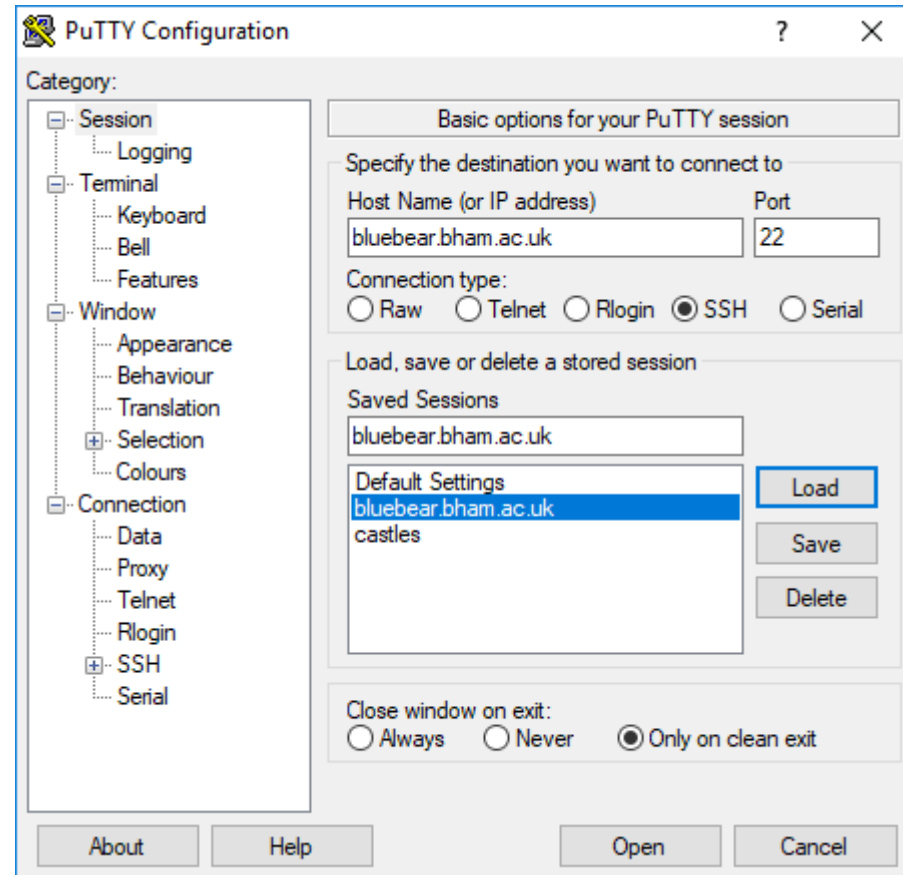
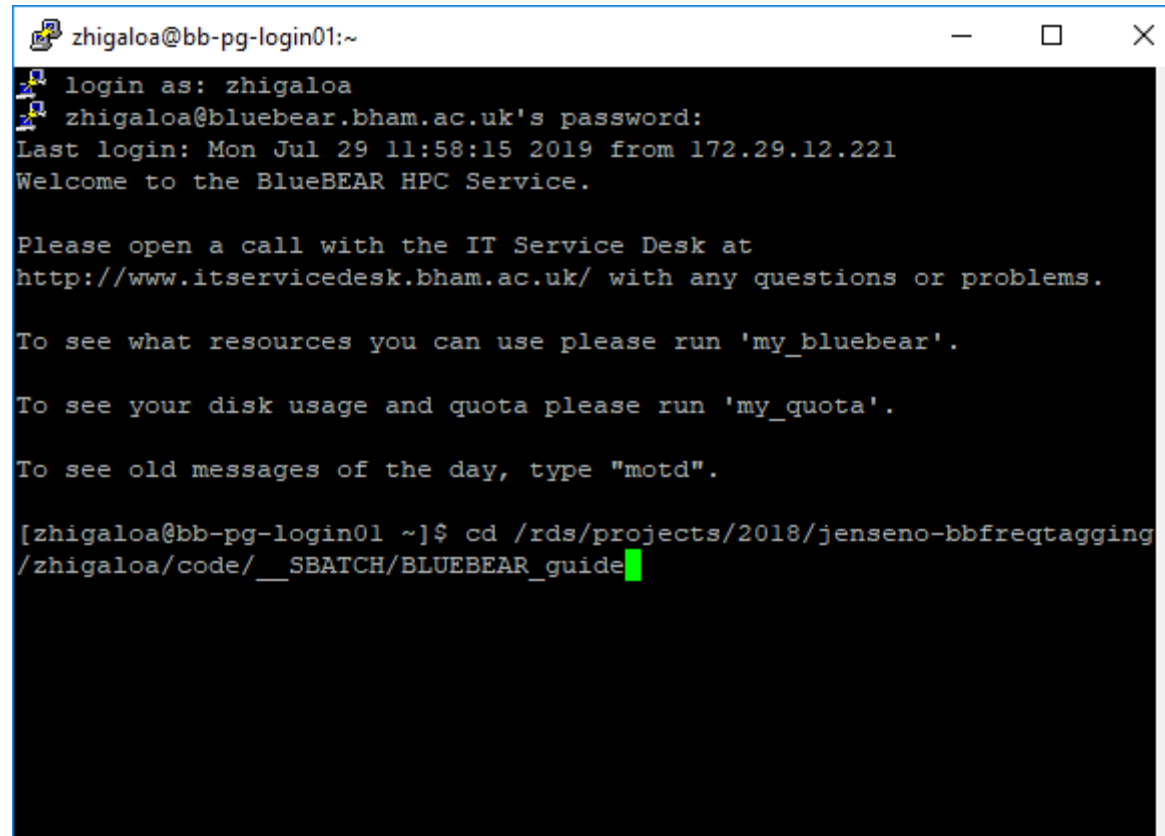


