FAQ

This is a page collecting answers to requests arrived to the HPC Helpdesk. Please check here before sending a specific request.

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General:

- How can I add a collaborator to my project?

  Project group leaders can also manage their user's membership on their UserDB page.

- I still didn’t receive the username and the password for the system access?

  You have to do the complete registration on the UserDB page and to be associated with a project (PI has to add you). Once you have inserted all the necessary information and you are associated with a project a new access button will appear, just click on it and you will receive in two mails the username and the password.

- Backup Policy

  Just the $HOME filesystem is guaranteed by daily backups. The backup procedure runs daily and we preserve a maximum of three different copies of the same file. Older versions are kept for 1 month. The last version of deleted files is kept for 2 months, then definitely removed from the backup archive.

- Information about my project on CINECA clusters (end data, total end monthly amount of hours, the usage?)

  You can list all the Accounts attached to your username on the current cluster, together with the "budget" and the consumed resources, with the command:

  ```
  > saldo -b
  ```

  More information in our documentation.

- I have finished my budget but my project is still active, how can I do?
Non-expired projects with exhausted budgets may be allowed to keep using the computational resources at the cost of minimal priority. Ask superc@cineca.it to motivate your request and, in case of a positive evaluation, you will be enabled to use the qos_lowprio QOS.

• Which filesystems do I have available? Which usage is intended?

  • $HOME: to store programs and small light results. This is permanent, backed-up, user-specific, and local area.
  • $CINECA_SCRATCH: where you can execute your programs. This is a large disk for the storage of run time data and files. It is a temporary area.
  • $WORK: An area visible to all the collaborators of the project. This is a safe storage area to keep run time data for the whole life of the project and six months after the end of the project.
  • $DRES: An additional area to store your results if they are heavy. This space is not automatic. You need to request for it writing to superc@cineca.it.

More detailed information can be found here.

• How can I check how much free disk have I available?

You can check your occupancy with a command "cindata". Option "-h" shows the help for this command and in our documentation, you can find the description of the output.

Connection/login

• I haven’t been login for a while, recently I found I couldn’t login it and return me a message: access denied

If you have forgotten your password, just write to the CINECA Help Desk (superc@cineca.it) to reset your password.

• How to change my password?

You can change your current password on the front-end system using the command passwd. Please look at our password policy.

Executions/scheduler:

• I was copying data or executing something in the login and the process was killed. Why?

The login nodes in our facilities have 10 minutes CPU time limit. This means that any execution requiring more than that is automatically killed. You may avoid this restriction by using the batch script on the SLURM partitions or an interactive run. The partition and the resources depend on the machine you are considering, so please see the "UG3.0 System specific guide" page. Important details and suggestions on how to transfer your data can be found on the "Data management" page.

• My job has been waiting for a long time.

The priorities in the queue are composed of several factors and the value may change due to the presence of other jobs, of the resources required, and your priority. You can see the reason for your job in the queue with the squeue command. If the state is PD, the job is pending. Some reasons for the pending state that could be displayed:

  • Priority= The job is waiting for free resources.
  • Dependency= It is depending to the end of another job.
  • QOSMaxJobsPerUserLimit = The maximum number of jobs a user can have running at a given time.

More information about the reason meanings can be found on the SLURM resource limits page. You can also consult the estimated starting run time with the SLURM command scontrol:

```
> scontrol show job #JOBID
```

or you can see the priority of your job with the sprio SLURM command:

```
> sprio -j #JOBID
```
Here you can find more info on Budget linearization.

- **Troubles running a dynamically linked executable**

In order to use the available libraries dynamically, you have to add the library directory to the path list of the environment variable $LD_LIBRARY_PATH before the execution of your job starts. To see your library path, please load the library module and then use

```
> module show <libraryname>
```

Then export or set the path:

- `export LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:<path>`
- `set LD_LIBRARY_PATH ${LD_LIBRARY_PATH}:<path>` (csh)

- **Error invalid account when submitting a job: Invalid account or account /partition combination specified.**

  The error *Invalid account* might depend on the lack of resources associated to your project or there is an error with the account name in your batch script. Just use the `saldo` command. If the account is correct and valid, are you lunching the job on the right partition? To see which partition is right for your case and account, please consult the Summary paragraph inside the *System Specific Guide*.

- **How can I list all my jobs currently in the queue?**

  Just do the command

  ```
  > squeue -u $USER
  ```

  and you will see the list of your running or pending jobs.

- **Can I modify SLURM settings of a waiting job?**

  Some Slurm settings of a pending job can be modified using the command `scontrol update`. For example, setting the new job name and time limit of the pending job:

  ```
  > scontrol update JobId=2543 Name=newtest TimeLimit=00:10:00
  ```

- **How can I place and release a job from hold state?**

  In order to place a job on hold type

  ```
  > scontrol hold JOB_ID.
  ```

  To release the job from the hold state, issue

  ```
  > scontrol release JOB_ID.
  ```

**Performance:**

- **I have found performance problems, what should I do?**

  First, you should find a method to reproduce the problem and confirm after some tests that it is reproducible. After that, you should provide all relevant information to the Support Team by e-mail together with instructions on how to reproduce your tests. Support Team will investigate the issue and contact you as soon as possible.