



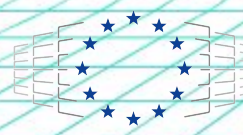
Boost your computations!

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the European Union**



EuroHPC
Joint Undertaking

This project has received funding from the European High Performance Computing Joint Undertaking under grant agreement No.101139786.

Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or EuroHPC Joint Undertaking. Neither the European Union nor the granting authority can be held responsible for them.

**Are you satisfied with the
performance of your
computations?**

Did you try **optimising** it?

**High-level
Specialised
Application
Support**



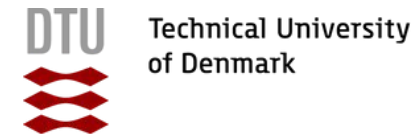
EPICURE
Unlocking European-level HPC Support

Feb 2024
–
Jan 2028

experts from
16 sites

all Hosting
Entities of the
**EuroHPC JU
systems**

Consortium



EuroHPC JU supercomputers

KAROLINA
VEGA
MELUXINA
DISCOVERER
DEUCALION

LEONARDO
LUMI
MARE NOSTRUM 5
JUPITER



What EPICURE can do for you?



**2nd Level
Support**

Code Porting, Enabling
and Scaling

- **Application preparation**
 - customising installation and compilation
 - verifying job scripts (parameters, affinity)
 - possibility of **code porting** between architectures
 - bringing CPU code to GPU
 - NVIDIA CUDA to HIP for AMD GPUs
- **Benchmarking and Scalability tests**
 - assesing resource utilisation (I/O, CPU, memory)
 - determining scalability limits
- **Performance analysis**
 - a detailed application profiling
 - finding bottlenecks

What EPICURE can do for you?



- **Code optimisation**

- direct modification of selected functions
- implementation of parallelisation mechanisms.

- **Refactoring**

- improving the structure of the code
- without implementing new functionality

**3rd Level
Support**

Code Optimisation

EPICURE goals

the project encourages the **best possible uptake** of the EuroHPC systems by European scientists and researchers

better performance, **more** computation, and **greater** scientific output from your existing allocation

Access to EuroHPC JU supercomputers

"EPICURE AST support is available only to users with a valid **EuroHPC JU Allocation Project**."

but...

you can quickly get the necessary access!

- **Benchmark Access Mode** (3M, ~2000 node/h)
- **Development Access Mode** (6M, ~4000 node/h)



CALL STATUS: OPEN

EuroHPC JU Call for Proposals for Regular Access Mode

Researchers from academia, research institutes, public authorities, and industry established or located in an EU Member State or in a country associated with Horizon 2020 can apply and access the EuroHPC pre-exascale and petascale supercomputers.

CALL STATUS: OPEN

EuroHPC JU Call for Proposals for Extreme Scale Access Mode

The call is open to all fields of science, industry and public sector justifying the need for and the capacity to use extremely large allocations in terms of compute time, data storage and support resources.

CALL STATUS: OPEN

EuroHPC JU Call for Proposals for Benchmark Access

The Call for Proposals for EuroHPC JU Benchmark Access Mode is a continuously open call, with a maximum time-to-resources-access (start-date) of two weeks after the date of submission.

CALL STATUS: OPEN

EuroHPC JU Call for Proposals for Development Access

The Call for Proposal for EuroHPC JU Development Access Mode is a continuously open call, with a maximum time-to-resources-access (start-date) of two weeks after the date of submission.

Access to EuroHPC JU supercomputers

"EPICURE AST support is available only to users with a valid **EuroHPC JU Allocation Project**."

but...

you can quickly get the neces

- **Benchmark Access Mode** (3M, ~2
- **Development Access Mode** (6M,



CALL STATUS: OPEN

EuroHPC JU Call for Proposals for Regular Access Mode

Researchers from academia, research institutes, public authorities, and industry established or located in an EU Member State or in a country associated with Horizon 2020 can apply and access the EuroHPC pre-exascale and petascale supercomputers.



epicure@kdm.cyfronet.pl

Development Access

Call for Proposals
maximum time-to-reso

Mode is a continuously open call, with a
weeks after the date of submission.

Unlocking European-level HPC Support

90+

Projects supported
(completed or ongoing)

80+

 application codes

optimized – AI frameworks (PyTorch),
specific custom user codes and HPC apps
like GROMACS and QuantumEspresso

30

 AI applications & LLM models
support & optimization

29

 Enabling, Compilation, porting
and Optimization Projects

23

 Profile, Performance
Analysis and Benchmarking

8

 HPC Workflow and Job Management,
Containerization, Data & I/O

2nd Level Support | Code Porting, Enabling and Scaling



3rd Level Support | Code Optimization

Driving forward in terms of processes and technical expertise the development and continuous improvement of the European HPC Application Support Service and their impact.



pmo-epicure@postit.csc.fi

<https://epicure-hpc.eu/>

Further information



Unlocking European-level HPC Support
High-Level Specialised Application Support Service in High-Performance Computing

European HPC Application support portal

The European HPC Application Support Portal provides comprehensive information about available support services and EuroHPC JU systems, including their architectures and access mechanisms. Furthermore, the Knowledge base and Training materials gather high-quality support materials for everyone to use.

- **trainings** and **knowledge base**
- **blog** and **newsletter**
- **media**



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