

Wulver Cluster Tools & Monitoring

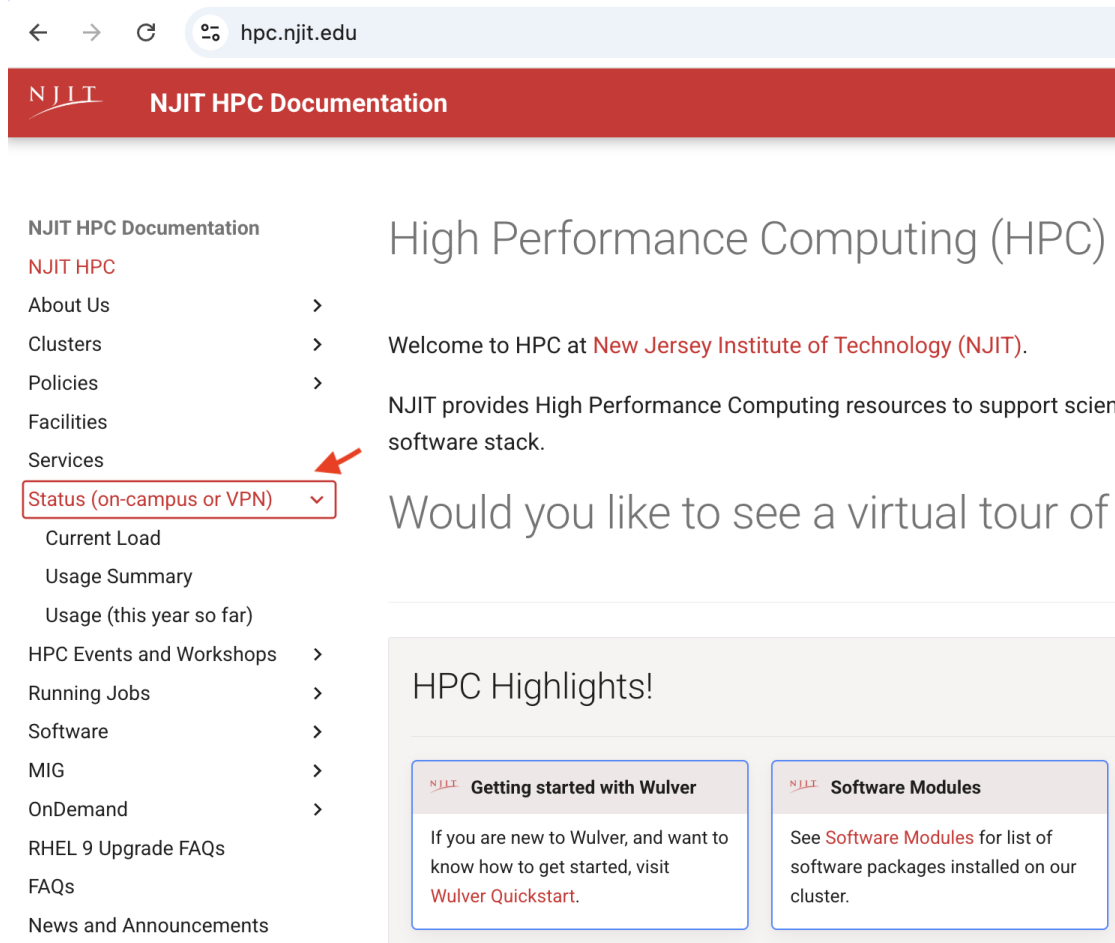
HPC User Meeting

October 22, 2025

Agenda

- Wulver Cluster Tools & Monitoring
- Ondemand.njit.edu
- Command line tools
- Upcoming Events
- Q&A

Hpc.njit.edu Status Page



The screenshot shows a web browser at hpc.njit.edu. The page has a red header with the NJIT logo and 'NJIT HPC Documentation'. A left sidebar lists navigation items, with 'Status (on-campus or VPN)' highlighted by a red box and an arrow. The main content area is titled 'High Performance Computing (HPC)' and contains a welcome message, a description of HPC resources, and a section for 'Would you like to see a virtual tour of t'. Below this is an 'HPC Highlights!' section with two boxes: 'Getting started with Wolverine' and 'Software Modules'.

