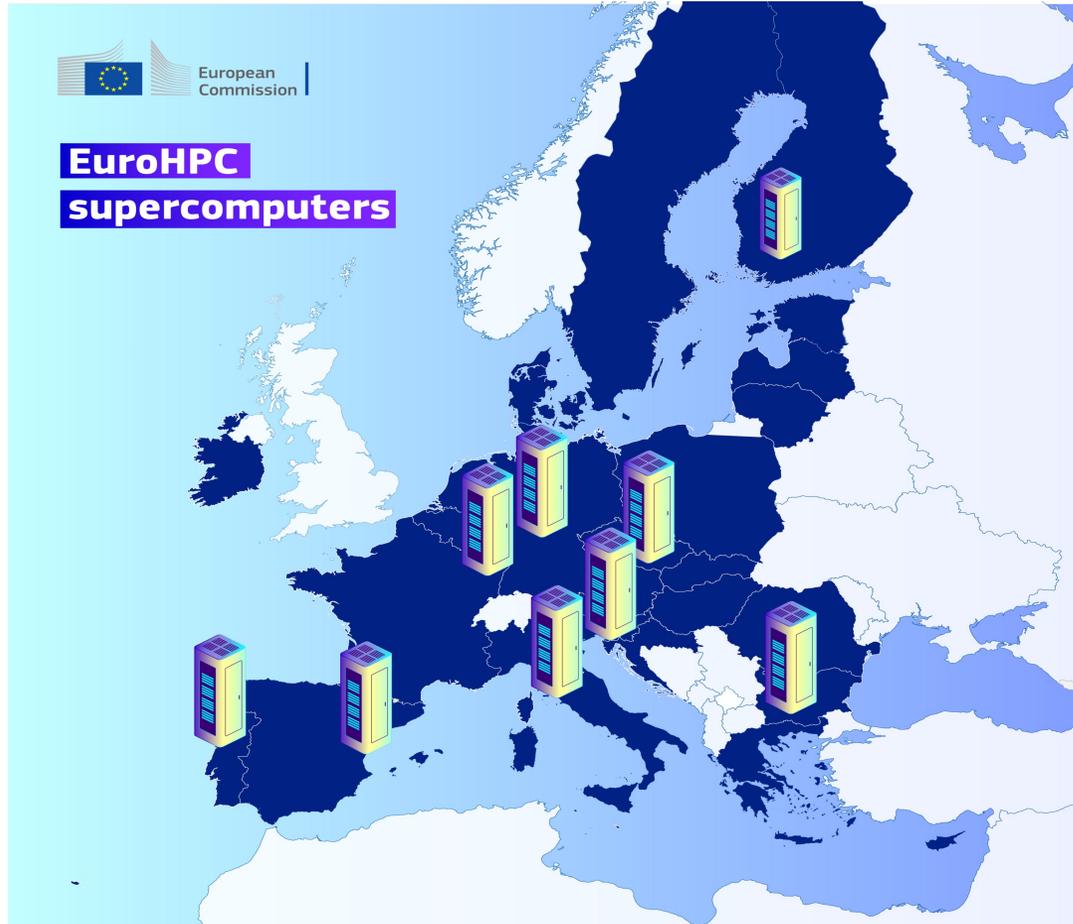
Henrik Nortamo, Balázs Szakmáry

CSC - IT Center for Science

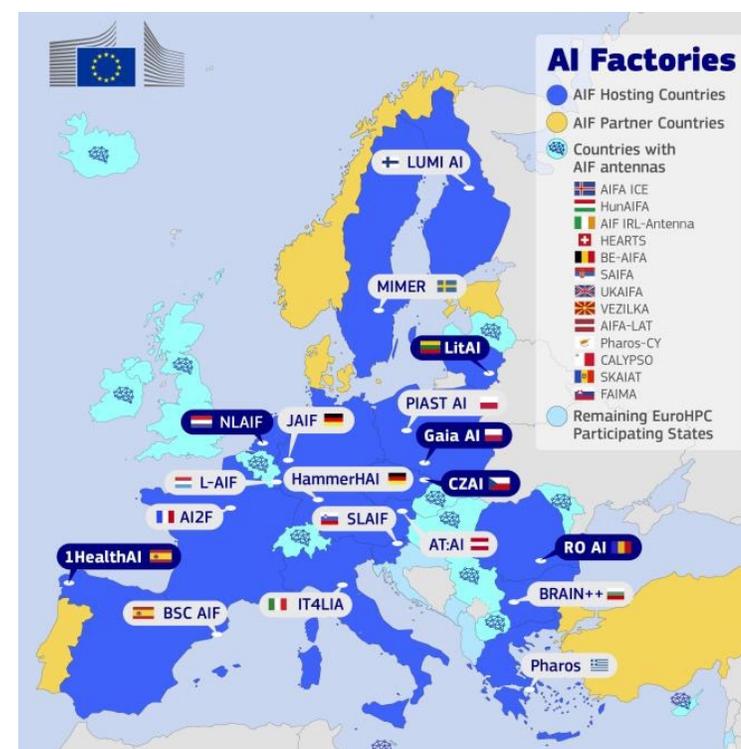
<https://my-eurohpc.eu>



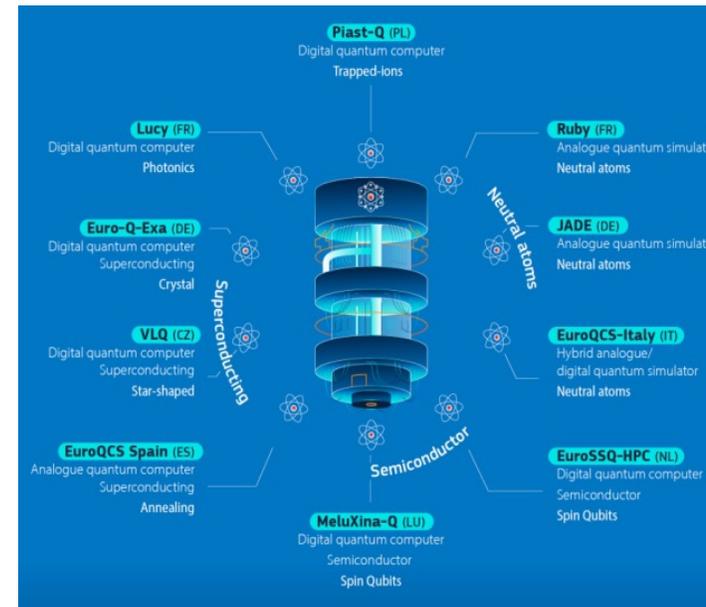
# EFP Target Systems



Alice Recoque, Arrhenius, DAEDALUS, Deucalion, Discoverer, JUPITER, Karolina, Leonardo, LUMI, MareNostrum 5, MeluXina, Vega, ...

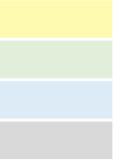


- BSC AIF, HammerHAI, IT4LIA, LUMI AIF, Meluxina-AI, MIMER, Pharos
- AI2F, AIF Austria, BRAIN++, JAIF, PIAST AIF, SLAIF
- ...



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

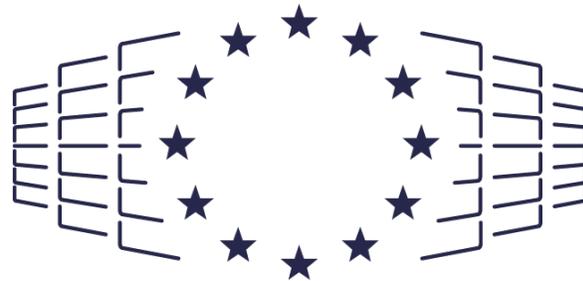
