



# EGI 2022 Conference

Together for Tomorrow: Innovative Computing  
for Research

## A Summary of the Conference Highlights

GDB – 12/10/2022

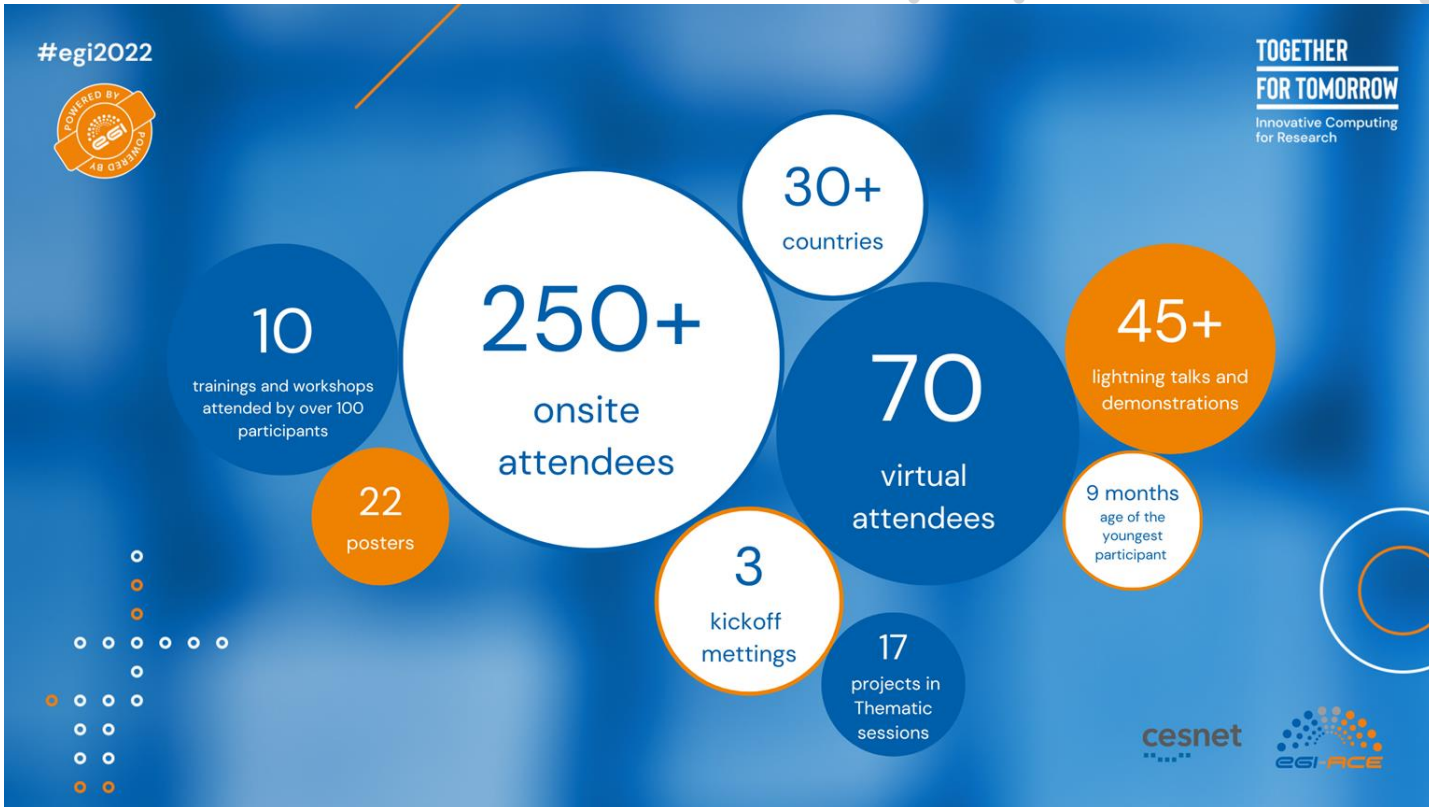


# EGI 2022 Conference



[EGI 2022 Conference overview - link](#)