← → ↻ 🔍 hpc.njit.edu

NJIT NJIT HPC Documentation

NJIT HPC Documentation

NJIT HPC

About Us >

Clusters >

Policies >

Facilities

Services

Status (on-campus or VPN) ▾

Current Load

Usage Summary

Usage (this year so far)

HPC Events and Workshops >

Running Jobs >

Software >

MIG >

OnDemand >

RHEL 9 Upgrade FAQs

FAQs

News and Announcements

High Performance Computing (HPC)

Welcome to HPC at **New Jersey Institute of Technology (NJIT)**.

NJIT provides High Performance Computing resources to support scient software stack.

Would you like to see a virtual tour of t

HPC Highlights!

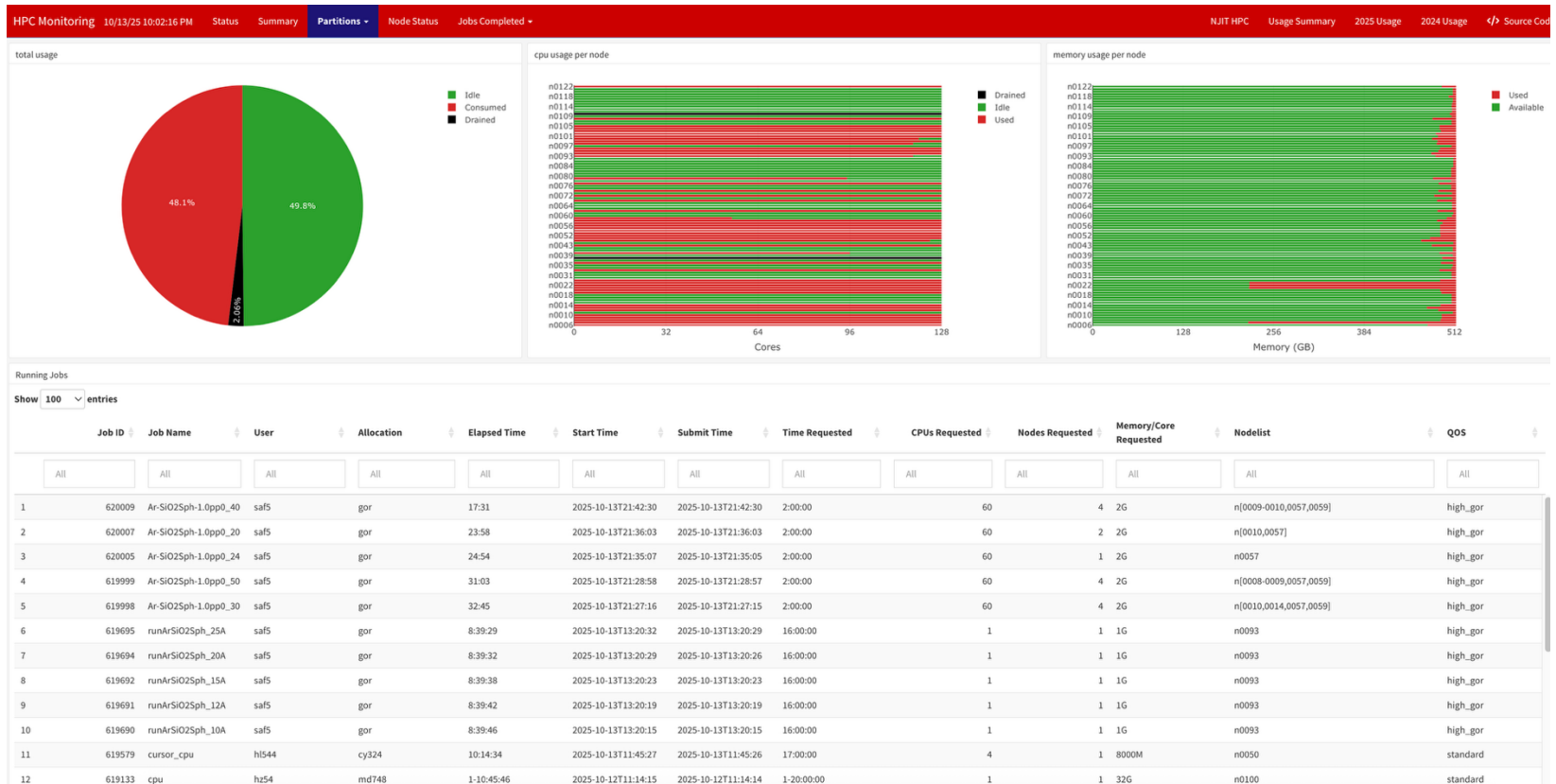
Getting started with Wolverine

If you are new to Wolverine, and want to know how to get started, visit **Wolver Quickstart**.

