Using Stata13 MP16 on Grace HPC

We are pleased to confirm that you are able to take advantage of Stata13 MP16 - Multiprocessor Version on Grace HPC. This guide assumes that you already have an account to use Grace. If you don't please complete an application form from the following link

Getting Started

- Logon to grace either via Putty (Windows) or directly from the terminal if you are using Linux/OS X.

Creating a Jobscript

As Grace uses a Linux based operating system, it is better to create your jobscripts directly on the cluster. This ensures that you don't get errors, whilst submitting or running jobs on the cluster. This is due to file formatting which differs significantly between Windows and Linux.

If you have files which were created under Windows and you want to make them Linux friendly, it is possible to use the "dos2unix" utility on grace, which will convert the formatting on the file to a Linux based format. If you wish to convert a file to a Linux friendly format you can use the command:

- **dos2unix filename.txt** (Image 1)

Image 1


```
[yny12fgu@login00 ~]$ dos2unix filetoconvert.txt
dos2unix: converting file filetoconvert.txt to UNIX format ...
[yny12fgu@login00 ~]$
```

Full details can be found by entering: (from the terminal)

- **man dos2unix**

To create a jobscript directly on the cluster follow the instructions below.

We have various different text editors available on the cluster. However we tend to recommend using **nano.** Further information on basic Linux commands and editors can be found from the following <u>link</u>

- Type **nano jobscriptname.bsub** (Image 2)
- Create your jobscript as outlined below in the example (configuring where appropriate –Image 3)
- Save the file "**Ctrl**+**x**" then enter "**y**" and then hit "**enter**" (Image 4)
- Having created a jobscript file, this can now be used as your submission script.

Stata12 MP16 Jobscript Example

```
----------------------------------------------------------------
#!/bin/sh
 #BSUB -B
 #BSUB -N
 #BSUB -q short
 #BSUB -x
 #BSUB -R 'select[sandy]'
 #BSUB -J model1_job
 #BSUB -oo model1-%J.out
 #BSUB -eo model1-%J.err
. /etc/profile
module add stata/13
 stata-mp -b do Modelfile.do
----------------------------------------------------------------
```
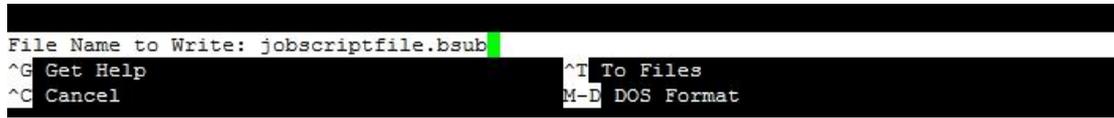
Image 2

Image 3

Image 4

Submitting a Jobscript

To submit a jobscript:
- Type **bsub < jobscriptname.bsub**
- You should get verification at the terminal, that the job has been submitted (Image 5)
- Your job should now run as detailed in your submission script
- Due to adding the –B and –N directive to the submission file, you will also get notified by email when the job starts and finishes. (Image 6)
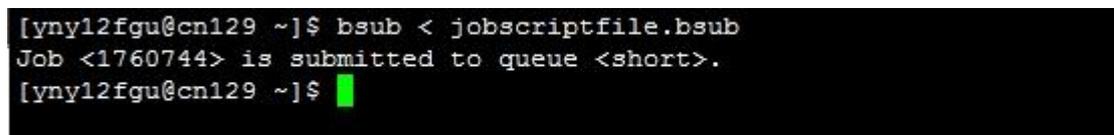
Image 5

Image 6