Getting started at PDC

To use PDC’s computing resources you need an account at PDC and an allocation of computing time. Accounts are available to individual researchers while computing time allocations are awarded for specific research projects and courses.

Accounts at PDC

How to get a PDC account

If you belong to a research project or intend to become part of one, do the following:

1. Go to the SUPR (SNIC User and Project Repository) portal https://supr.snic.se, and register as a user in SUPR.
2. Become associated with a PDC time allocation - either by asking the principal investigator of an existing project to let you pin their time allocation, or by applying for a new allocation for a new project via SUPR (see below).
3. Go to the SUPR portal and request an account at PDC.

If you are enrolled in a course held at KTH, or have a special time allocation managed by PDC, fill in the form at https://www.pdc.kth.se/support/documents/getting_access/get_access.html#apply-via-pdc-webpage.

Your account

- At PDC you will get one account with which you can access all PDC resources (both for computation and data storage).
- You can access your PDC files and also PDC’s resources from any computer.
- Your account lives indefinitely but needs to be re-activated for login every other year.

Research time at PDC

Everyone who wants to do research on the PDC systems needs to be associated with a time allocation. A time allocation specifies how much runtime each research project can use on particular PDC systems each month. The time is measured in core hours (which correspond to using one core for one hour).

Size of time allocations for all the projects on Beskow in February 2017

Size of time allocations for all the projects on Tegner in February 2017

Useful account information

- Each PDC account is associated with one home directory on the AFS file system, and two directories on the Lustre file system:
  - /afs/pdc.kth.se/home/<u>/<username> — HOME directory
  - /cfs/klemming/nobackup/<u>/<username> — no quota enforced
  - /cfs/klemming/scratch/<u>/<username> — no quota enforced
  - /cfs/klemming/scratch/<u>/<username> — files deleted after 30 days

- Typical error message you will see if your account needs reactivation and you start the process of logging in to PDC using the ‘kinit’ command:

```
$ kinit -f <username>@NADA.KTH.SE
kinit: krb5_get_init_creds: No ENC-TS found
```

- You may see this error when submitting a job if your account has recently been created and has not propagated to all PDC systems, or if you incorrectly specify your project:

```
Error: Unable to allocate resources:
Job violates accounting/QOS policy
```

Small allocations

- Applicant must at least be a Ph.D. student in Swedish academia
- Evaluated on a technical level only
- Proposals evaluated in about 1-2 weeks
- Limit is usually 5,000 core hours/month

Medium allocations

- Applicant must be an Assistant Professor or higher in Swedish academia
- Evaluated on a technical level only
- Proposals evaluated in about 1.5-4 weeks
- Limits depend on machine: 200,000 core hours/month on large clusters

Large allocations

- Applicant must be an Assistant Professor or higher in Swedish academia
- Evaluated on a technical and scientific level
- Proposals are evaluated by the Swedish National Allocations Committee (SNAC) twice per year
- No formal limits

PDC can also offer small test allocations to researchers who need to test the PDC clusters (for example, to see whether their code compiles or runs correctly) before deciding whether to submit a larger proposal. For more information and help with applying, contact PDC Support (support@pdc.kth.se).

To apply for research time, see http://www.snic.se/allocations/apply4access

Access QR code or visit www.pdc.kth.se for more information.

PDC Center for High Performance Computing