



How to apply for LUMI resources

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Partners:



ci task





What you need to apply for LUMI grants?

- active PLGrid **account** (<https://portal.plgrid.pl>)
- **active affiliation** (polish academic/scientific unit employee type)
- active LUMI service in PLGrid portal
- register with Puhuri using MyAccessID



Access to LUMI resources

Puhuri AAI uses MyAccessID platform as an integration point for all IdPs. MyAccessID is published in eduGAIN as a Service Provider and will consume IdPs available in eduGAIN through the metadata exchange mechanism. MyAccessID can on request integrate IdPs in the case they are not available in eduGAIN.

The user should register with PUHURI portal and sign in with MyAccessID.

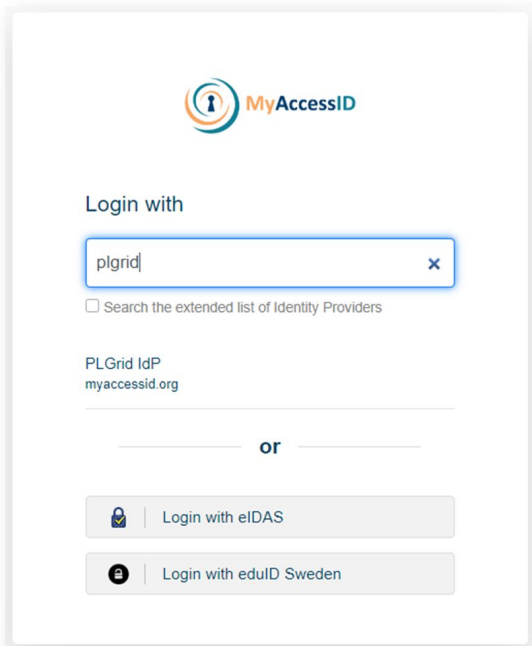
<https://puhuri-portal.neic.no/login/>

A screenshot of the Puhuri Portal login interface. At the top, there is a logo for 'PUHURI PORTAL' consisting of a stylized person icon inside a blue circle with radiating lines, followed by the text 'PUHURI PORTAL' in blue. Below the logo are two input fields: 'Username' and 'Password'. The 'Username' field has a small icon of a person with a red 'x' next to it. Below the input fields is a green button labeled 'Login'. Underneath the 'Login' button is the word 'OR' in a smaller font. Below 'OR' is a button with a blue 'i' icon and the text 'Sign in with MyAccessID'. This button is enclosed in a red dashed border. Below this button is the text 'By authenticating you are agreeing to the Terms of Service and Privacy policy.' At the bottom of the page, it says 'Powered by' followed by the 'neic' logo and the text 'NEIC - INFRASTRUCTURE COLLABORATION'.

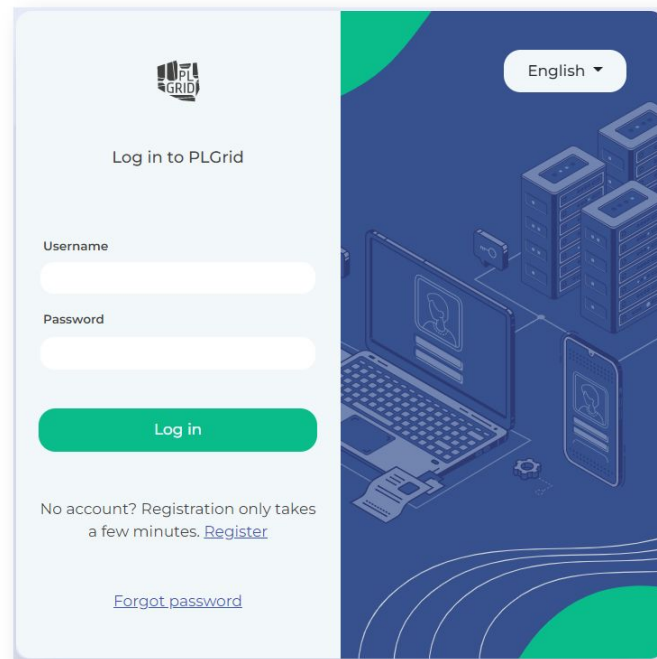


Access to LUMI resources

- Enter plgrid in the login field and select PLGrid IdP
- Enter PLGrid login details on the next page



The MyAccessID login page features the MyAccessID logo at the top. Below it, the text "Login with" is followed by a search input field containing "plgrid" and a close button (x). A checkbox labeled "Search the extended list of Identity Providers" is present below the search field. Underneath, the text "PLGrid IdP" and "myaccessid.org" are displayed. A horizontal line with the word "or" in the center separates this section from the bottom section. The bottom section contains two buttons: "Login with eIDAS" (with a lock icon) and "Login with eduID Sweden" (with a person icon).



