Policies for Using the ZHORES Cluster

General statements

1. Skoltech Center for Data-Intensive Science and Engineering (CDISE) supports and administers a flagship petaflops supercomputer "Zhores" for usage in research, education and industrial projects.
2. All relevant information about the HPC facilities including this document can be found at hpc.skoltech.ru.
3. Distribution of computing time and job prioritizing on the "Zhores" cluster is performed according to the following directions:
   a. Reimbursable computational work performed by industrial and commercial customers;
   b. Research and educational activities performed by CDISE professors and researchers;
   c. Research and educational activities performed by other Skoltech professors and researchers in Skoltech subject to availability of resources.
4. Information about available resources, their distribution & queues on "Zhores" can be found at hpc.skoltech.ru/zhores-supercomputer.
5. CDISE faculty, researchers and PhD students can use the "Zhores" cluster free of charge.
6. Price for the "Zhores" usage for users outside of CDISE can be found at hpc.skoltech.ru/prices.
7. Access to the "Zhores" cluster is performed remotely via Internet.
8. All questions regarding the "Zhores" cluster must be submitted via the ticketing system located at hpc.skoltech.ru/help.
9. HPC administration reserves the right to reallocate and even cancel computational jobs to optimize the "Zhores" performance, for maintenance and for incidents resolution.

User and access policy

1. Any user of the "Zhores" cluster must hold at least a MSc degree in Natural Sciences (i.e. Computer Science, Physics, Chemistry etc).
2. Current MSc students of CDISE can obtain access to work and practice on the special segment of "Zhores" cluster only if they have completed the basic 3-credit course "Basics of Linux & HPC" or 6-credit course "High-Performance Computing" and obtain positive reference from the course lecturer and their scientific supervisor. As an exception to this rule, current Skoltech MSc student can be granted access if (s)he is employed by Skoltech as a Research Intern.
3. Conditions for being granted access to the "Zhores" cluster:
   a. Access is granted only for educational, research purposes and for relevant calculations requiring large-scale computational resources;
   b. All users of the "Zhores" cluster agree to abide the Skoltech HPC Usage Rules, which can be found at hpc.skoltech.ru/rules.
4. Access to the "Zhores" cluster for Skoltech PhD students, researchers and professors is requested through the following procedure:
   a. Principal Investigator (PI) - Skoltech CDISE Professor or Researcher fills out and submits the Project application form located at hpc.skoltech.ru/apply-for-an-account. Project application form must contain information about the project, duration of the project, amount of computing power and storage requested, number of people involved in using the "Zhores" cluster for this project, signed and scanned HPC Usage Rules for every user.
   b. Access is granted only for tasks specified in the Project application.

c. If there will be external users working on the "Zhores" cluster within the project, the PI must submit a justification letter stating why involvement of external specialists is needed for the project.

d. If all the previous points are fulfilled your application will be reviewed by the HPC Panel and in the case of the positive decision you will be granted access to the "Zhores" cluster.

Rules for the competitive selection of applications

Applications are submitted according to the submission guidelines described above. Applications are reviewed by the HPC Panel or by a committee designated by the HPC Panel. Members of the HPC Panel can be found at hpc.skoltech.ru/panel. Application reviewing might take up to 3 working days. Total time from submission of the project to creation of user accounts might take up to 5 working days.

Reasons for application rejection

- Incomplete application forms or application procedure;
- Unavailability of requested resources;
- Unavailability of requested software or software licenses;
- Current high computational load of the resources;
- Previous failure to follow the Skoltech HPC Usage Rules.
- Previous failure to submit the Project Report.
- Lack of scientific merit in the Project.
- Obvious discrepancy between the Project scientific part and requested resources.
- Unpaid bills for computing or storage.

Final project reporting and acknowledging the HPC resources

Within a month after the project is finished, Principal Investigator is required to submit the final project report at hpc.skoltech.ru/final_report, describing results obtained using the "Zhores" cluster.

All users must acknowledge the usage of the "Zhores" cluster in any publishable materials and presentations.

List of services and prices for external users

CDISE offers the following HPC services:

- Provision of computing power (CPUs, GPUs) and access to the pre-installed software;
- Provision of the storage space for the period of the project.

Prices for external users (users outside CDISE) can be found at hpc.skoltech.ru/prices. Any questions concerning the prices and/or consulting should be directed to hpc_sales@skoltech.ru