

O2, SLURM and LMOD Cheatsheet

LMOD commands

- module list** *List all currently loaded software packages*
- module avail** *List all available software packages on O2*
- module spider** **<software>** *Retrieve information on a software package*
- module load** **<software_to_load>** *Load a software package*
- module swap** **<software_to_unload>** **<software_to_load>** *Exchange two software packages*
- module unload** **<software_to_unload>** *Unload a software package*
- module purge** *Unload all currently loaded software packages*

SLURM Directives

Partitions -p				
Partition	Priority	Max Runtime	Max Cores	Limits
interactive	14	12 Hours	20	2 Job Limit
priority	14	30 Days	20	2 Job Limit
highmem	12	5 Days	20	420 GiB (total)
short	12	12 Hours	20	
medium	6	5 Days	20	
long	4	30 Days	20	
transfer	1	5 Days	4	

- E-mail Address** **--mail-user**
--mail-user=<email_address>
<email_address>: E-mail address for notifications to be sent to
- E-mail Notification** **--mail-type**
--mail-type **[ALL, BEGIN, END, TIME_LIMIT_ZZ]**
(requires --mail-user is specified)
 - ALL**: Sends an e-mail when job begins and ends
 - BEGIN**: Sends an e-mail when job begins
 - END**: Sends ane-mail when job ends
 - TIME_LIMIT_ZZ**: Sends an e-mail when job gets to **ZZ** percent of the time limit

- Time** **-t**
-t **HH:MM:SS** or **-t** **DD-HH:MM**
 - DD**: Days
 - HH**:Hours
 - MM**: Minutes
 - SS**: Seconds
- Memory** **--mem**
--mem **XG**
X: Number of Gibibytes (~Gigabyte)

- Cores** **-c**
-c **Y**
Y: Number of cores
- Standard Error** **-e**
-e **<filename>**
<filename>: File to write the Standard Error to
- Standard Output** **-o**
-o **<filename>**
<filename>: File to write the Standard Output to
- Dependencies** **--dependency**
--dependency=afterok:<jobid>
<jobid>: Job ID that the submitted job is dependent on completing successfully

Job Managment

- Open Interactive Job**
srun --pty -p interactive -t **HH:MM:SS** **--mem** **XG** **-c** **Y** **bash**
- sbatch** **<submission_script>** *Submit a job*
- scancel** **<jobid>** *Cancel job*
- O2squeue** *Display jobs*
- O2_jobs_report** *Display a summary report with per-job information*

O2 Storage Options

Storage Name	Capacity	Back-up
/home	100GiB (~107GB)	Snapshots daily to 14 days, weekly up to 60 days
/n/data1, /n/data2, /n/groups	Expandable	Snapshots daily to 14 days, weekly up to 60 days
/n/scratch/	25 TiB (~27TB) and 2.5 Million files	None