

# Access to computers and OpenFOAM at Chalmers, and the OpenFOAM environment

## Access to computers at Chalmers

- Your CID accounts are valid in all Linux computer labs at Chalmers.
- Remote access can be done through:  

```
ssh -XY -l <CID> remotel1.chalmers.se
```

```
ssh -XY -l <CID> remotel2.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.

## Access to OpenFOAM at Chalmers

**NOTE: Only if you will use the Chalmers installation!**

Set up aliases through `~/ .bashrc` by copy-pasting into a terminal window (only once):

```
echo ". /chalmers/sw/unsup64/OpenFOAM/addToBashrc" >> $HOME/.bashrc
```

Also make `~/ .profile` point at `~/ .bashrc`:

```
ln -s ~/ .bashrc ~/ .profile
```

This makes everything work when doing remote login.

Open a new terminal window and type the following:

```
OF24x  
which icoFoam
```

You should get (something like):

```
/chalmers/sw/unsup64/OpenFOAM/OpenFOAM-2.4.x/platforms/linux64GccDP0pt/bin/icoFoam
```

Also, try opening a new terminal window and type the following:

```
OFextend31  
which icoFoam
```

## Environment variables

- Some useful OpenFOAM environment variables  
(see `$WM_PROJECT_DIR/etc/bashrc`  
and `$WM_PROJECT_DIR/etc/config/settings.sh` in 2.4.x):

```
env | grep WM
```

```
env | grep FOAM_
```

Type `env` for a complete list

- Find out the value of an environment variable by:

```
echo $FOAM_APP
```

# Aliases

- Some useful OpenFOAM aliases

(see `$WM_PROJECT_DIR/etc/config/aliases.sh` in 2.4.x):

```
alias src='cd $FOAM_SRC '  
alias lib='cd $FOAM_LIB '  
alias run='cd $FOAM_RUN '  
alias foam='cd $WM_PROJECT_DIR '  
alias foamsrc='cd $FOAM_SRC/$WM_PROJECT '  
alias foamfv='cd $FOAM_SRC/finiteVolume '  
alias app='cd $FOAM_APP '  
alias util='cd $FOAM_UTILITIES '  
alias sol='cd $FOAM_SOLVERS '  
alias tut='cd $FOAM_TUTORIALS '  
alias foam3rdParty='cd $WM_THIRD_PARTY_DIR '
```

- Type `alias` for a complete list

## Organize user directories and find documentation

- In a FRESH terminal window, type:

```
OF24x
```

```
mkdir -p $WM_PROJECT_USER_DIR/{run,applications,src}
```

- In a FRESH terminal window, type:

```
OFextend31
```

```
mkdir -p $WM_PROJECT_USER_DIR/{run,applications,src}
```

- 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
```

On your laptop you might not have `acroread`, but you should be able to use `evince` or `xpdf` instead.

## PingPong, E-mail, password and wireless

- Communication will be done through PingPong:

<https://pingpong.chalmers.se>

(there are also app's for iPhone and Android)

Log in with CID and its password.

You can get notification by mail, but to the Chalmers address...

- E-mail forwarding for those who will not check Chalmers e-mail:

[http://www.tfd.chalmers.se/~hani/wikis/haniWiki/index.php?title=Tips\\_and\\_tricks/\\_Forward\\_e-mail\\_using\\_Outlook\\_Web\\_App](http://www.tfd.chalmers.se/~hani/wikis/haniWiki/index.php?title=Tips_and_tricks/_Forward_e-mail_using_Outlook_Web_App)

- If you want to change CID password:

<https://cdks.chalmers.se/> (please note the 's' in https)

Log in using CID and password.

- Wireless network NOMAD:

Open a web page (will redirect you to the login page of NOMAD)

Log in with user name <CID>/net, and password on second line of card.

- Wireless network Eduroam:

If your university is connected you should be able to log in as usual.