# The EuroHPC Federation Platform (EFP)



"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**

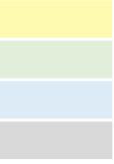


**EuroHPC**  
Joint Undertaking

## 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.



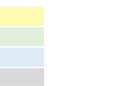
## **Advanced workflows and data transfer**

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

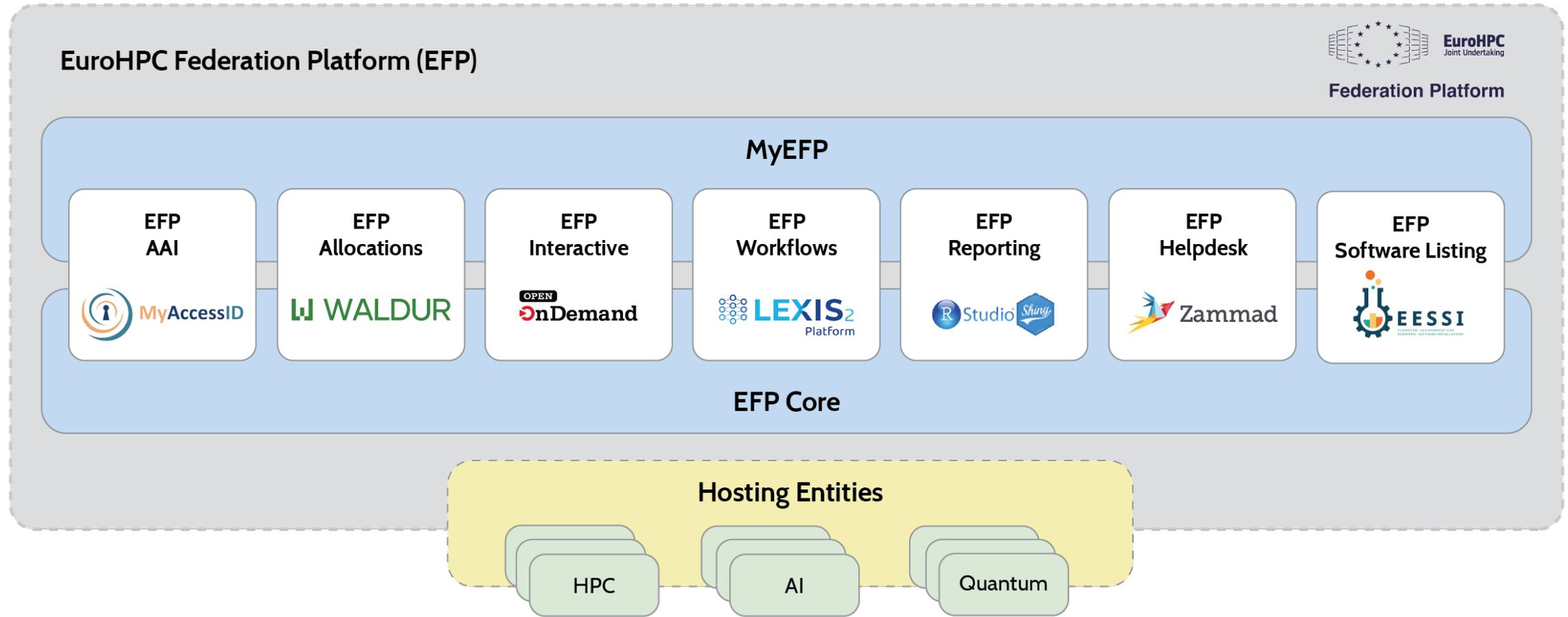
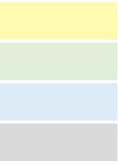


## **Direct access utilizing SSH certificates**

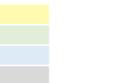
Short lived certificates which are obtained via a login flow with Multi-Factor Authentication (MFA) for increased security.



