



LUMI Documentation and Helpdesk

**Detailed introduction to the LUMI-C
environment and architecture**

Apr. 27-28, 2022

LUMI Documentation

docs.lumi-supercomputer.eu

- The documentation is a constantly evolving document, consider to check it regularly
- Even if you don't have a project yet, we strongly recommend to have a look at the documentation before applying for compute time to fit your workflow to the system policies and hardware

Structure of the documentation

The basic information about the use of LUMI is located in the two first sections of the documentation:

- **First Steps:**

- first thing you have read or should read
- account creation and how to connect to LUMI

- **Computing:**

- hardware description
- module environment
- Slurm partition, billing, submitting jobs
- Storage

Structure of the documentation

- **Developing:**
 - programming environment
 - performance and debugging tools
- **Software:**
 - installation of software with EasyBuild
 - container wrapper usage
 - information about running a specific software package (to be extended in the future)

Providing feedback about the documentation

- What is obvious to us may not be to you
- Feel free to give us feedback about the documentation if in your opinion something is unclear or missing
- You have two options to submit your remarks about the documentation:
 - Use the [support form](#) and select "Documentation" in the Category drop-down menu
 - Create an [issue](#) in the Github repository

LUMI is the documentation

- LUMI itself contain a lot of documentation provided by the manpages
- We strongly recommend you to read the `intro_<topic>` manpages

For example, here is a curated list of the `intro` manpages available:

```
$ man intro_<topic>
intro_mpi           intro_coarray      intro_openacc      intro_scalapack
intro_openmp        intro_craypat      intro_papi          intro_perftools
intro_upc           intro_directives   intro_hugepages     intro_libsci
```

LUMI is the documentation

- Some modules of the LUMI central software stack and user installable software ("contrib") also contain documentation regarding their usage

```
$ module help <modulename>
```

- May also contain links to the software package or to a relevant page in the LUMI documentation
- The Message of the Day displayed when you log-in also contains random tips and trick message

LUMI helpdesk

- The LUMI User Support Team has 14 members (9 FTE) based in each of the consortium countries (except Iceland)
- Our main mission is to provide user support via the helpdesk:
 - Open Monday to Friday from 8a.m. CE(S)T to 6p.m. CE(S)T
 - Accessible via the support web forms

lumi-supercomputer.eu/user-support/need-help

- Everything you share with the support team is confidential

Things we can help you with

- Accessing LUMI (*but... see the next slide*)
- Using the LUMI environment in general
- Compiling and running your application (*but... see the next slide*)
- Help you install the software you need with Easybuild including creating easyconfigs if not already available
- Storage quota (note: we rarely grant an increase in the number of files)

Things we can help you with

- You don't need to have an active project to contact us
- Feel free to contact us before applying for compute time if have any question
- We will not write the proposal for you but we can help you to check if your project is a good fit for LUMI. For example, check if
 - we already had issues with the software you plan to use
 - your project is compatible with LUMI policies

Things we cannot help you with

- Create an account: this is the responsibility EuroHPC and of the local organization in the 10 LUMI consortium countries.
- The same apply for compute time
- Don't expect us to have expertise in every software package that will be running on LUMI
- Provide software license or install licensed software
- Port your code (outside of the Porting Call)

General recommendation

- Be as complete as possible when submitting request. Include information like username, project number, job ID, batch script, ...
- Provide the full list of commands to reproduce the problem in a copy-pastable format. Don't forget the list of the loaded modules (output of the `module list` command)
- Provide the output and **full** error message: the last error message is not always the most important one!

LUMI Support Team Coffee breaks

- We organize a coffee break with users every last Wednesday of the month 13-13.45 CE(S)T / 14-14.45 EE(S)T
- The next ones are May 25th and June 29th via [Zoom](#)
- A good opportunity to meet the members of the Support Team "face to face" and have a discussion about LUMI

Questions?