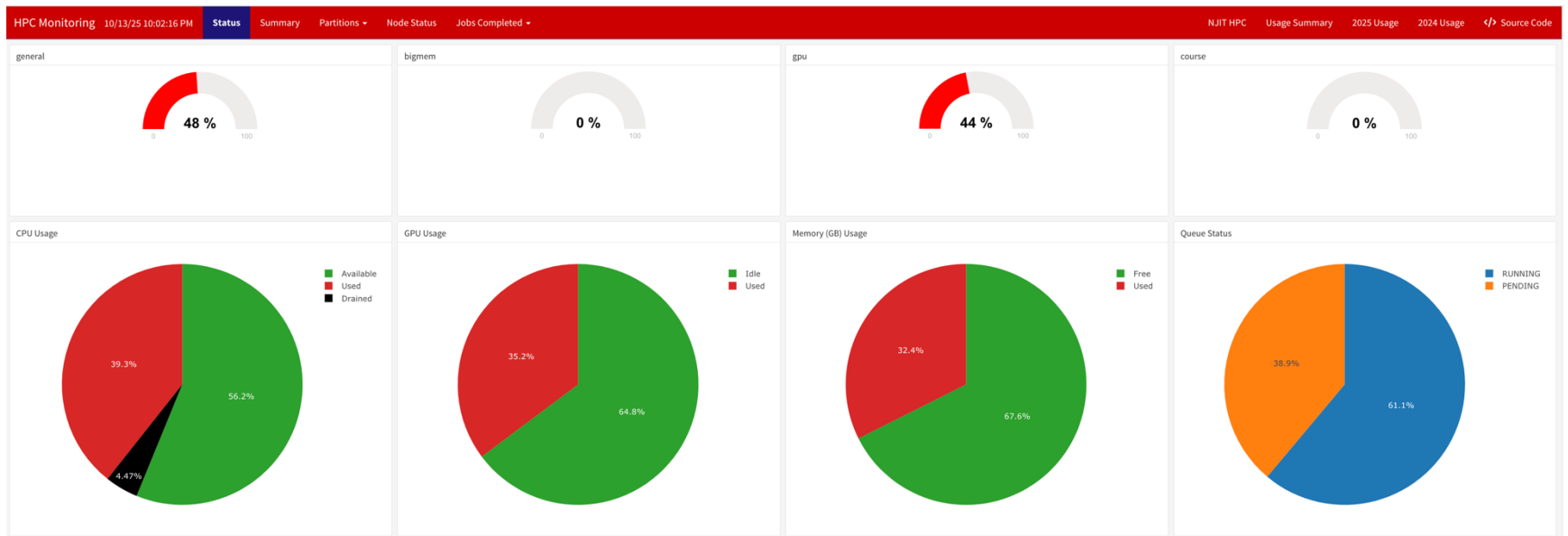
Software Modules

See **Software Modules** for list of software packages installed on our cluster.

Monitoring Wulver



Managing and Monitoring Jobs



ondemand.njit.edu

- For Wulver user, login via your UCID

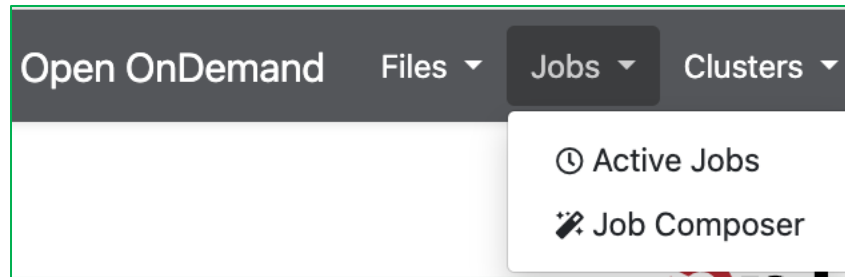
Open OnDemand Files ▾ Jobs ▾ Clusters ▾ Interactive Apps ▾ Tools ▾  My Interactive Sessions

OPEN

 **nDemand**

OnDemand provides an integrated, single access point for all of your HPC resources.

