

Computer facilities

- Your CID accounts are valid in the MT13 Linux computer lab in the M-building. There is no `ssh` access to those computers.
- Remote access can be done through:

```
ssh -XY -l <CID> remote1.student.chalmers.se  
ssh -XY -l <CID> remote2.student.chalmers.se  
ssh -XY -l <CID> remote3.student.chalmers.se  
ssh -XY -l <CID> remote4.student.chalmers.se  
ssh -XY -l <CID> remote5.student.chalmers.se
```

(where `<CID>` is your user name at Chalmers)
- Student accounts and temporary accounts only have 1GB disk. You can use `/scratch` to temporarily store larger files, but they will automatically be removed after 168 hours.
- You should be able to do an `ssh` to your own computing facilities and work there if you like.

Recommended set-up the OpenFOAM environment

In the file `~/.bashrc`, type *on one line*:

```
alias OF16x='export FOAM_INST_DIR=/chalmers/sw/unsup/OpenFOAM;  
    . /chalmers/sw/unsup/OpenFOAM/OpenFOAM-1.6.x/etc/bashrc'
```

Open a new terminal window and type the following:

```
OF16x  
which icoFoam
```

You should get:

```
/chalmers/sw/unsup/OpenFOAM/OpenFOAM-1.6.x/applications/bin/linuxGccDPOpt/icoFoam
```

Test if this works both when doing a remote login and when doing a login in MT13 and opening a new terminal window.

`~/.profile` is used when logging in, and `~/.bashrc` is used when opening a new terminal window, or when running a bash script. You might have to do:

```
cd  
ln -s .bashrc .profile
```

Create the run-directory and find documentation

- In a terminal window, type:

```
mkdir -p $HOME/OpenFOAM/$USER-1.6.x/run
```

This is where you will put your case files.

They may be located elsewhere, but this is the default location.

- The OpenFOAM documentation can be found by typing either of the following:

```
acroread $WM_PROJECT_DIR/doc/Guides-a4/UserGuide.pdf
```

```
acroread $WM_PROJECT_DIR/doc/Guides-a4/ProgrammersGuide.pdf
```

Now we will go through the `icoFoam/cavity` tutorial, in the UserGuide, in detail, to show the basics of using OpenFOAM solvers.