**Please remember to change “YOURUSERNAME” to your user name on c3ddb and /path/to/private-key to the path to your key to c3ddb**

**My trick for convenient login and transferring jobs:**

**#Add the following to the ~/.bashrc or ~/.bash\_profile (mac) on your local computer**

c3ddb\_key=/path/to/private-key

function c3ddb() {

ssh -i $c3ddb\_key -l YOURUSERNAME c3ddb01.mit.edu

}

function c3ddb2() {

ssh -i $c3ddb\_key -l YOURUSERNAME c3ddb-globus.mit.edu

}

function c3push(){

files="$1"

dir="$2"

rsync -av --progress $files YOURUSERNAME@c3ddb-globus.mit.edu:$dir -e 'ssh -i /path/to/private-key'

}

function c3pull ()

{

files="$1";

dir="$2";

rsync -av --progress YOURUSERNAME@c3ddb-globus.mit.edu:$files $dir -e 'ssh -i /path/to/private-key'

}

**Login**  
  
 c3ddb # only for submitting jobs and transferring files

c3ddb2 # for small jobs  
  
**Upload files**

c3push your\_file directory\_on\_c3ddb

**Download files**

c3pull your\_file\_on\_c3ddb directory\_on\_local\_computer

**Directories**  
  
 /scratch/users/YOURUSERNAME # **main working space**

/home/YOURUSERNAME # very limited space

**My trick for checking and submitting job:**

**#Add the following to the ~/.bashrc on c3ddb**

**# You can change the settings of -c number of threads (default 40), -t time estimation of the job (default 2 days, max 5 days). You can check out their capacities here: https://github-wiki-see.page/m/abiwaters/Getting-Started-on-c3ddb/wiki/How-to-Submit-a-Batch-Job**

function jobmit() {

bashdir="$1"

jobname="$2"

jobtype="$3"

if [ "$jobtype" == big ]; then

sbatch -p sched\_mem1TB -c 40 -t 2-00:00:00 -J $jobname -e $bashdir.err -o $bashdir.out $bashdir

else

if [ "$jobtype" == small ]; then

sbatch -p defq -c 40 -t 2-00:00:00 -J $jobname -e $bashdir.err -o $bashdir.out $bashdir

else

sbatch -p defq,sched\_mem1TB,sched\_mem4TB -c 40 -t 0-12:00:00 -x node325,node310 -J $jobname -e $bashdir.err -o $bashdir.out $bashdir

fi

fi

}

function checkjob() {

jobtype="$1"

if [ "$jobtype" == big ]; then

squeue -a -p sched\_mem1TB

else

if [ "$jobtype" == small ]; then

squeue -a -p defq

else

squeue -u YOURUSERNAME

fi

fi

}

**#Then source ~/.bashrc**

source ~/.bashrc

1. **Submit job requiring big memory or urgent jobs**

jobmit yourbash.sh yourjobname big

1. **Submit normal jobs**

jobmit yourbash.sh yourjobname small

**Or:**

jobmit yourbash.sh yourjobname

1. **Check your jobs**

Checkjob

1. **Check all big jobs**

Checkjob big

1. **Check all small jobs**

Checkjob small

**How to load pre-installed programs:**

module avail # gives you the list of all installed programs

module add /path/program # link the program to your environment – you can now access the program.

**How to check the quota**  
  
 srun lfs quota -u YOURUSERNAME /scratch

**Others**

1. launch an interactive session e.g. on one node with 16 cores  
 and exclusive use of the node  
  
 salloc -N 1 -n 16 -p defq --time=1:00:00 –exclusive

salloc -N 1 -n 16 -p sched\_mem1TB\_centos7 --time=1:00:00 --exclusive

**Tutorials**

<http://www.tchpc.tcd.ie/node/74>