Slurm Command Reference

Command	Purpose	Example
sinfo	View information about Slurm nodes and partitions	sinfo --partition investor
squeue	View information about jobs	squeue -u myname
sbatch	Submit a batch script to Slurm	sbatch myjob
scancel	Signal or cancel jobs, job arrays or job steps	scancel jobID
srun	Run an interactive job	srun --ntasks 4 --partition investor --pty bash

<u>Useful Slurm Bash Aliases:</u>
alias sq="squeue -o \"%8i%12j%4t%10u%20q%20a%%20P%%5D%R\""
alias si="sinfo -o \"%20P%8D%16F%8z%10m%N\""
<u>Useful FIU HPC Commands:</u>
hpcusage - View your accounts and usage for the current month
Common options to use in your sbatch submission scripts.

sbatch option	Purpose
#SBATCH --qos	Request access to the resources available to your group
#SBATCH --account	Charge resources used by this job to specified account
#SBATCH --partition	Place your job in the group of servers appropriate for your request
#SBATCH --nodes	Specify the number of nodes to be allocated to this job
#SBATCH --ntasks	Specify number of tasks for this job (default is 1 core per task)
#SBATCH --ntasks-per-node	Request that *ntasks* be invoked on each node.
#SBATCH --cpus-per-task	Specify number of cores for each task (default is 1 core per task)
#SBATCH --mem	Total memory requested for this job (Specified in MB)
#SBATCH --mem-per-cpu	Memory required per allocated core (Specified in MB)
#SBATCH --job-name	Name for the job allocation that will appear when querying running jobs
#SBATCH --output	Direct the batch script's standard output to the file name specified. The default is "slurm-%j.out", where "%j" is the job ID.
#SBATCH --error	Direct the batch script's error output to the file name specified.
#SBATCH --mail-type	Notify user by email when certain event types occur. Valid *type* values are BEGIN, END, FAIL

LSF to Slurm Command Reference

LSF Command	Slurm Command
bsub < myjob.sub	sbatch myjob.sub
bhosts	sinfo
bjobs	squeue -u username
bjobs -l <jobID>	scontrol show job <jobID>
bkill <jobID>	scancel <jobID>

Monitoring HPC usage

With LSF you would view the file ADMIN_usage in your home directory.
With Slurm you can run the command "**hpcusage**" to view your available and used resources.

LSF to Slurm Batch Script Reference

Note: Slurm submission scripts require a shell declaration as the first line. They will not run without this. Example:
#! /bin/bash

Description	**LSF**	**Slurm**
Scheduler directive	#BSUB	#SBATCH
Place job in queue	-q PQ_mygroup	--qos=pq_mygroup
		--account=acc_mygroup
Select group of servers	-m "IB_16C_96G"	--partition=IB_16C_96G
Select # of servers for job	-nnodes 2	--nodes=2
Processor count	-n 16	--ntasks=16
		--cpus-per-task=1
Processes per node	-R "span[ptile=16]"	--tasks-per-node=16
Job name	-J myjob	--job-name=myjob
Output file	-o out	--output=out
Error file	-e err	--error=err