# EGI 2022 Conference - Statistics





# EGI 2022 Conference Highlights

## 19 and 20/9

### □ interTwin Kick off Meeting



- The interTwin project started on September 1st coordinated by EGI Foundation, with the aim to implement a co-designed prototype of an interdisciplinary Digital Twin Engine – an open source platform based on open standards that offers the capability to integrate with application-specific Digital Twins.
- The platform will be validated by Digital Twins applications from different domains: High Energy Physics, Radio Astronomy, Astroparticle Physics, Climate Research and Environmental Monitoring.
- More info at <https://www.egi.eu/article/intertwin-kick-off-at-egi2022/>



# EGI 2022 Conference Highlights

## 20/9 (TUE)

### □ Opening Plenary Session

- Presenters:
  - Arjen van Rijn (NIKHEF)
  - Tiziana Ferrari (EGI.eu)
  - Ludek Matyska (CESNET)
- Arjen welcomed all, introduced guest speakers and gave an overview of EGI Foundation.
- Tiziana presented an overview of EGI Foundation, latest status and achievements, such as new projects (now, there are 26 active projects) and two new members to the EGI Council (ACONET – Austria and Vilniaus Univ. – Lithuania).
- Ludek presented to e-INFRA CZ and the plans for CZ National plans for EGI and EOSC.



# EGI 2022 Conference Highlights

## 20/9 (TUE)

### ☐ Authentication and Authorisation in federated environments

- The AAI framework and identity management at EGI were explained.
- Description of EGI Check-in and the systems to manage user attributes, COmanage and Perun.
- Brief presentation of three success stories where EGI AAI has been successfully implemented to support a research community.

### ☐ EGI DIH presentation

- Launching of the EGI DIH(Digital Integration Hub), with an introduction about the concept of DIHs and the description of how to join as providers for the EGI community,
- Participation of IISAS and CESGA as first partners that joined the EGI DIH, explaining their experiences working with companies and their expectations on joining the DIH.



# EGI 2022 Conference Highlights

## 21/9 (TUE)

### □ **Plenary Session: Setting the future of digital infrastructures for data-intensive computing**

- Presenters:
  - Sergio Andreozzi (EGI)
  - Jana Klanova (Masaryk University)
  - Christian Cuciniello (EC)
- Sergio presented an overview of EGI Federation service portfolios and service strategy plans for 2022 - 2024.
- Jana showed the EIRENE Research Infrastructure: Research for a Healthy Future.
- Christian introduced the European Commission (EC) commitment for Open Science.



# EGI 2022 Conference Highlights

## 21/9 (WED)



### ❑ **CSIRT F2F meetings**

- There were meetings focusing on future activities, collaborations and contributions to projects. David Crooks gave a talk on Collaborative Operational Security, David Kelsey on Building trust for research and collaboration, and Linda Cornwell presented recent activities and future development of EGI Software Vulnerability Group.

### ❑ **Green Computing in EGI-ACE**

- Exploratory discussions with (external) partners on an *Energy Efficiency and Sustainability at Data Centres* framework.
- Two surveys launched on Green Computing at participating sites, also on Green software.

### ❑ **Combining Copernicus data and EGI services for Earth Observation at scale (C-SCALE)**

- Presentation of the main results of the project so far: FedEarthData, a service for processing Earth Observation data using cloud, HPC and HTC in a distributed infrastructure powered.





# EGI 2022 Conference Highlights

## 21/9 (WED)

### □ HPC in EGI-ACE

- Presentation of the HPC integration work at EGI-ACE and a presentation of the HPC integration handbook delivered by the project.
- Four providers successfully accessed by pilot use cases using ssh-oidc technology.
- Experimentation with HPC as a Service and access to HPC via gateways like Jupyterhub.
- Presentation of other HPC in EOSC initiatives:
  - Fenix and ESCAPE work for data transfer between ESCAPE data lake and Fenix Data Archive using FTS and token-based authentication.
  - C-SCALE approach to provide federated access to HPC system using SRAM, an EOSC AAI-compliant system which provides mechanisms for user provisioning and de-provisioning with LDAP.
  - Effort in the Netherlands to facilitate the federation of HPC and other computing resources nationally. Collaboration with commercial clouds to scale when needed.



# EGI 2022 Conference Highlights

## 21/9 (WED)

### ❑ **EOSC Synergy session**

- Presentation of the main Key Exploitable Results of the project:
  - Handbook on EOSC infrastructure integration,
  - Service Quality Assurance as a Service,
  - Thematic Service integration,
  - Training platform and Hackathon manager.

