

General User Policy for the HPC clusters HERO (High-End Computing Ressource Oldenburg) and FLOW (Facility for Large-Scale COmputations in Wind Energy Research) (v1.2, 2011/04/20)

The HPC cluster HERO is a shared ressource funded by the Deutsche Forschungsgemeinschaft (DFG) and intended for computationally demanding or data-intensive calculations. It is used by more than 20 research groups from the Faculty of Mathematics and Science and the Department of Computing Science. FLOW is a dedicated system for computationally demanding CFD simulations in wind energy research and has been funded by the Federal Environment Ministry (BMU). It is used by the Research Group TWiST (Prof. J. Peinke) and the ForWind Center for Wind Energy Research.

Both systems differ significantly from local PCs or workstations and actions that are perfectly acceptable on the latter may seriously affect other users on a HPC cluster. Therefore, every user must conform to a set of policies ensuring that the available ressources are fairly shared and used effectively. By signing up for an account you signify to accept and comply with the following general rules and conditions:

- 1. Jobs **must** be run through the workload management system, i.e. Sun Grid Engine (SGE). Any compute jobs running outside SGE will be terminated automatically.
- 2. You will be making every effort to ensure that your jobs use the requested resources (number of CPU cores, memory, disk space, etc.) as efficiently as possible. Parallel jobs (MPI, Linda, OpenMP, ...) must be tested to make sure they use all cores reserved. Offending jobs will be suspended and help provided by the HPC staff to resolve the misuse issue.
- 3. You agree to take part in a special training (taking approximately one day) held by the HPC stafff. Training sessions will be offered at least one time each semester.
- 4. Your **Login ID** and **password** are the same as for your anonymous university account (e.g., abcd1234). The password can be changed by any of the official ways (e.g., the web site https://pw.uni-oldenburg.de). It is not possible to change the password locally on the cluster. In order to facilitate communication between the users, you consent that all other users of HERO may retrieve your real name using the standard UNIX command finger.
- 5. Storage, data security and backup. The quotas for the user homedirectories are divided into three classes: small (25 GB), medium (50 GB), and large (100 GB). New users usually fall into the "medium" category. For data-intensive research projects, separate space on the storage system has been reserved. The HPC storage system has a snapshot functionality enabling users to restore accidentally deleted files and folders. Moreover, the homedirectories are backed up to tape for disaster recovery. It is not possible to restore single files or directories from the tape backup, though.
 - Despite all reasonable technical efforts, neither the integrity or secrecy of the data nor the protection against data loss can be guaranteed. It is strongly recommended that users keep their own backup copies of important data (e.g., source code).
- 6. The HPC User Wiki (http://wiki.hpcuser.uni-oldenburg.de) provides valuable information and guidelines for use. You acknowledge to read the Wiki regularly and follow the directions therein, as well as any directions you receive via the HPC User E-Mail list.

The above rules and conditions may be changed at any time. Appeals to the General User Policy should be directed to the Advisory Board of the HPC facilities or the HPC Manager.