Step 1: Open PUTTY and login to bluebear.bham.ac.uk



Step 2: Select folder with the scripts using “cd” command

A terminal window titled 'zhigaloo@bb-pg-login01:~' with standard window controls. The terminal shows a login sequence for user 'zhigaloo' on 'bluebear.bham.ac.uk'. It displays the last login time and a welcome message. Instructions for using the system are provided, including links to the IT service desk and commands for resource usage. Finally, the user enters a 'cd' command to navigate to a specific project directory, with a green cursor at the end of the command.

```
zhigaloo@bb-pg-login01:~  
login as: zhigaloo  
zhigaloo@bluebear.bham.ac.uk's password:  
Last login: Mon Jul 29 11:58:15 2019 from 172.29.12.221  
Welcome to the BlueBEAR HPC Service.  
  
Please open a call with the IT Service Desk at  
http://www.itservicedesk.bham.ac.uk/ with any questions or problems.  
  
To see what resources you can use please run 'my_bluebear'.  
  
To see your disk usage and quota please run 'my_quota'.  
  
To see old messages of the day, type "motd".  
  
[zhigaloo@bb-pg-login01 ~]$ cd /rds/projects/2018/jenseno-bbfreqtagging  
/zhigaloo/code/__SBATCH/BLUEBEAR_guide
```

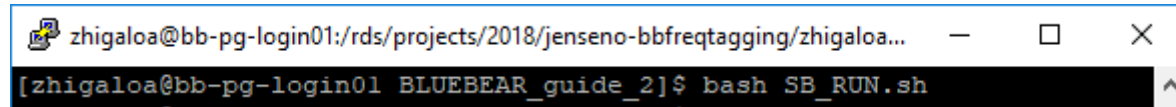
Step 3: In “SB_RUN.sh” (1) set subject indices: **tSubjects=(1 2 5)**; (2) set name of your MATLAB script: **f=“my_script.m”**, (3) set computation time: **t=“12:00:00”** and (4) memory: **m=“16GB”**.

