Supercomputer Sim Checklist & Helpful Commands

Checklist Before Running

In SLURM file

1. Update time
2. Update title to name of function you are running in R file
3. Update array, cpus-per-task, mem-per-cpu
4. Make sure number of nodes in array equal to number you are requesting in R file
5. Make sure time requested is correct

WinSCP

1. Upload R file (both helper functions and simulations) to server
2. Upload SLURM file to server

Putty

1. Set current directory
2. Run correct SH file

Order of Arguments Passed

1. Function name
2. Job number
3. Number of cores per job
4. Number of Jobs
5. Name of compute server

Running on Login Node

1. Load Modules
    a. **Cedar:** module load StdEnv gcc/9.3.0 r/4.1.0
    b. **Niagara:** module load CCEnv StdEnv gcc/9.3.0 r/4.1.0
2. Run R script
    a. Rscript scriptname.R arg1 arg2 arg3 arg4 arg5

Running via CMD Batch on Mercury

R CMD Batch '—args arg1 arg2 arg3 arg4 arg5' scriptname.R outfilename.out &

Running via SLURM on Niagara/Cedar

sbatch slurmfile.sh

Screen

screen -S <name of the session> # new screen
ctrl+A, ctrl+D # detach
screen -ls # To view all existing screen session type
screen – R # To reconnect to an existing screen session
screen -r <name of session> # Reconnect specific screen
screen -X -S <name of session> quit # Kill specific screen

Debug Node on Niagara

debugjob --clean 1