Jobs Menu and Active Jobs



- Active Jobs: The Active Jobs window opens in a new tab which shows the list of all the active jobs in the cluster.
- Job Monitoring: Users can monitor job status, view job details, and track progress conveniently within the Open OnDemand portal.

Active Jobs

- The Active Jobs window opens in a new tab which shows the list of all the active jobs in the cluster.

Open OnDemand

Files

Jobs

Clusters

Interactive Apps

Tools

My Interactive Sessions

Help

Logged in as g07396

Log Out

Active Jobs

Show 50 entries

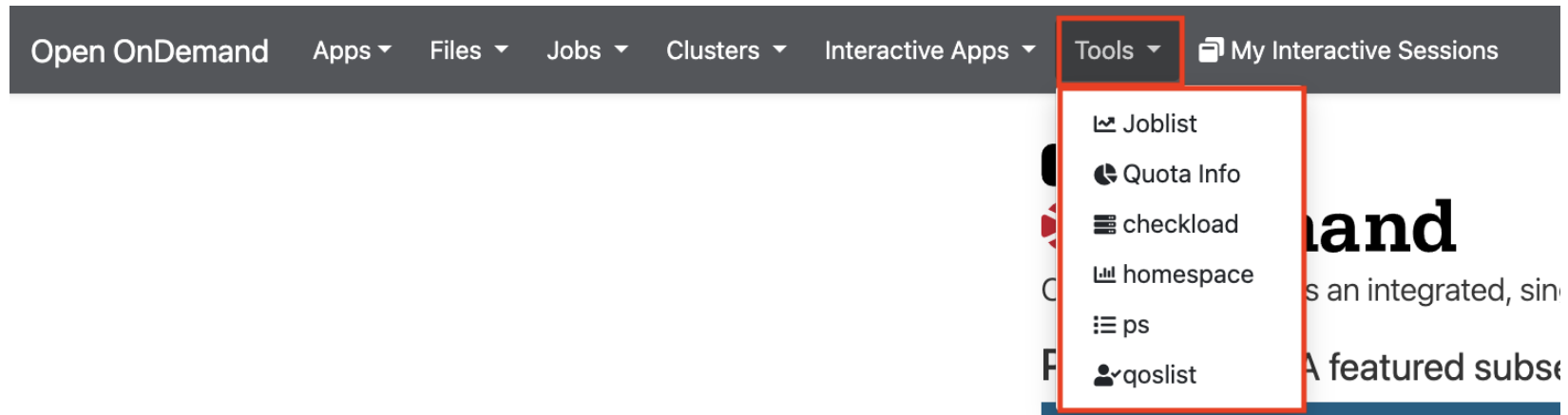
Filter:

All Jobs

Wulver

ID	Name	User	Account	Time Used	Queue	Status	Cluster	Actions
> 497439	cox.h.hrt	hf78	zhiwei	00:00:00	bigmem	Queued	Wulver	
> 497438	cox.h.pans2	hf78	zhiwei	00:00:00	bigmem	Queued	Wulver	
> 497437	cox.h.pans	hf78	zhiwei	00:00:00	bigmem	Queued	Wulver	
> 497427	cox.h.bl	hf78	zhiwei	00:00:00	bigmem	Queued	Wulver	
> 491773	clfaslasy	zd4	zd4	68:54:47	bigmem	Running	Wulver	
> 502579	prehp	hf78	zhiwei	00:08:02	bigmem	Running	Wulver	
> 502096	sa6b500cl160	sm3557	samaneh	00:00:00	general	Queued	Wulver	
> 502095	sa6b500cl160	sm3557	samaneh	00:00:00	general	Queued	Wulver	
> 502094	sa6b500cl160	sm3557	samaneh	00:00:00	general	Queued	Wulver	
> 502093	sa6b500cl160	sm3557	samaneh	00:00:00	general	Queued	Wulver	
> 502092	sa6b500cl160	sm3557	samaneh	00:00:00	general	Queued	Wulver	