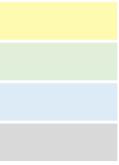
# Technologies used for EFP



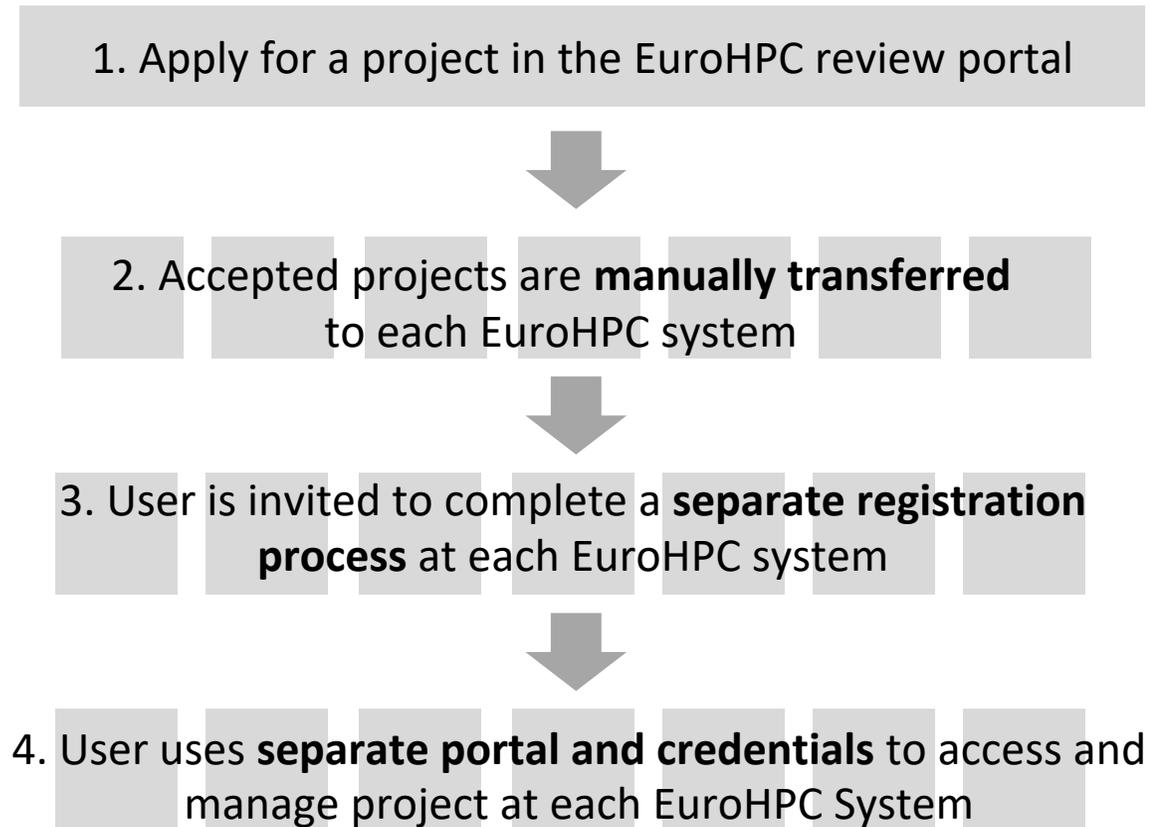
Contributions to existing open source projects are upstreamed when possible