The PLGrid login page features the PLGrid logo at the top left and a language dropdown menu set to "English" at the top right. The main heading is "Log in to PLGrid". Below this, there are two input fields: "Username" and "Password". A green "Log in" button is positioned below the password field. At the bottom, there is a link for "No account? Registration only takes a few minutes. [Register](#)" and another link for "[Forgot password](#)". The right side of the page has a blue background with a green circular graphic and an illustration of server racks, a laptop, and a smartphone.



Access to LUMI resources

- Ensure that the entered data is correct and mark the required fields
- You will receive a notification upon successful registration

Registrar Form Submitted registrations Sign out

MyAccessID

Register MyAccessID Identity

In order to access LUMI resources via Puhuri, you will need to register MyAccessID identity.

Given name*

Surname*

E-mail*

MyAccessID Acceptable Use Policy

MyAccessID Acceptable Use Policy* I confirm I have read and agreed with the MyAccessID Acceptable Use Policy

Data Processing* I consent to the processing of my personal data by MyAccessID (see the MyAccessID Privacy Notice)

LUMI General Terms of Use

LUMI General Terms of Use* I confirm I have read and agreed with the LUMI General Terms of Use

Data Processing* I consent to the processing of my personal data by the LUMI and Puhuri Services (see the Privacy Notices of LUMI and the Puhuri Services)

For information about the privacy of your personal data, please consult the:

- MyAccessID Privacy Notice
- LUMI Privacy Notice
- Privacy Notices of the Puhuri Services

Registrar Form Submitted registrations Sign out

You have been successfully registered

You are now a member of PUHURI.

Types of LUMI grants

- **test access (benchmark/development)**
 - **regular access**



<https://portal.plgrid.pl>



Carry out **innovative research** with us!

PLGrid proper grant

A predefined grant containing specific resources available in the PLGrid infrastructure.



Apply

PLGrid pilot grant

Pilot grant to test user needs for the use of PLGrid Infrastructure.



Apply

LUMI

Computing grants implemented on the LUMI supercomputer. Applications accepted according to the competition schedule. The call for applications takes place twice a year.



Apply

LUMI test access

As part of the test access, the user can use the LUMI CPU resources for 1 month (30 days). Test access provides 10,000 CPU hours that can be used.




Apply

LUMI test access

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Apply

- duration: 1 month (30 days)
- resources: 10 000 CPU and 1 000 GPU hours
- applying and managing: [Helpdesk PLGrid](#)
- applications can be submitted on an ongoing basis
- continuous support

Test grant summary report:

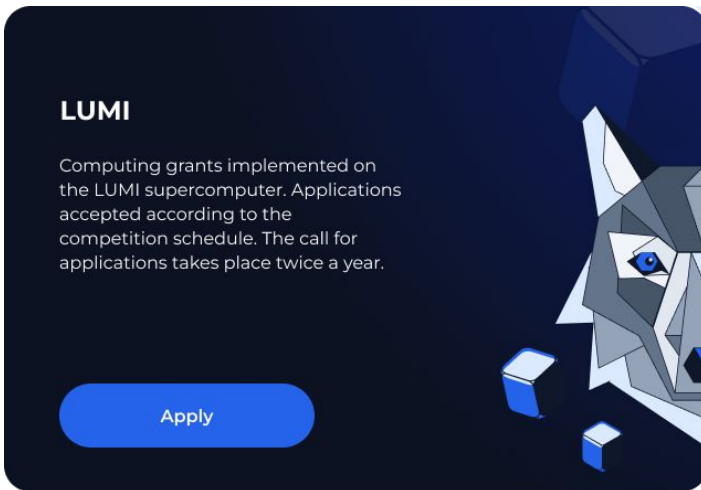
- A brief summary of the tools and applications used as part of the test grant
- Problems encountered with the operation and/or performance of the tested applications
- Summary of unresolved application issues/other problems
- Brief characteristics of the results obtained, taking into account CPU and GPU resources (if applicable)
- Summary of performed software scalability tests with particular emphasis on GPU partition nodes (if applicable)
- Do the obtained results allow to apply for a proper grant?