Tools – ondemand.njit.edu



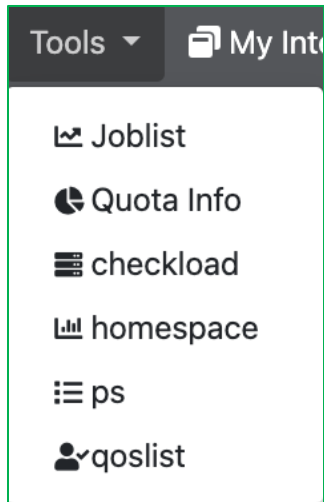
Available Tools

Joblist

The checkload tool provides real-time information about the current load on the HPC cluster, assisting users in deciding the best time to run their jobs.

Quota Info

Quotainfo is a tool available in Open OnDemand to check disk usage quotas, helping users keep track of their allocated storage space on HPC clusters.



Additional Tools Available

Checkload

The checkload tool provides real-time information about the current load on the HPC cluster, assisting users in deciding the best time to run their jobs.

Homespace

Homespace tool offers details about the home directory space usage, enabling users to manage their files and storage efficiently within their personal workspace.

qoslist

Displaying All QOS Entries for a User Across All Associated Accounts

Command line Tools – managing jobs

- seff
- squeue
- scancel
- quota_info
- checkq
- checkload
- slurm_jobid
- https://hpc.njit.edu/Running_jobs/managing-jobs/

Seff – check mem efficiency

```
$ seff
Usage: seff [Options] <Jobid>
Options:
  -h      Help menu
  -v      Version
  -d      Debug mode: display raw Slurm data
```

```
$ seff 575079

Job ID: 575079
Cluster: wulver
User/Group: ls565/ls565
State: COMPLETED (exit code 0)
Cores: 1
CPU Utilized: 00:00:19
CPU Efficiency: 67.86% of 00:00:28 core-walltime
Job Wall-clock time: 00:00:28
Memory Utilized: 4.21 MB
Memory Efficiency: 0.11% of 3.91 GB
```

File management

- Rsync
- Scp
- Ondemand.njit.edu

RSYNC

To HPC (Upload):

```
rsync -avzP /path/to/local/machine $UCID@wulver.njit.edu:/path/to/destination
```

From HPC (Download):

```
rsync -avzP $UCID@wulver.njit.edu:/path/to/source /path/to/local/machine
```

Flags: -a (archive), -v (verbose), -z (compress), -P (progress + resume)

Tip: Replace \$UCID with your NJIT username. Ensure SSH access to wulver.njit.edu.

scp File Transfer

From HPC to Local Machine:

scp [option] \$UCID@wulver.njit.edu:/path/to/source/file [target/path]









From Local Machine to HPC:

scp [option] [path/to/source/file] \$UCID@wulver.njit.edu:/target/path

Tip: Use '-r' option for recursive copy of directories.

Replace \$UCID with your NJIT username. Ensure SSH access to wulver.njit.edu.

Upcoming Events

 Intro to Wulver: Job Scheduler & Submitting Jobs >	October 1 2:30pm - 3:30pm		Online	Abhishek Mukherjee
 Intro to Wulver: Focus on Job Efficiency >	October 8 2:30pm - 3:30pm		Online	Abhishek Mukherjee
 Machine Learning and Big Data >	October 14-15 11am - 5pm	TBA	Library Faculty Commons CAB 2032	Pittsburgh Supercomputing Center
 HPC User Meeting - Cluster Tools & Monitoring >	October 22 2:30pm - 3:30pm	TBA	CTR 235	Hui(Julia) Zhao
 Conda for Shared Environments >	November 5 2:30pm - 3:30pm	TBA	Online	Hui(Julia) Zhao
 HPC User Meeting >	December 3 2:30pm - 3:30pm	TBA	CTR 235	Hui(Julia) Zhao

IST Staff Faculty Open House, Tuesday, October 28, 3:00-4:30pm Location: The Campus Center Atrium

IST Student Open House, Monday November 10

https://hpc.njit.edu/HPC_Events_and_Workshops/

