Introduction to Kamiak
Follow Along

Transferring Files to and from Kamiak

Copy from Kamiak to your laptop
Terminal >> New Window  (for Windows, Start >> Ubuntu)
scp -r your.name@kamiak.wsu.edu:/opt/apps/samples/training .
ls -l training

Copy from your laptop to Kamiak
scp -r training your.name@kamiak.wsu.edu:~/

Synchronize
rsync -rvx training/ your.name@kamiak.wsu.edu:~/training

Logging into Kamiak

Log into Kamiak
Terminal >> New Window  (for Windows, Start >> Ubuntu)
ssh your.name@kamiak.wsu.edu
exit

Submitting Batch Jobs to Kamiak

Log back into Kamiak
ssh your.name@kamiak.wsu.edu

Setup only for this training
cd training
. setup.sh

Create/edit a job script
cat myJob.sh

Submit the job script
sbatch  myJob.sh  # To test: sbatch --test-only myJob.sh

View the job queue
squeue -u your.name  # Shows pending and running jobs
squeue -j jobNumber
See output
cat myJob*.out

Cancel the job
scancel jobNumber

View job history and details
sacct -S 10/26/20 -u your.name  # Past job history
scontrol show job jobNumber       # Job details

Viewing Information about the Cluster

What partitions and nodes are available
sinfo -a | more                  # Availability (alloc, idle, mix)

View all running and queued jobs
squeue -a | more                 # Queued jobs for all partitions

View node details
scontrol show node cn93         # Amount of memory, cpus, GPUs

Interactive Jobs

idev -N 1 --ntasks=1 --cpus-per-task=2 -t 360
module avail
module load python/2.7.15
module list
python -i
    print "Hello World!"
    exit()
srun -l python helloWorld.py
exit
Job Arrays

cat jobArray.sh
sbatch jobArray.sh
squeue -u your.name
cat output/myJobArray*.out
scancel jobNumber

Using Available Software on Kamiak

module avail python3 # See available python3 modules
module load python3 # Load latest version
module list # See loaded modules
module unload python3 # Unload a module
module load python3/3.4.3 # Load specific version (recommended)
module list # See loaded modules
module avail # Available modules compatible with compiler
module spider # See all modules
module whatis anaconda3 # See what a module does
module help anaconda3 # See help for a module
which python3 # See that python is in your path
printenv PATH # See effects of loading modules
printenv LD_LIBRARY_PATH

Using Scratch Storage

export myscratch="$(mkworkspace)"
echo $mycratch
export myscratch="$(mkworkspace -b /local)"
lsworkspace -v

Getting Help

hpc.wsu.edu  Support & Zoom Help Desk Hours
hpc.wsu.edu/cheat-sheet User’s Guide / Kamiak Cheat Sheet
hpc.wsu.edu/training.slides
hpc.wsu.edu/training/follow-along