USING THE SHARED COMPUTING CLUSTER TO SUBMIT R JOBS

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- First, see Marc Rysman's website to get an account
  - Also on his website, on the "Slides", you'll find instructions to download the necessary software
- Create a batch file. See the next page for an example.
- Save the batch file as a .txt file (rbatch.txt, for example)
- Open FileZilla and log in:
  - Host: scc1.bu.edu
  - Port: 22
  - → Quickconnect
- Upload your .R file and your batch file (rbatch.txt, for example)
- Open X11 (for Mac) or X-Win32 (for PC)
- Log in to the SCC server:
  - ssh *yourUsername*@scc1.bu.edu
  - When requested, enter your password
- Type chmod u+x rbatch.txt (or whatever the name of your batch file is)
  - This will (ch)ange the (mod)e of yo(u)r batch file to e(x)ecutable
- Type qsub -P econdept rbatch.txt
- Wait for an email confirming that your job has finished
- The log file is now accessible via FileZilla in your scc1 directory
- Visit http://www.bu.edu/tech/about/research/computation/scc/ for further assistance.

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```
#!/bin/sh

# Note: A line of the form "#$ qsub_option" is interpreted
#       by qsub as if "qsub_option" was passed to qsub on
#       the commandline. A line of the form "# COMMENT" is
#          interpreted as a comment.

# Set the runtime limit to 2 hours
#$ -l h_rt=2:00:00
Merge output files to reduce clutter
#$ -j y
# Name the standard output and error file
#$ -o example.qlog

echo "============================================================"
echo "Starting on : $(date)"
echo "Running on node : $(hostname)"
echo "Current directory : $(pwd)"
echo "Current job ID : $JOB_ID"
echo "Current job name : $JOB_NAME"
echo "Task index number : $SGE_TASK_ID"
echo "============================================================"

# Run the job. Here, example.R is the name of the .R file.
R --vanilla < example.R  > output.Rout

echo "============================================================"
echo "Finished on : $(date)"
echo "============================================================"
```