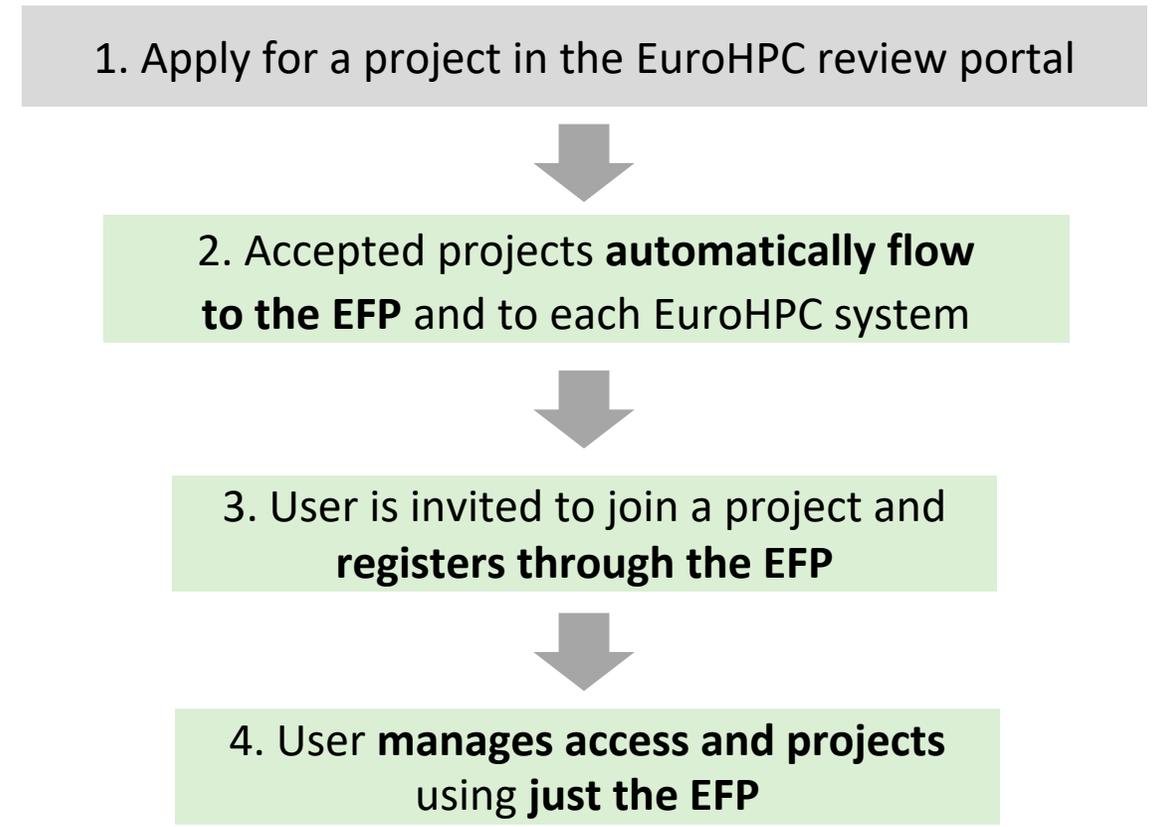
# Impact of EFP on User Journey



*Currently (without EFP)*

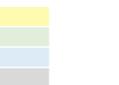


*Soon (with EFP)*



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.



Overview

Projects

Software Catalog

Workflows

## Overview

### Welcome

Welcome to MyEFP **Balazs Szakmary**

You last logged in on 29.10.2025 klo 17.43

#### Service break

MELUXINA will be down for maintenance on May 15th from 8:00 PM to 10:00 PM EEST.

### Workflows

Example 1

Example 2

Example 3

[View Workflows](#) →

### Batch Jobs

Example 1

Example 2

Example 3

[View Batch Jobs](#) →

Logout



### Locations



### Maintenance announcements

#### In progress

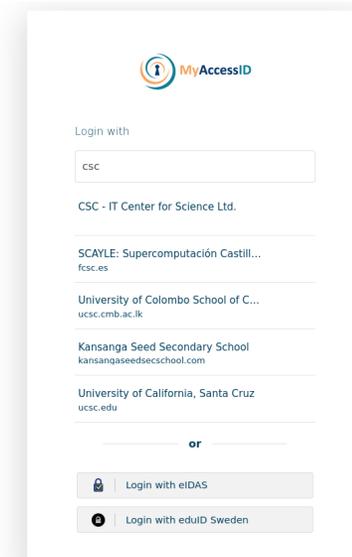
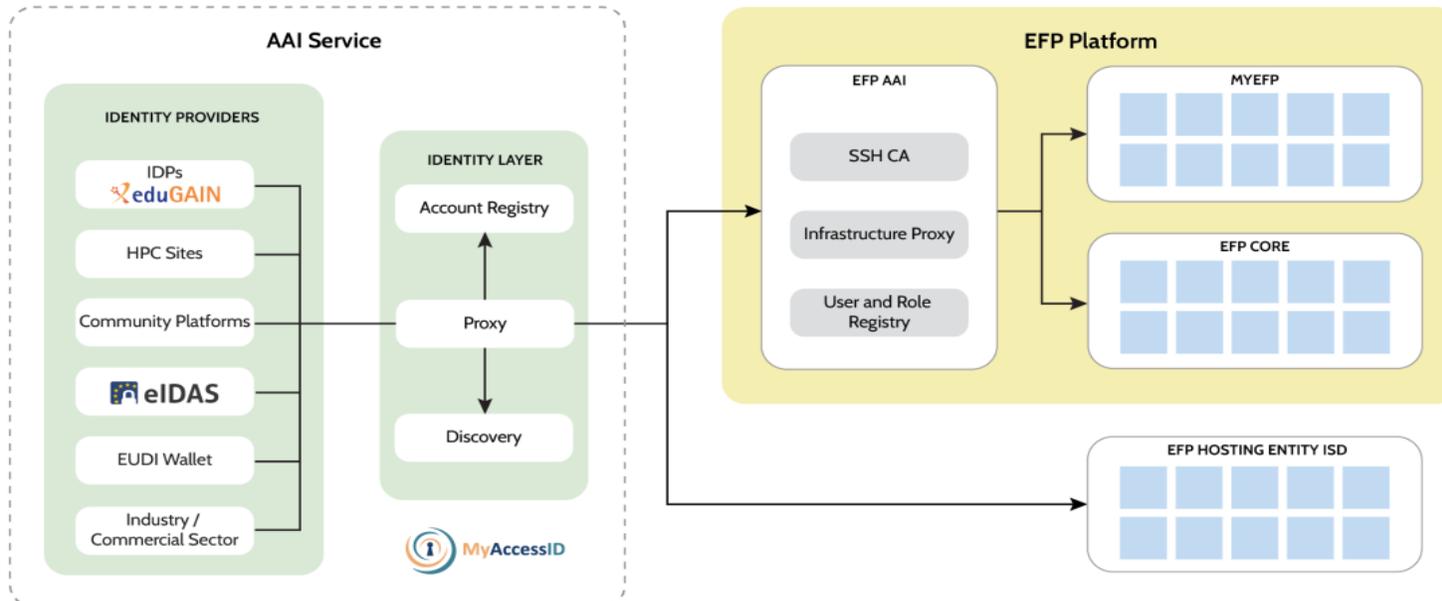
01/27/2026, 08:02 - 02/26/2026, 08:02  
**Mock announcement 1**  
[Degraded performance](#)  
Mock offering name 1  
Mock description  
[Read more](#) ↗

03/28/2026, 08:02 - 04/27/2026, 09:02  
**Mock announcement 3**  
[Degraded performance](#)  
Mock offering name 3  
Mock description  
[Read more](#) ↗

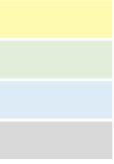
# EFP AAI:



- EFP utilizes **MyAccessID** for identity federation
  - AAI Proxy + Discovery service + Account registry
  - Identity vetting for strong level of assurance
  - Support for national eIDs and users with no institutional login (e.g. industry)
- Short-lived certificates for direct SSH access to the systems
- Identity federation can also be utilized directly independently of the platform



