

# Gadi Quick Reference Guide

<b>Filesystems</b>	
/home	Backed up. 10 GiB fixed quota per user.
/scratch	Not backed up, temporary files, auto purge policy applied.
/g/data	Not backed up, long-term large data files.
/apps	Read only, centrally installed software applications and their module files.
\$PBS_JOBFS	Not backed up, local to the node, I/O intensive data.
massdata	Backed up, archiving large data files.
man mdss	Read manual of all `mdss` commands
mdss dmls -l	List files with status: online/in disk cache(REG), on tape(OFF), or both (DUL)
mdss put/get	Put or retrieve files from mdss
<b>Accounting</b>	
nci_account	Display compute grant and usage
quota -s	Display storage grant and usage on /home
lquota	Display storage grant and usage on /scratch and /g/data by project
nci-files-report -f <fs> -g <grp>	Report data usage on filesystem <fs> owned by the project <grp> by (project folder, user)
<b>Module command</b>	
module avail	List all available modules
module load <app>/<ver>	Load the module for application <app> version <ver>
module unload <app>	Remove the module for application <app> from the current shell
module show <app>/<ver>	Show what the module <app>/<version> does
module list	List all modules loaded in the current shell
<b>PBSPro command</b>	<b>Run commands in this section with the frequency &lt; 0.2 Hz</b>
qsub job.sh	Submit job defined in the submission script job.sh
qdel <jobid>	Delete the job with jobID <jobid>
qstat -swx <jobid>	Display the job status in the queue with comment
qstat -fx <jobid>	Display full job status information
qps <jobid>	Take a snapshot of the process status of all current processes in the running job
qcat [-s/-o/-e] <jobid>	Display [submission script/STDOUT/STDERR] of the running job

q1s <jobid>	List contents in the folder \$PBS_JOBFS
qcp <jobid> <dst>	Copy files and directories from the folder \$PBS_JOBFS to the destination folder <dst>
<b>PBSPro Directives</b>	
#PBS -P <prj>	Project for job debiting, /scratch project folder access and data ownership
#PBS -q <queue>	Submit the job to the queue <queue>
#PBS -l ncpus=<xx>	Request <xx> CPU cores
#PBS -l storage=<scratch/prj1+gdata/prj2+massdata/prj3>	Storage needed to be available inside the job. massdata is only available in copyq jobs.
#PBS -l ngpus=<yy>	Number of GPUs, ncpus has to be 12 x ngpus and the job has to be submitted to `gpuvolta`.
#PBS -l walltime=<hh:mm:ss>	Max walltime the job would run
#PBS -l mem=<10GB>	Memory allocation
#PBS -l jobfs=<40GB>	Disk allocation on compute/copyq node(s)
#PBS -l software=<app1,app2>	Licenses required
#PBS -l wd	Start the job from the directory in which it was submitted
#PBS -W depend=beforeok:<jobid1,jobid2>	Set dependencies between this and other jobs.
#PBS -a <YYMMhhmm>	Time after which the job is eligible for execution
#PBS -M <email@example.com,email2@anu.edu.au>	List of receivers to whom email about the job is sent
#PBS -m <aben>	Email events. `a` for abortioin, `b` for begin, `e` for end, `n` for none
<b>Useful URLs</b>	
User & Project Management	<a href="http://my.nci.org.au">my.nci.org.au</a>
Knowledge Base	<a href="http://opus.nci.org.au">opus.nci.org.au</a>
Training Course	<a href="http://learning.hpc-australia.org.au">learning.hpc-australia.org.au</a>
Service Desk Portal	<a href="http://help.nci.org.au">help.nci.org.au</a>
License Live Status	<a href="http://usersupport.nci.org.au/license-status.html">usersupport.nci.org.au/license-status.html</a>