EGI for Research Infrastructures

Solve your Digital Challenges with our
Advanced Computing Solutions

egi

Acknowledgements

We want to thank all the EGI Federation members for their high-quality services, collaborative efforts and trust. **We are the EGI Federation!**

We also want to thank the Research Infrastructures for their cooperation and confidence in our services.

Finally, we would also like to thank the European Commission for the trust and funding received to support our work.
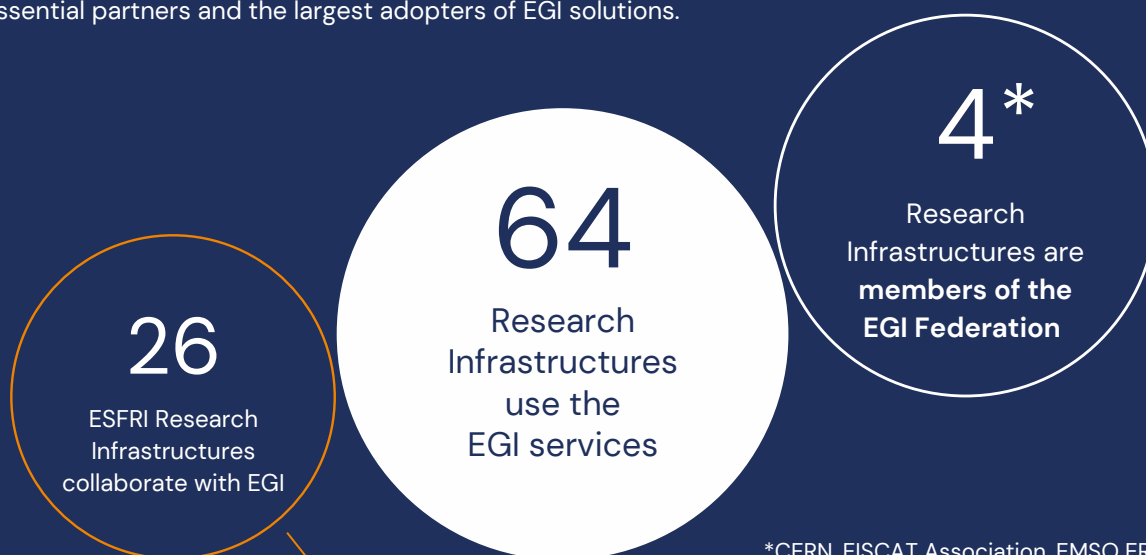
Advanced computing for research

EGI operates the largest federated e-Infrastructure for data-intensive computing in the world and is committed to supporting all fields of science, from physics to astronomy, environmental sciences to humanities, life sciences, chemistry and many other disciplines.

From advanced HTC and Cloud computing to Data spaces and data analytics tools, EGI changes the way how researchers open and innovate their science and operate in a digital world.

EGI and Research Infrastructures

Research Infrastructures and research communities are our essential partners and the largest adopters of EGI solutions.

64
Research Infrastructures use the EGI services

26
ESFRI Research Infrastructures collaborate with EGI

4*
Research Infrastructures are **members of the EGI Federation**

*CERN, EISCAT Association, EMSO ERIC and SeaDataNet are EGI Federation members directly represented at the EGI Council

Environment

EISCAT_3D
EMSO ERIC
Euro-Argo ERIC
LifeWatch ERIC

Health & Food

BBMRI, EATRIS, ECRIN, ELIXIR, EMBRC ERIC, EMPHASIS, ERINHA, EU-OPENSCREEN ERIC, Euro-Bioimaging ERIC, INFRAFRONTIER, INSTRUCT ERIC, ISBE, METROFOOD-RI, MIRRI

Social & Cultural innovation

CLARIN ERIC
DARIAH
E-RIHS
OPERAS

Physical sciences & Engineering

CTA
HL-LHC
KM3NeT 2.0
SKAO

ESFRI Research Infrastructures supported by EGI

EGI services

EGI provides technical and human services for research: from integrated and secure distributed high-throughput computing and cloud computing, storage and data resources to consultancy, support and co-development.

In addition, EGI offers services for federation. These services offer capabilities to securely access, process and analyse distributed data managed by different research groups and organisations federated in a distributed Research Infrastructure.

The service delivery is planned, managed and coordinated according to FitSM standards.

**Use the computing services offered by EGI and take your own services to the next level. We will assist you with the uptake and creation of customised solutions taking into account your needs and those of your users.
Our technical solutions are co-developed and operated with Research Infrastructures.**

Compute

Cloud Compute

Cloud Container Compute

High-Throughput Compute

Compute Orchestration

Workload Manager

Storage & Data

Datahub

Data Transfer

Online Storage

Security & Identity

Check-in

Training

FitSM Training

ISO 27001 Training

Training Infrastructure

Applications

Notebooks

EGI Services for research

Services for research

The EGI external service catalogue addresses the needs of Research Infrastructures that wish to enrich their service portfolio with capabilities for data analytics and processing.

We offer our expertise in operating customised data analytics tools such as virtual research environments, Jupyter Notebooks and Binder replay environments that are fully integrated with an underlying distributed data infrastructure.

Enrich your Research Infrastructure service portfolio with capabilities for data analytics and processing

Our services for research: https://www.egi.eu/services/research/

Services for federation

The EGI internal service catalogue addresses the needs of research data centres participating in distributed Research Infrastructures and operating as part of a single seamless federated network.

The services of the internal catalogue offer capabilities to securely access, process and analyse distributed data managed by different research groups and organisations.

Allow a secure access, processing and analysis of your distributed data

Our services for federation: https://www.egi.eu/services/federation/

Why us?