# EFP Allocations:



- Provides **project-centric dashboards**
- Allows project members to **see and manage their allocations**
- Serves **metadata** about the systems and partitions, like login node hostname, username on the system, ...
- Collects & serves information about **maintenance breaks** of EuroHPC systems

A screenshot of the WALDUR web interface. The top navigation bar shows the breadcrumb path: Organizations / JU Review Portal / Projects / EHPC-AIF-FL / EHPC-AIF-2025FL...financial time road statement/ HPC / EHPC-AIF-FL / EHPC-AIF-2025FL01-048 / ...someone financial time road statement. The main content area displays a project dashboard for 'EHPC-AIF-FL / EHPC-AIF-2025FL01-048 / matter policy offer seven my someone financial time road statement'. It includes a 'Get started' tab, usage statistics (0/12681 Node hours Node-hours, 0/0 Storage hours TB-hours), and a 'Getting started' section with instructions on how to access resources using SSH and submit jobs using SLURM commands. The interface also shows a sidebar with navigation options like 'Add resource', 'Organizations', 'Projects', 'Resources', 'Reporting', and 'Service catalog'. The footer indicates the version is 7.9.8 and provides links for privacy policy, terms of service, and support.



# Overview of available resources via EFP Allocations

Search... 36K

## Resources

 Import
  Add

Search...




 Export

State Creating x OK x Updating x +

Clear filters

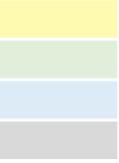
<input type="checkbox"/>	<input type="checkbox"/>	Name	Category	Offering	Organization	Project	Created at	State	Actions
<input type="checkbox"/>	<input type="checkbox"/>	EHPC-AIF-FL / EHPC-AIF-2025FL01-048 / matter policy offer seven my ...	HPC	LUMI-G	JU Review Portal	EHPC-AIF-FL / EHPC-AIF-2025FL01-048...	Jan 21, 2026, 5:00 PM	Creating	⋮
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EHPC-AIF-FL / EHPC-AIF-2025FL01-013 / way business boy relationshi...	HPC	LUMI-G	JU Review Portal	EHPC-AIF-FL / EHPC-AIF-2025FL01-013...	Jan 21, 2026, 5:00 PM	Creating	⋮
<p><b>0/10382 Node hours Node-hours</b>      <b>0/0 Storage hours TB-hours</b></p> <p>Plan details: <a href="#">Show</a></p> <p>Attributes: <a href="#">Show details</a></p>									
<input type="checkbox"/>	<input type="checkbox"/>	EHPC-AIF-PG / EHPC-AIF-2025PG01-144 / friend process chair myself ...	HPC	MareNostrum5 ACC	JU Review Portal	EHPC-AIF-PG / EHPC-AIF-2025PG01-14...	Jan 20, 2026, 1:11 PM	Creating	⋮
<input type="checkbox"/>	<input type="checkbox"/>	EHPC-AIF-PG / EHPC-AIF-2025PG01-142 / large particularly product fe...	HPC	Leonardo BOOSTER	JU Review Portal	EHPC-AIF-PG / EHPC-AIF-2025PG01-14...	Jan 20, 2026, 1:11 PM	Creating	⋮
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EHPC-AIF-PG / EHPC-AIF-2025PG01-132 / common go enjoy stuff	HPC	MareNostrum5 ACC	JU Review Portal	EHPC-AIF-PG / EHPC-AIF-2025PG01-13...	Jan 20, 2026, 1:11 PM	Creating	⋮
<p><b>0/1334 Node hours Node-hours</b></p> <p>Plan details: <a href="#">Show</a></p> <p>Attributes: <a href="#">Show details</a></p>									
<input type="checkbox"/>	<input type="checkbox"/>	EHPC-AIF-PG / EHPC-AIF-2025PG01-128 / travel individual medical on i...	HPC	Discoverer GPU	JU Review Portal	EHPC-AIF-PG / EHPC-AIF-2025PG01-12...	Jan 20, 2026, 1:11 PM	Creating	⋮
<input type="checkbox"/>	<input type="checkbox"/>	EHPC-AIF-PG / EHPC-AIF-2025PG01-123 / difficult prevent support size...	HPC	Leonardo BOOSTER	JU Review Portal	EHPC-AIF-PG / EHPC-AIF-2025PG01-12...	Jan 20, 2026, 1:11 PM	Creating	⋮
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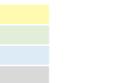
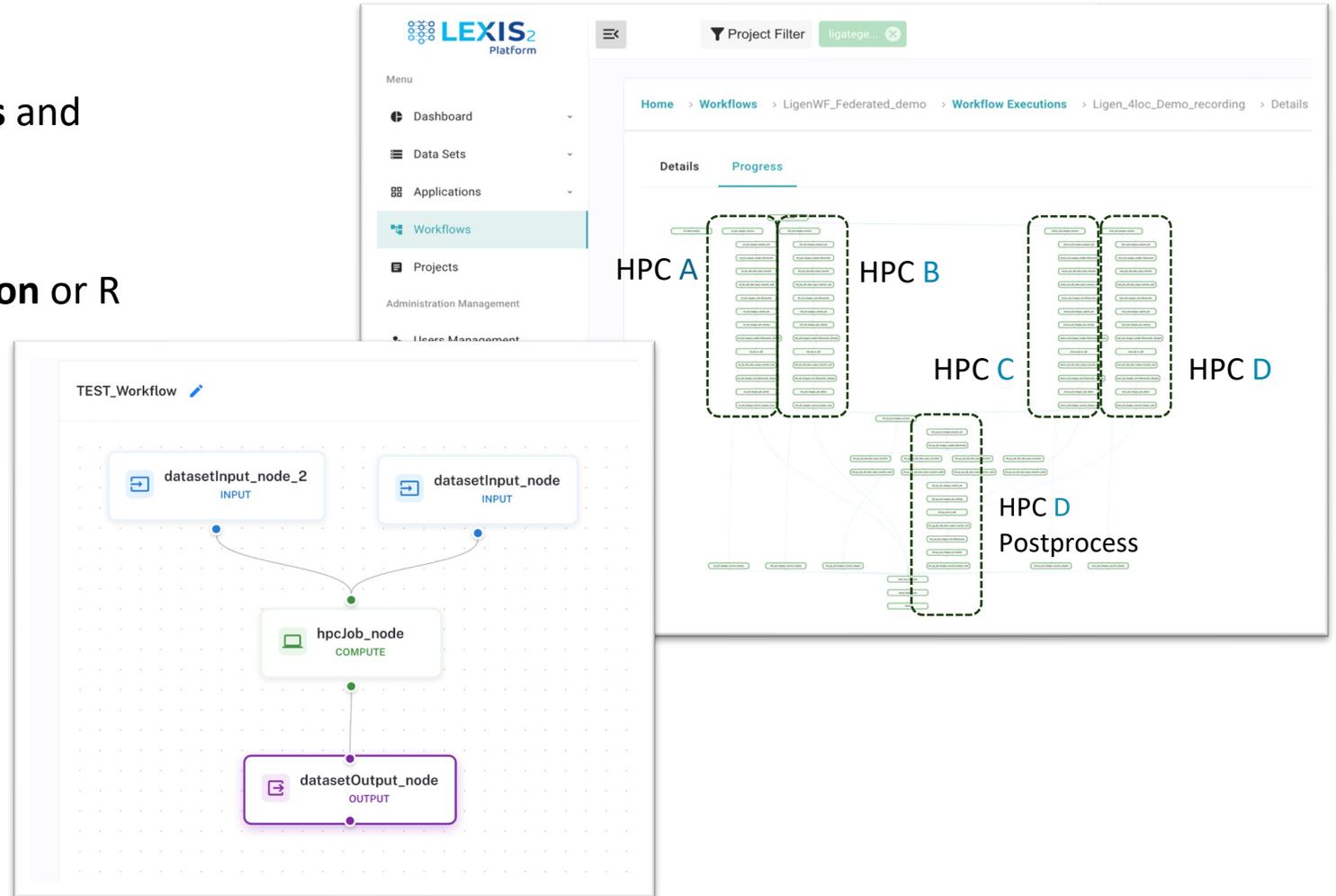
1 ... 11 **12** 13 ... 58

