Useful PBS admin commands

* qstat

* showq

* qmgr

* diagnose
maui's current tables for important metrics
-f: fairshare
-p: priority

* pbsnodes

* qsummary

* idle_nodes
- displays the nodes that have $1 (or more) cpus free (default 1 or more)

* checkjob

* checknode

* showstate

* showstats

* qalter
- alter the parameters of a job. Usually applies to a job that is in the Q state and you want to
change values (like cpu-time, target nodes) before it runs

* qhold
- put a hold on a job before it starts running (applies to job in Q state)

* qrun -H
- force to run a job on a particular node

qsub #submit a job, see man qsub
qdel -p jobid #will force purge the job if it is not killed by qdel
qdel_all #kill all jobs & stop PBS server.
#Run this before shutdown of cluster nodes.
#When all nodes are up again, do@feynman service pbs restart
qsummary #lists summary of jobs/user
qstat #list information about queues and jobs
showq #calculated guess which job will run next

xpbs #GUI to PBS commands
qstat -q #list all queues on system
qstat -Q #list queue limits for all queues
qstat -a #list all jobs on system
qstat -au userid #list all jobs owned by user userid
qstat -s #list all jobs with status comments
qstat -r #list all running jobs
qstat -f jobid #list full information known about jobid
qstat -Qf queueid #list all information known about queueid
qstat -B #list summary information about the PBS server
qstat -iu userid #get info for jobs of userid
qstat -n -1 jobid #will list nodes on which jobid is running in one line
pbsnodes -l #will list nodes which are either down or offline
checknode node034 #will list status of node034 including jobids on that node
checkjob jobid #will list job details