"

Our diverse service portfolio, computing close to research data, knowledge of the research landscape and experience with the specific needs of the Research Infrastructures set us apart from commercial service providers.

Giuseppe La Rocca

Community Support Lead

1 By federating over 300 research data centres from national e-Infrastructures and research-performing organisations, EGI brings computing close to research data, enabling scalable access and processing at petabyte- and exabyte scales.

2 The EGI infrastructure is enabled by technical solutions that are a collaborative effort of the EGI community and scientific collaborations. At EGI, we aim at supporting reuse and customisation of solutions at high technology readiness level that have been already adopted successfully in research projects with complex digital needs.

3 Our network of experts is available to assess your technology requirements, suggest the best solutions and then collaborate on technology projects that further advance relevant setups. EGI can also provide you and your users with tailored training that allows everybody to use the resources to their full capacity.

4 EGI is part of a global network of computing e-Infrastructures spanning Europe, Africa, Asia Pacific, and America. We collaborate with peer e-Infrastructures worldwide to support the data processing needs of international scientific collaboration enabling research in a truly global ecosystem.

Start your journey with EGI

Contact us

Explain your needs and requirements

Agree on service configuration, development and deployment plan

Meet a dedicated technical expert
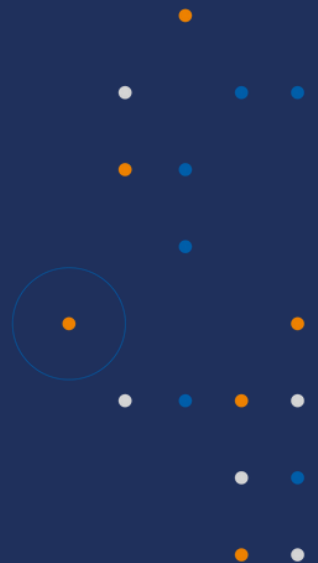
Agree on our collaboration framework

Start the co-development

Deploy your solutions

Let us support you in the uptake of your services

Access mechanisms

Easy access to our services is our top priority. For this reason, we strive to offer services free at the point of use for all our end users, including Research Infrastructures.

On the other hand, involved professionals and deployed computing infrastructures need to be compensated. Thanks to the capability of integrating national and European investments, we can optimise the use of financial resources. For special needs, we can also channel community funding to our providers.

Sponsored Access

EC funding

WHAT: Virtual access to EGI services, support or co-development
ACCESS POLICY: Free at the point of use
REQUIREMENT: Relevance to scope of the project
SUSTAINABILITY: Post-project support possible | subject to negotiation
HOW: Use cases submission to open calls, project partnership

In-kind support on the national level

WHAT: Access to EGI services, support or co-development
ACCESS POLICY: Free at the point of use thanks to national funding
REQUIREMENT: Alignment to national roadmaps and priorities
SUSTAINABILITY: Depending on the national or institutional priorities
HOW: Memorandum of Understanding with the EGI Foundation facilitating the matchmaking

Paid Access

Direct charge

WHAT: Access to EGI services, support or co-development
ACCESS POLICY: As defined in the contract
REQUIREMENT: Mutual interest
SUSTAINABILITY: As defined in the contract
HOW: Direct contract

Long-term Partnership

EGI Federation membership

WHAT: Access to EGI services for research & services for federation
ACCESS POLICY: Services for federation as defined in the SLAs | Services for research are subject to negotiation
REQUIREMENT: Research Infrastructures with a legal entity
SUSTAINABILITY: Long-term support and collaboration
HOW: By joining the EGI Federation as Participant or Associated Participant
MORE INFORMATION: https://go.egi.eu/join

How other Research Infrastructures used our services?

CHALLENGE

EMSO needs to provide access to curated data and offer high-quality services to a large and diverse group of users to define environmental policies based on scientific data.

SOLUTION

EGI contributes to operating different EMSO ERIC services, including the data portal. We delivered expertise and support in various technical areas, including platform development, data migration, and training.

SERVICES

Cloud Compute Online Storage Training Infrastructure Check-in

ACCESS MECHANISM
EGI Federation membership

OPERAS

CHALLENGE

OPERAS develops services that pool, aggregate, or federate existing resources from across Europe to deliver to European researchers a single access point and integrates its service into the EOSC marketplace as soon as they are ready.

SOLUTION

EGI provides OPERAS with the Check-in service, enabling user registration, and authenticated and authorised access to OPERAS services. Other EGI services allow the distribution of the computational task to a scalable compute platform and to store intermediate results from the user jobs.

SERVICES

Cloud Compute   Online Storage   Training Infrastructure   Check-in

ACCESS MECHANISM
EC Funding

EMPHASIS

CHALLENGE

Plant phenotyping generates huge, complex and heterogeneous data including a quantitative description of plant characteristics,experimental and environmental conditions and raw images. The PHIS information system was brought into the EMPHASIS ESFRI from the PHENOME French project to ease data management and analysis within plant phenotyping communities. The system integrates various open source solutions.

SOLUTION

EGI helps EMPHASIS with the migration of the PHIS information system to the EGI cloud resources. The platform has been also integrated with EGI Check-in to ease the user access and it is being extended with a distributed data management system by integrating EGI DataHub. Deep Training facility is also used to publish deep learning models and train them on the EGI Infrastructure

SERVICES

Cloud Compute   Online Storage   Datahub   Check-in

ACCESS MECHANISM
EC Funding

EGI for Research Infrastructures

Contact us

📞 +31 (0)20 89 32 007   ✉ contact@egi.eu

Website: www.egi.eu

🐦 @EGI_einfra   in @EGI_einfra   ▶ /EGIFederation