111-120 of 580 items 

# EFP Workflows:

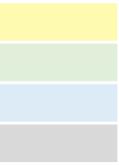
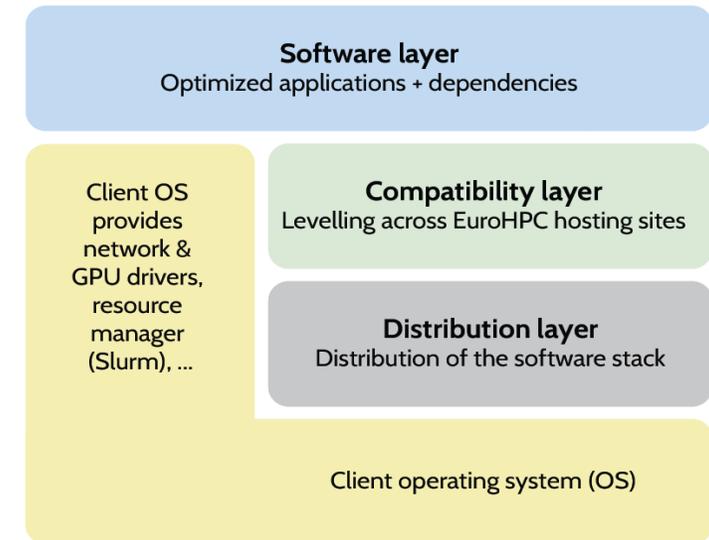


- Easy access to **visually managed workflows** and **distributed data management**
- **API** usage from various languages like **Python** or **R**
- **Smart scheduling** policies for workflows based on metrics from HPC sites
- Support for **multi-system workflows** (incl. Quantum, AI or Kubernetes)
- **Data staging** from external sources



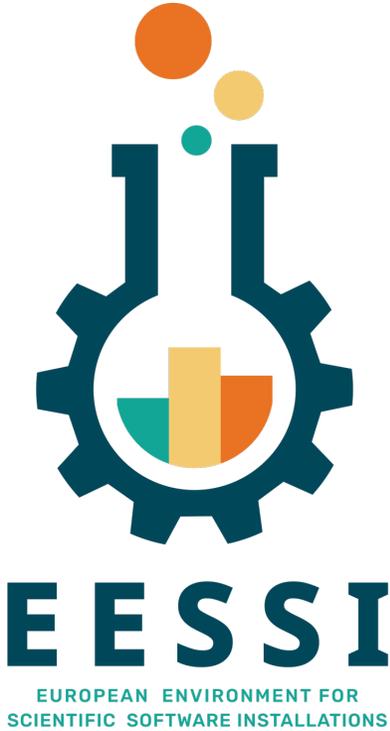
# EFP Software Catalog

- Federated Software Catalog provides a **unified software stack**
- **Same software** installations available on all systems that can be accessed from EFP
- **Integration** of the *European Environment for Scientific Software Installations* (EESSI) into EFP
- Base for apps in EFP Interactive and using EFP Workflows
- Overview of available software in MyEFP via Software Listing
- Pre-compiled software (with EasyBuild) for relevant system architectures (CPU/GPU)
- Distributed to EuroHPC systems via CernVM-FS



