

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 an e-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 Management

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