

Title

Cool Staff Members use L^AT_EX
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About Something



NeSI

New Zealand eScience
Infrastructure

About Something

About Something

- one
- two
- three
- four

About Something

About Something

- ① one
- ② two
- ③ three
- ④ four

Submitting a Job

Job Description Example : SMP

```
#!/bin/bash
#SBATCH -o /share/src/app/example/app-%j.%N.out
#SBATCH -D /share/src/app/example
#SBATCH -J MIGRATESMP
#SBATCH --get-user-env
#SBATCH --ntasks=1
#SBATCH --cpu_bind=core
#SBATCH --export=NONE
#SBATCH --time=08:00:00
ml load migrate/3.4.4-smp
export OMP_NUM_THREADS=4
srun migrate-n-thread parmfile.testml -nomenu
```

Submitting a Job

Job Description Example : MPI

```
#!/bin/bash
#SBATCH -o /share/src/app/example/app-%j.%.N.out
#SBATCH -D /share/src/app/example
#SBATCH -J MIGRATEMPI
#SBATCH --get-user-env
#SBATCH --ntasks=2
#SBATCH --cpu_bind=core
#SBATCH --export=NONE
#SBATCH --time=08:00:00
ml load migrate/3.4.4-mpi
srun migrate-n-mpi parmfile.testml -nomenu
```

Submitting a Job

Parametric Job

To submit 50,000 element job array

```
sbatch -array=1-50000 -N1 -i jobin_%a -o jobout_%a job.sh
```

Submit time < 1 second

"%a" in file name mapped to array index

Additional environment variable with array index:

```
SLURM_ARRAY_TASK_ID
```


Submitting a Job

Parametric Job

The management is really easy:

```
$ queue
```

```
JOBID PARTITION NODESLIST(REASON)
```

```
123_[2-50000] debug (Resources)
```

```
123_1 debug tux0
```

```
$ scancel 123_[40000-50000]
```

```
$ scontrol hold 123
```

Questions & Answers