# EFP Software Catalog

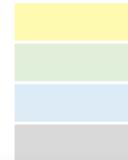
GROMACS TensorFlow  
python™  
OpenFOAM®  
Bioconductor  
OPEN SOURCE SOFTWARE FOR BIOINFORMATICS  
QUANTUM ESPRESSO  
WRF  
OpenCV PyTorch  
PETSsc  
*(and more software)*



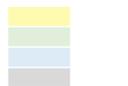
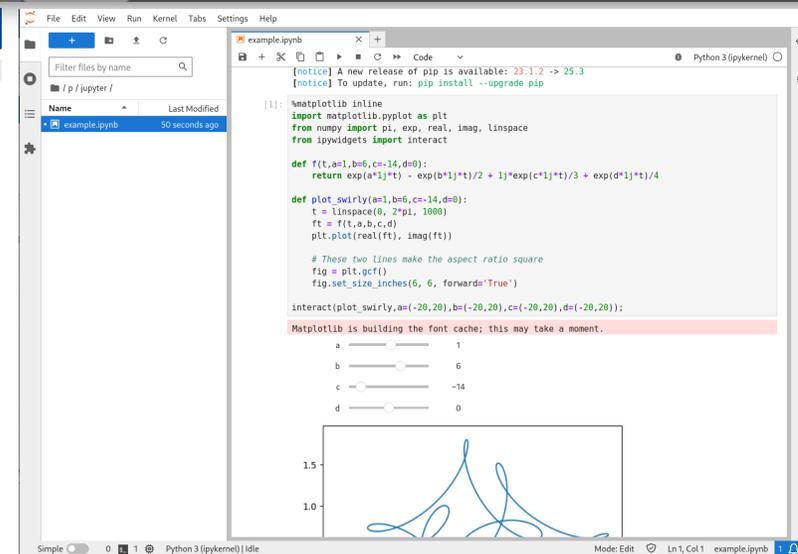
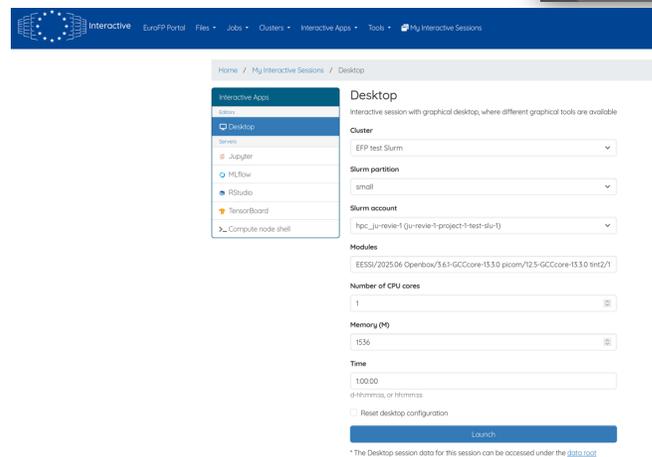
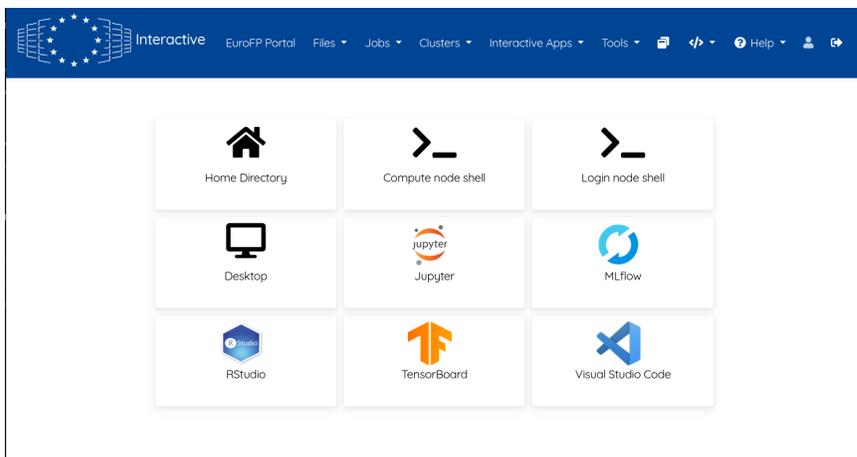
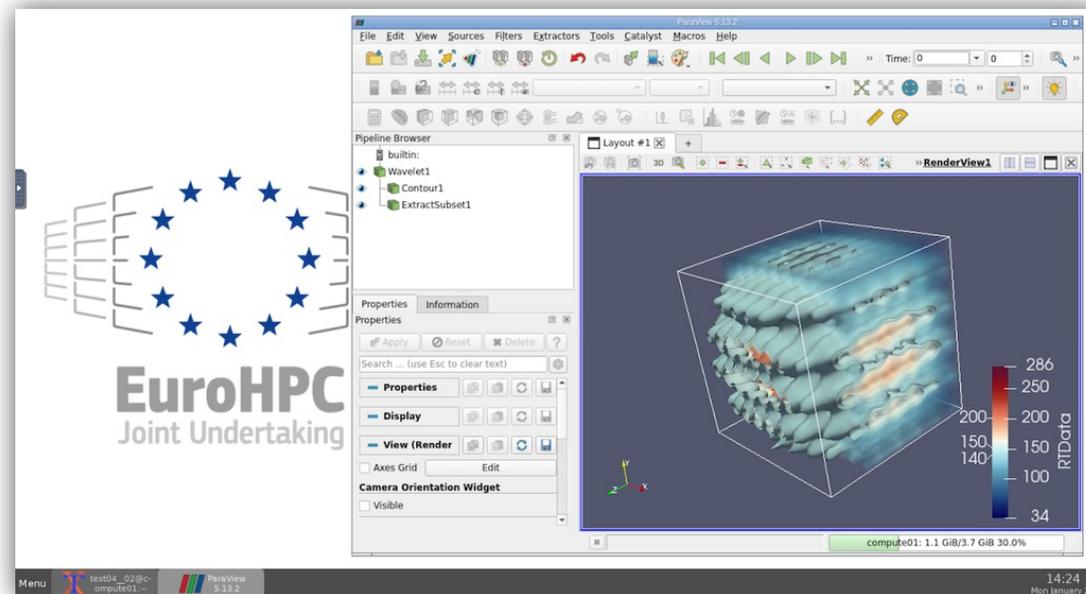
Automatically "streamed" to EuroHPC systems  
(and beyond)