In this example, subjects with indices 1, 2 and 5 are selected; script name is “my_script”; time is 12 hours; memory is 16 GB.

```
d:\code\_SBATCH\BLUEBEAR_guide_2\SB_RUN.sh - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
SB_RUN.sh x
1  #!/bin/bash
2
3  # set parameters
4  declare -a tSubjects=(1 2 5) # subject index
5  f="my_script" # your MATLAB function name
6  t="12:00:00" # time
7  m="16GB" # memory
8
9  # do not change code below this line
10 fname="$f.sbatch"
11 echo "#!/bin/bash" > $fname
12 echo "#SBATCH --ntasks 1" >> $fname
13 echo "#SBATCH --time $t" >> $fname
14 echo "#SBATCH --qos bbdefault" >> $fname
15 echo "#SBATCH --mem $m" >> $fname
16 echo "" >> $fname
17 echo "set -e" >> $fname
18 echo "" >> $fname
19 echo "module purge; module load bluebear" >> $fname
20 echo "module load MATLAB/2018b" >> $fname
21 echo "" >> $fname
22 echo "i=\$1" >> $fname
23 echo "i=\"\${i:1:\${#i}}\" >> $fname
24 echo "" >> $fname
25 echo "matlab -nodisplay -r \"\$f(\${i})\" >> $fname
```

```
d:\code\_SBATCH\BLUEBEAR_guide_2\my_script.m - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
my_script.m x
1  %-----
2  % Function
3  %-----
4  function my_script(i)
5
6  tSubjects = {'KF15', 'ZW01', 'EE78', 'KJ14', 'WQ20', 'DF10'};
7              1       2       5
8  fprintf(1, 'Processing ... %s\n', tSubjects{i});
9
10 end % end
11
12 %-----
13
```

Step 4: Use command “bash SB_RUN.sh” to launch script for all subjects.

A terminal window with a title bar showing the user 'zhigaloe' and the current directory. The terminal text shows the user at the prompt typing the command to run the script.

```
zhigaloe@bb-pg-login01:/rds/projects/2018/jenseno-bbfreqtagging/zhigaloe...  
[zhigaloe@bb-pg-login01 BLUEBEAR_guide_2]$ bash SB_RUN.sh
```

Step 5: After some time (when resources on Bluebear become available) two output files (per subject) will be created in the script folder: *.out and *.stats.

In this example, “slurm-6188956.out” contains MATLAB script output and “slurm-6188956.stats” some extra info.

```
Listner - [z:\zhigaloe\code\_SBATCH\BLUEBEAR_guide\slurm-6188956.out]
File Edit Options Encoding Help
Java/1.8.0_152
MATLAB/2018b
Opening log file: /rds/homes/z/zhigaloe/java.log.36176

          < M A T L A B (R) >
    Copyright 1984-2018 The MathWorks, Inc.
      R2018b (9.5.0.944444) 64-bit (glnxa64)
        August 28, 2018

To get started, type doc.
For product information, visit www.mathworks.com.

Processing ... KF15
```

```
Listner - [z:\zhigaloe\code\_SBATCH\BLUEBEAR_guide\slurm-6188956.stats]
File Edit Options Encoding Help
100 %
+-----+
| Job on the BlueBEAR cluster:
| Starting at Thu Aug  1 09:47:04 2019 for zhigaloe(607737)
| Identity jobid 6188956 jobname SB_RUN.sh
| Running against project chiou-s-meg-posture and in partition cascadelake-shared
| Requested cpu=1,mem=16GBnode=1,billing=1 - 12:00:00 walltime
| Assigned to nodes bear-pg0211u07b
| Command /rds/projects/2018/jenseno-bbfreqtagging/zhigaloe/code/_SBATCH/BLUEBEA
R_guide/SB_RUN.sh
| WorkDir /rds/projects/2018/jenseno-bbfreqtagging/zhigaloe/code/_SBATCH/BLUEBEA
R_guide
+-----+
+-----+
| Finished at Thu Aug  1 09:47:27 2019 for zhigaloe(607737) on the BlueBEAR
Cluster
| Required () - 00:00:23 walltime
| JobState COMPLETING - Reason None
| Exitcode 0:0
+-----+
|
```