### ❑ **EUHubs4Data session**

- Main achievements of the project so far, launch of the third open call for experiments and some mentions to the sustainability of the DIH Federation.
- Federated Data Catalogue technical details: implementation, standards, issues and challenges.
- Success stories from a DIH (PSNC) and an SME (Binare Oy) working on Open Calls experiments.
- Impact of the Data Governance Act to the project and future DIH federation.



# EGI 2022 Conference Highlights

## 22/9 (THU)

- **Plenary: International collaboration for excellence in science: opportunities and challenges**
  - The session brought together representatives from institutions collaborating with EGI at the international level, to explore existing challenges and benefits for international collaboration and the way forward.
  - A presentation about the ongoing EGI activities will provide the framework for the discussion.
  - Speakers:
    - Giuseppe La Rocca (EGI)
    - Eric Yen (ASGC Taiwan) (ROC Pacific Asia)
    - Jianhui Li (CNIC)



# EGI 2022 Conference Highlights

## 22/9 (THU)

### □ **Plenary Session: Pathways for improved coordination and cooperation among e-infrastructures**

- A panel of experts from scientific communities and e-Infrastructures lead the discussions for coordination and cooperation among e-infrastructures.
- The audience had also the opportunity to suggest concrete actions.
- Chair:
  - Arjen van Rijn (NIKHEF)
- Panelists:
  - Chiara Ferrari, Director of SKA-France and European SKA Forum Chair.
  - Tiziana Ferrari, Director, EGI Foundation.
  - Maria Girone, CTO, CERN OpenLAB.
  - Natalia Manola, CEO, OpenAIRE MAKE.
  - Antti Pursula, Head of Secretariat, EUDAT CDI.
  - Paul Rouse, Chief Community Relations Officer, GÉANT.
  - Matthias Schramm, Big Earth Observation Data for Environment, Vienna University of Technology.
  - Josephine Wood, Senior Programme Manager, EuroHPC JU



# EGI 2022 Conference Highlights

## 23/9 (FRI)

### □ iImagine Kick-off meeting



- iImagine started on Sept 1<sup>st</sup>, coordinated by the EGI Foundation, with the objective to provide a portfolio of “free at the point of use” image datasets, high-performance image analysis tools empowered with Artificial Intelligence (AI), and Best Practice documents for scientific image analysis.
- iImagine will collaborate with AI initiatives in Europe, e.g. AI4EU
- More at <https://imagine-ai.eu/>



# EGI 2022 Conference Highlights

## 23/9 (FRI)



### ☐ CSIRT F2F meetings

- A workshop on Security Architecture and Risk Management, chaired by Sven Gabriel (NIKHEF), also presented by the CSIRT team. The focus was on Operational Security, Security Architecture and SOC. The many security-related side discussions have been covering the EGI Service Security Challenge as well as looking into putting in place a Security Operations Centre for cloud activities.

### ☐ Training: Data Management with Rucio and FTS

- The training has been organised in 2 blocks:
  - The first part showed how FTS works and the way to submit and monitoring transfers using the EGI FTS instance running at UKRI-STFC.
  - The second part focused on showcasing the multi-VO instance of Rucio running at UKRI-STFC and available for EGI communities, the various ways to interact with the service, both as user and as admins, and the future plans.
- Discussions with the trainees on integration with EGI Check-in, on going for both services.



# EGI 2022 Conference Highlights

- ❑ **EGI response to the 6th Sanction Package of the EC and support to Ukraine**
  - The representative of the Ukrainian Grid Infrastructure in the EGI Council requested support to provide, selected scientific communities that lost access to their local computing facilities, with access to compute clusters in other countries, as the IT infrastructure lost during the conflict will not be restored in the short/medium term.
  - EGI will open a call for participation to opt in; and hopes WLCG will help with this call in the same way we joined forces to support structural biology during the pandemic.
  - The EGI Executive Board requested that the EGI Foundation adheres to the requirements of the 6th Sanction Package of the EC, implying that the EGI Foundation will stop its services towards IHEP and ITEP (both institutes own a data centre in the EGI infrastructure). The EGI Service Delivery Team is discussing it.



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