

Quick Guide to translating features from Torque/MOAB to SLURM

| User Commands | PBS/Torque | Slurm |
|------------------------------|----------------------------|--|
| Job submission | qsub [script_file] | sbatch [script_file] |
| Job deletion | qdel [job_id] | scancel [job_id] |
| Job status (by job) | qstat [job_id] | squeue [job_id] |
| Job status (by user) | qstat -u [user_name] | squeue --user=[user_name] |
| Job hold | qhold [job_id] | scontrol hold [job_id] |
| Job release | qrls [job_id] | scontrol release [job_id] |
| Queue list | qstat -Q | Squeue |
| Node list | pbsnodes -l | sinfo --Node OR scontrol show nodes |
| Cluster status | qstat -a | sinfo |
| Environment Variables | | |
| Job ID | \$PBS_JOBID | \$SLURM_JOBID |
| Submit Directory | \$PBS_O_WORKDIR | \$SLURM_SUBMIT_DIR |
| Submit Host | \$PBS_O_HOST | \$SLURM_SUBMIT_HOST |
| Node List | \$PBS_NODEFILE | \$SLURM_JOB_NODELIST |
| Job Array Index | \$PBS_ARRAYID | \$SLURM_ARRAY_TASK_ID |
| Job Specification | | |
| Script directive | #PBS | #SBATCH |
| Queue | -q [queue] | --partition=[queue] |
| Node Count | -l nodes=[count] | --nodes=[min[-max]] |
| CPU Count | -l ppn=[count] | --ntasks-per-node=[count] |
| Wall Clock Limit | -l walltime=[hh:mm:ss] | --time=[min] OR --time=[days-hh:mm:ss] |
| Standard Output File | -o [file_name] | --output=[file_name] |
| Standard Error File | -e [file_name] | --error=[file_name] |
| Combine stdout/err | -j oe (both to stdout) | (Default if you don't specify --error) |
| Copy Environment | -V | --export=[ALL NONE variables] |
| Event Notification | -m abe | --mail-type=[events] |
| Email Address | -M [address] | --mail-user=[address] |
| Job Name | -N [name] | --job-name=[name] |
| Job Restart | -r [y n] | --requeue OR --no-requeue |
| Working Directory | N/A | --workdir=[dir_name] |
| Resource Sharing | -l naccesspolicy=singlejob | --exclusive OR --shared |
| Memory Size | -l mem=[MB] | --mem=[mem] [M G T] OR --mem-per-cpu=[mem] [M G T] |
| Account to charge | -W group_list=[account] | --account=[account] |
| Tasks Per Node | -l mppnppn [PEs_per_node] | --tasks-per-node=[count] |
| CPUs Per Task | | --cpus-per-task=[count] |
| Job Dependency | -d [job_id] | --depend=[state:job_id] |
| Job Project | | --wckey=[name] |
| Job host preference | | --nodelist=[nodes] AND/OR --exclude=[nodes] |
| Quality Of Service | -l qos=[name] | --qos=[name] |
| Job Arrays | -t [array_spec] | --array=[array_spec] |
| Generic Resources | -l other=[resource_spec] | --gres=[resource_spec] |
| Licenses | | --licenses=[license_spec] |
| Begin Time | -A "YYYY-MM-DD HH:MM:SS" | --begin=YYYY-MM-DD[THH:MM[:SS]] |

<http://slurm.schedmd.com/rosetta.html>

Long options listed for clarity. See man pages for shorthand.