

mycscons on Mio

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- We can use `srun` to submit to the cluster
 - This allows us to batch submit scripts
 - However, we have another option for m8r

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- We can use `./mycscons` to submit an SConstruct to the cluster

Some helpful tools

- Submit a job
 - `./mycscons` submits the SConstruct in that location
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 - `./mycscons` submits the SConstruct in that location
 - Option: `-f filename` if you have other naming conventions
- Submitting in this way automatically lists where log and error files go
 - They live in your scratch directory

When a job is running

- Using `squeue` shows all running jobs on the cluster
 - Adding `-u username` filters on that *username*
 - Probably a good idea to alias in your `~/ .bashrc`
 - `alias sq="squeue -u username"`

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 - `alias sq="squeue -u username"`
- Also shows the task number
 - If you have a job that hangs or is incorrect, rather than waiting you should cancel it:
 - `scancel #####` (← the task number!)

When a job is running

- It is not possible to simply log into a compute node and run a task!!!
 - Slurm allocates resources for us
 - This is to avoid conflicts with other users
- However, once resources are allocated to your job, you can log into that node to QC
 - Usually not necessary

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- If you have a larger compute job not appropriate for the head node, you can request a resource for command line operations
 - `srun -n12 --pty bash -i`
 - Requests a 12 cpu node with taskname “bash” for an interactive job
- This is not a standard request
 - Remember to exit the interactive job when finished or you will hold the node!