FSU | RESEARCH COMPUTING CENTER
INFORMATION TECHNOLOGY SERVICES

Connecting to the HPC

- To access the HPC, you must have an RCC account: https://its.fsu.edu/research/rcc-user-accounts.
- If off campus, connect to the university VPN: https://rcc.fsu.edu/vpn

Option 1: Open OnDemand (Web Portal)

Visit Open OnDemand: https://ood.rcc.fsu.edu
Log in with RCC credentials

Option 2: SSH (Command Line)

Enter the following command in the terminal:

```
$ ssh <USERNAME>@hpc-login.rcc.fsu.edu
```

HPC Terminology

Concept	Quick Explanation
Login Node	Where you connect after logging in
Compute Node	Where jobs actually run
Scheduler	Allocates resources for job submissions (Slurm)
Modules	Loads paths to existing compilers and software on HPC

Submitting Jobs

Sample Slurm Script:

```
#!/bin/bash
#SBATCH --job-name='my-job'    # <- Job name
#SBATCH -n 32                  # <- Request 32 cores
#SBATCH -t 2-04:30:00          # <- Max runtime: 2 days, 4.5 hours
#SBATCH -A genacc_q            # <- genacc_q Slurm account
#SBATCH --mem-per-cpu=3.9G     # <- Allocate memory per CPU
#SBATCH -N 1                   # <- Request 1 compute node

module load gnu                # <- Load the enviroment module
srun <my_executable>           # <- Run the executable
```

Submit a job:

```
$ sbatch myscript.sh
```

Check job status:

```
$ squeue --me
```

Common Commands

Task	Command
See available modules	`module avail`
Load module	`module load <module>`
Search for a module	`module spider <module>`
Check jobs	`squeue --me`
Cancel a job	`scancel <jobID>`
List loaded modules	`module list`
Unload a module	`module unload <module>`
Purge all modules	`module purge`
View my jobs	`rcctool my:jobs`

Debugging Checklist

Job won't run?

- Did you load the correct modules?
- Did you request enough time/memory?
- Are file paths correct (use absolute paths)?
- Did you check your '.log' and '.err' output files?

Common Errors

Symptom	Likely Cause	Potential Solution
'command not found'	software not installed or module not loaded	install the software or 'module load <module>'
'permission denied'	file permissions	'chmod' your files
job stays in 'PENDING'	no resources	reduce request or keep waiting

Getting Help

Resource	Contact/Link
Documentation Website	https://docs.rcc.fsu.edu
Workshop Archive	https://docs.rcc.fsu.edu/workshops
HPC Driver's Ed	https://docs.rcc.fsu.edu/driversed
RCC YouTube	www.youtube.com/@fsurcc

For specific questions or additional support, send an email to
support@rcc.fsu.edu