HPC cluster usage policy
Effective November 15, 2021

Highlights

Single-core jobs: Only on C10 & C11.

Quota (cores): For HRI members—C10: 60, C11: 240, C12: 168, C13: 128;
For non-HRI members—C10: 30, C11: 120, C12: 100, C13: 0.

Overall cap for a single user: For HRI users—450 cores (C11-C13 combined)
For non-HRI users—300 cores (C11-C13 combined).

Non-HRI users not allowed access to C13.

Wall-clock time limit: 6000 core-hours for any single job.

HRI students/postdocs allowed access up to six months after they leave to complete on-going projects. Account remains valid up to a year.

Details of policy

1. **Parallel vs. serial jobs:** Jobs requiring single cores (serial) can be run only on C10 & C11. Jobs acquiring more than one cores in the script, but actually using a single core will be treated as a multi-core job. Users are strongly advised not to run such jobs. Only in exceptional circumstances such jobs will be allowed with proper justification and approval.

2. **Core limit:** Each user can use his/her max allowed quota of cores on a cluster at any point of time. Once a user reaches her quota of resources on a clusters, additional jobs whether running or queued can be summarily deleted without any prior warning.

   1. Job limits: For a single user **C10: 60 cores, C11: 240 cores**, **C12: 168 cores**, **C13: 128 cores**.

   2. Total usage by a single HRI user at any point of time cannot be more than **450 cores** of all clusters C11, C12 and C13 taken together. Jobs in excess of this may be terminated by the sys-admin.

3. **Non-HRI users:**
    1. Non-HRI users will be given access to the clusters only on written approval of an HRI faculty member stating that they are woking in collaboration. This will be for a specific time period **not exceeding six months.** Usage beyond this period will need a fresh recommendation.
    2. If the non-HRI member is a student, postdoc or a non-permanent member in some other academic institute in India or abroad, she has **to produce a statement from her supervisor, or an appropriate senior person in academic position, that she does not have access to sufficient computing resources to carry out the project. This statement must include the title of the project**.
    3. An HRI faculty member can recommend **only one non-HRI member at any point of time who can run jobs on the cluster facility**. If there are more than one such recommendations, only one will have privilege to run jobs, while others may continue to have login privileges and access to data up to a year from expiry of account validity.
    4. Non-HRI users can run jobs only on C10-C12 clusters.
    5. Non-HRI users will have reduced resource quota compared to HRI users: **C10 — 30 cores, C11 — 120 cores** and **C12 — 100 cores**.
4. **Wall clock time limit:** Each job will have a maximum CPU time limit of **6000 core hours**. (This may require a little time to be implemented. Depending on user requirements and experience, we can revise the limit.)

HRI students and postdocs will continue to have access to the clusters up to six months from the day they leave HRI (the date on 'No Dues' form for students and end of their tenure for postdocs). After that they will be treated as non-HRI persons. Their data will be retained up to a year from the date. The sys-admin can delete their data after this to create space for existing users. Postdocs leaving the institute (or their advisors) are requested to inform the cluster sys-admin about their exact date of departure.

If any user requires resources beyond the limits set out in this policy for a limited period of time, he/she can make a special request with clear justification.

Sharing of user id and password, particularly with those who do not have access to the facility is strictly prohibited.

These policies do not cover nodes reserved for the *neutrino* queue on C13.