LUMI test access

Here you can request for LUMI test access (CPU) that lasts 30 days.

LUMI regular access



LUMI

Computing grants implemented on the LUMI supercomputer. Applications accepted according to the competition schedule. The call for applications takes place twice a year.

Apply

- duration: 1 year
- max resources:
 - 20 000 000 CPU
 - 1 000 000 GPU
 - 10 000 000 TBh
- applying: PLGrid portal
- call for applications: twice a year

- applications only in English
- evaluation process: each application is reviewed by 2 scientific reviewers and 2 technical reviewers



Applying for regular LUMI grant - basic info

The first step - complete the basic information for the application like:

- title
- acronym
- team
- affiliation etc.

Basic information

Title *

The title should be a concise, usually one-sentence description of the research topic, containing specific features of the studied phenomenon. Must be at least **10 characters long**.

Grant ID *

Unique short name of your grant (**4 to 20 characters, only lowercase letters and numbers, no spaces**).

Research team *

 ▼ ↺

PLGrid resources are granted within the scientific team - all its active member will have access to them. You can only select a team where **Applicant** has *Manager* role.

Affiliation *

 ▼ ↺

Cancel

Save and continue



Applying for LUMI grant - resources

Second step -
request for specific
resources.

Resources

L U M I LUMI

The European High-Performance Computing Joint Undertaking (EuroHPC JU) is pooling European resources to develop top-of-the-range exascale supercomputers for processing big data, based on competitive European technology. One of the pan-European pre-exascale supercomputers, LUMI, is located in CSC's data center in Kajaani, Finland. The supercomputer is hosted by the LUMI consortium. The LUMI (Large Unified Modern Infrastructure) consortium countries are Finland, Belgium, the Czech Republic, Denmark, Estonia, Iceland, Norway, Poland, Sweden, and Switzerland. LUMI is one of the world's best-known scientific instruments for the lifespan of 2021-2027.

CPU - Draft

 Delete  Edit resources parameters

APPLIED FOR FOLLOWING RESOURCES

CPU Hours 4 000 000 h

GPU - Draft

 Delete  Edit resources parameters

APPLIED FOR FOLLOWING RESOURCES

GPU Hours 200 000 h

STORAGE - Draft

Capacity (Terabyte hour) *

2 000 000 TBh

Cancel [Create allocation](#)



Applying for LUMI grant - grant details

This is the most extensive section of the application. User must provide information about:

- research purpose/public abstract
- usage description
- scientific & economic readiness
- data management plan
- references & prior experience
- field of science and keywords

Grant details

Grant start date *

14. 04. 2023

Duration in months *

12

The application must be reviewed and evaluated before the grant is allocated. The above date will be considered as the actual start date of the grant. In case of prolonged negotiations, the grant will be launched as soon as the application is accepted.

Keywords *

Enter up to 5 keywords.

Research purpose *

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Substantive description of the research, public abstract - information about planned works under the grant and what the user wants to achieve. In this field you can add graphic files, links, pdf files. (min. 250, max. 1000 characters)

Usage description *

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Justify the requested computational and storage resources. Provide basis on which the requested resources were estimated. Describe the computational techniques and platforms that you will use, including application code names (together with exact version), programming languages, libraries, and other software used. Describe also parallelization and scalability aspects, including parallel programming system used (e.g., MPI, PGAS, "embarrassingly parallel"). If possible, provide data for your application parallel performance, speedup and scalability.

Field of Science *

Please select field of science

Fields of Science according to the OECD (Revised Field of Science and Technology (FOS) classification). Please provide the information about third level classification (e.g. for chemical sciences please specify "organic chemistry").

Scientific readiness - methods and state-of-the-art *

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Describe theoretical and computational methods you plan to apply to achieve your aims and objectives. Compare these to established state-of-the-art within the field.



Evaluation criteria

Technical evaluation criteria:

- Justification of the requested computing and data storage resources,
- methodology for estimating the requested resources,
- number and type of declared software packages and platforms for use on the LUMI supercomputer,
- the ability to use the declared software packages and platforms on the LUMI supercomputer,
- evaluation of the data management plan,
- timetable for implementation of the grant proposal,
- level of competence and previous experience of using computing infrastructure and software of the applicant.

