Use of Research Computer Facilities at R. H. Smith School of Business

Getting access to the servers
To take advantage of this facility, users should email rcsupport@rhsmith.umd.edu with the following info. If the request is approved, further notification for details on accessing the servers using secure shell, X-emulation etc. would be emailed. Please allow 2-3 working days for the application to be processed.
-- A brief description of the research project
-- HW requirements like how much memory, CPU and storage requirements
-- Duration of the project
-- Software requirements

The login name and password are those of the user at the University of Maryland common login Directory ID (e.g. as used at ELMS, the library, payroll records, registrar etc.).

Etiquette for use of the machine
The machines are shared between all faculty and PhD students at Smith and therefore it is important that users show respect for one another. In particular, it is not acceptable for any user to hog more than their fair share of the machine's resources, for example, by running multiple simultaneous jobs when others are waiting, or filling the disc drives with files that could be deleted.

There is no formal limitation of the number of jobs that users can run simultaneously and, in practice, a user can run as many simultaneous jobs as they wish. For example, it may be that a user wishes to run 4 jobs that are each expected to take 2 hours to run. Rather than run the jobs sequentially at 2 hour intervals it may be more convenient to start the jobs simultaneously. Each job might now take 8 hours because each will only have 25% of the processor's capacity, but if the jobs are set to run overnight, without inconveniencing any other user, there is no reason why this approach should not be adopted.

However, overall, users are responsible for ensuring that running multiple simultaneous jobs does not unduly inconvenience other users. If running jobs simultaneously required when other users are running jobs, the simultaneous jobs should be 'nice'd so that they do not hog too many resources.

Backup and disk space
Each user will have a home directory that has a capacity (5.0 GB for all users and is AFS space). These directories are backed up regularly so that files can be recovered from backup facilities in the event of errors arising in the current version of the file (or its accidental deletion). Data that require more storage space than this limit should be stored on temp/scratch volumes in the /export/data/bmgtdata directory. (A soft link can be created so that the user's directory on this drive appears as a sub-directory to the user’s home directory.)
Though the system is designed with a high-level of fault tolerance, Smith IT cannot guarantee that the system will never be subjected to a catastrophic failure. There could be events of hardware failure that can cause data loss and systems inaccessible for longer duration.

Please always consider how you would mitigate data loss in the event of a hardware failure. Users are responsible for backing up their data. The storage space being provided is scratch space to be used during data analysis. Users should regularly backup or archive all data they keep on the server.

There are many possible solutions to enable backup from the user's work directory. One method that existing users have used is to use a program such as SuperFlexibleFileSynchronizer (www.superflexible.com) which can run on either a MSwindows, Mac or linux platform and can backup the user's files from servers, via sftp, to the user's own desktop computer.