

BG/P in a nutshell

Accounts

usernames: from *aco1se01* to *aco1se12*
password=username

Login

Linux:

```
ssh <username>@login.bgp.cineca.it
```

Windows (i.e. Putty):

On configuration front page, hostname:
<username>@login.bgp.cineca.it
click "Open"

(other SSH terminals for Windows are similar)

Code writing

Vim is available

If you open a graphical session, gedit or emacs can be used

Compiling

```
module load bgp-gnu
```

(default compilers may give programs)

Fortran compiler: mpif90 es1.f -o es1f.x

C compiler: mpicc es1.c -o es1c.x

C++ compiler: mpiCC es1.cc -o es1cc.x

Job script

```
#!/bin/bash
#
# @ job_name = myjob
# @ output = es1c.out
# @ error = es1c.err
# @ job_type = bluegene
# @ wall_clock_limit = 0:30:00
# @ bg_size = 64
# @ class = debug
# @ queue
```

```
mpirun -mode DUAL -np 4 ./es1f.x
```

output: stdout file (where your results will be written)

error: stderr file (where your errors will be written)

wall_clock_limit: maximum running time

bg_size: partition allocated (minimum: 64)

class: debug (your assigned class. Keep *bg_size* 64 and *wall_clock_limit* 30 minutes!)

mpirun: for running parallel jobs

mode: DUAL (2 processes per node) or SVN (4 processes per node)

np: number of actual tasks in use

Job launching

```
llsubmit job.txt
```

the command *llq* displays informations about the jobs situations.

If ST = Q, your job is in queue

if ST = R, your job is running