Scientific evaluation criteria:

- the topic and purpose of the scientific research,
- to what extent the required resources enable the implementation of the proposed research project,
- to what extent the requested research makes it possible to obtain the declared publications and other scientific achievements,
- the overall usefulness of the project and its socio-economic impact on society,
- the number and selection of references presented in the context of the research topic,
- overall presentation of the proposal: technical quality of the text (language, drawings, etc.).



Applying for LUMI grant - project, publications & summary

In the next steps, you can add information about related projects under which your research are co-financed and expected publications. Last but not least - draft summary.

Related projects

If research purpose of this grant is supported by any funding programme (e.g. NCN, NCBR, MNISW) please add this information.

Add information about related project

Declared publications

- Expected publication in international journal
- Expected publication in other journal
- Expected conference presentation
- Expected PhD dissertation
- Expected Master and/or Undergraduate Thesis

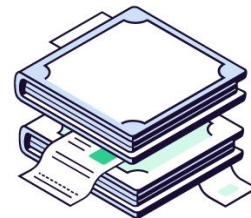
The above publications will include the following acknowledgments to PLGrid infrastructure:

"We gratefully acknowledge Poland's high-performance computing infrastructure PLGrid (HPC Centers) for providing computer facilities support within computational grant no. PLL/2023/4/016317"

Comment

Required when publication is not declared

My research is not supported by any funding programme.



Save changes

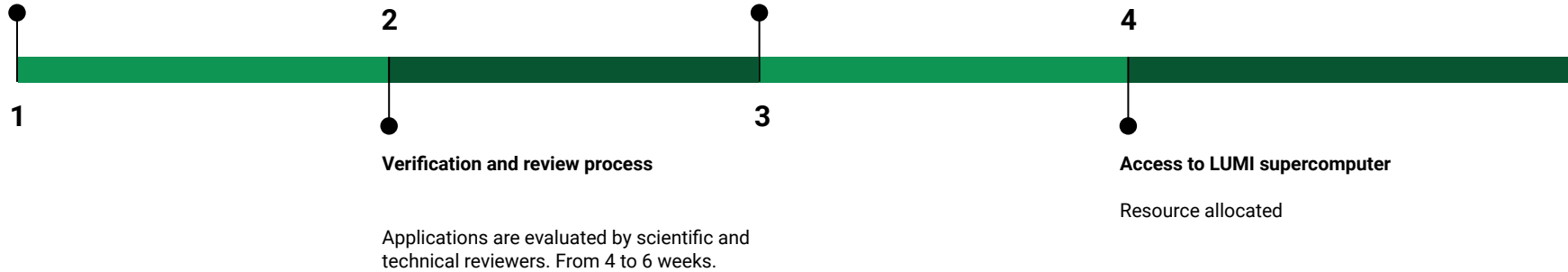
LUMI call timeline

Call announcement

Call is open and users have 4 weeks to send us their applications.

Announcement of results

Publication of the ranking list of applications based on the evaluations. One week time for acceptance of the amount of allocated resources.





Reporting LUMI grants

After the end of the grant, it is necessary to complete the report:

- Rate level of satisfaction with performing calculations on the LUMI supercomputer,
- A brief description of the work performed, a description of the results obtained or patents filed based on the work,
- list of submitted and published scientific articles.

Acknowledgements formula :

We acknowledge Poland's high-performance computing infrastructure PLGrid for awarding this project access to the LUMI supercomputer, owned by the EuroHPC Joint Undertaking, hosted by CSC (Finland) and the LUMI consortium through grant no. PLL/2023/4/016319.



LUMI call - where to find information?

Each LUMI call is announced:

- on the ACK Cyfronet AGH website (<https://www.cyfronet.pl/lumi>)
- www.plgrid.pl
- [Portal PLGrid](#)
- as a newsletter / mailing information to PLGrid users

Next call will be announced 01.03.2024 (tomorrow)!

Second 2024 call will be announced 01.09.2024



Thank you for your attention



Access to LUMI resources

LUMI is a unique European initiative related to supercomputers, involving ten European countries and the EuroHPC Joint Undertaking (EuroHPC JU) investing in a common system, which is expected to accelerate research and increase the competitiveness of European solutions.

The peak performance of LUMI is 552 petaflops. ACK Cyfronet AGH represents Poland in the LUMI consortium. Thanks to the financial contribution of the state and the cooperation of our specialists, Polish scientists will be able to use the supercomputer resources for conducting large-scale computation-based research, parallel processing of enormous datasets, multidimensional analysis, and also utilizing artificial intelligence.

LUMI documentation - <https://docs.lumi-supercomputer.eu/>