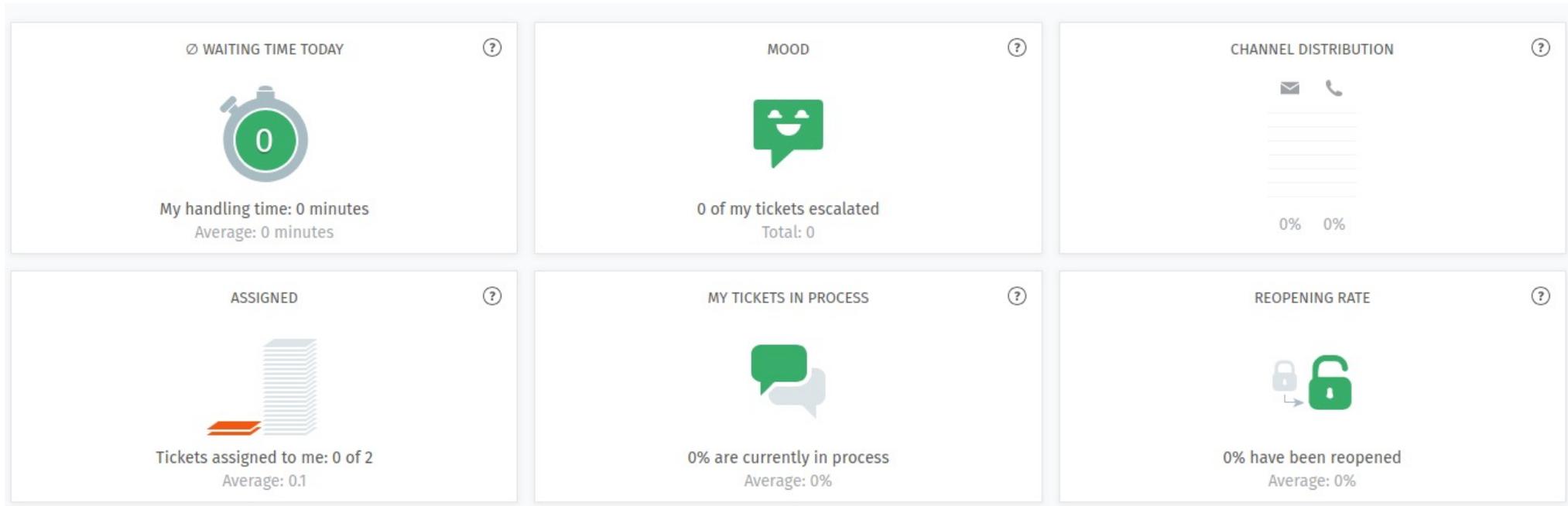
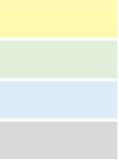
# EFP Interactive:



- Easy to use **web interface** for both new and more advanced users to interactively use the federated resources.
- **Interactive applications** like Jupyter notebooks, remote desktops and shell.
- Supports **job management** and **file management** on the federated resources.



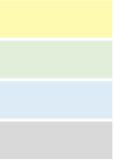
# EFP Helpdesk:



[helpdesk@my-eurohpc.eu](mailto:helpdesk@my-eurohpc.eu)



# Timeline



- **1st phase (2025 – 2026):** Initial release of EuroHPC Federation Platform
  - Coming soon, scheduled for end of March 2026
    - Core functionality
    - Integration with the currently online EuroHPC systems
  - Further improvements planned throughout 2026
    - Updates deployed continuously when ready
    - Integration with new EuroHPC systems
    - Authorization extended to web APIs
    - Smart scheduler
    - Initial connection to other federations
    - Quality and usability improvements
- **2nd phase (2027 – 2029):**
  - Integration with all EuroHPC (HPC, AI, Quantum) systems
  - Improved integration with other federations
  - Advanced features



Upcoming webinars – more info at <https://my-eurohpc.eu/training/>

**Webinar 2 of 5 — EFP Federated Software Catalogue**

Date: Wed 25 February 2026 14:00-15:00 CET | [Registration open](#)

Speaker: Kenneth Hoste (Ghent University)

**Webinar 3 of 5 — EFP Interactive**

Date: Wed 4 March 2026 15:30-16:30 CET | [Registration open](#)

Speaker: Robin Karlsson (CSC - IT Center for Science)

**Webinar 4 of 5 — EFP Authentication & Authorization Infrastructure (AAI)**

Date: Wed 29 April 2026 14:00-15:00 CET

Speaker: Josh Howlett (GÉANT)

**Webinar 5 of 5 — EFP Workflows**

Date & Speaker: *to be confirmed*



*Scan me for more information  
on upcoming EFP webinars!*

In case of questions, contact EFP consortium via: [helpdesk@my-eurohpc.eu](mailto:helpdesk@my-eurohpc.eu)



ICT Solutions for Brilliant Minds



IT4INNOVATIONS  
NATIONAL SUPERCOMPUTING  
CENTER

