



August 5th, 2025 | Oak Ridge, TN

myOLCF: Updates

Hewlett Packard
Enterprise

AMD

Aaron Barlow

Oak Ridge Leadership Computing Facility



U.S. DEPARTMENT
of **ENERGY**

ORNL IS MANAGED BY UT-BATTELLE LLC
FOR THE US DEPARTMENT OF ENERGY

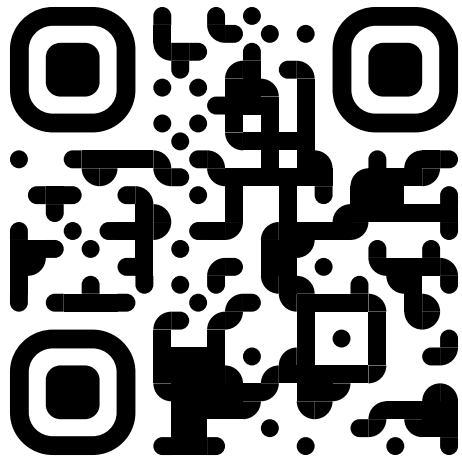
FRONTIER



MyOLCF: OLCF's Self-Service Application

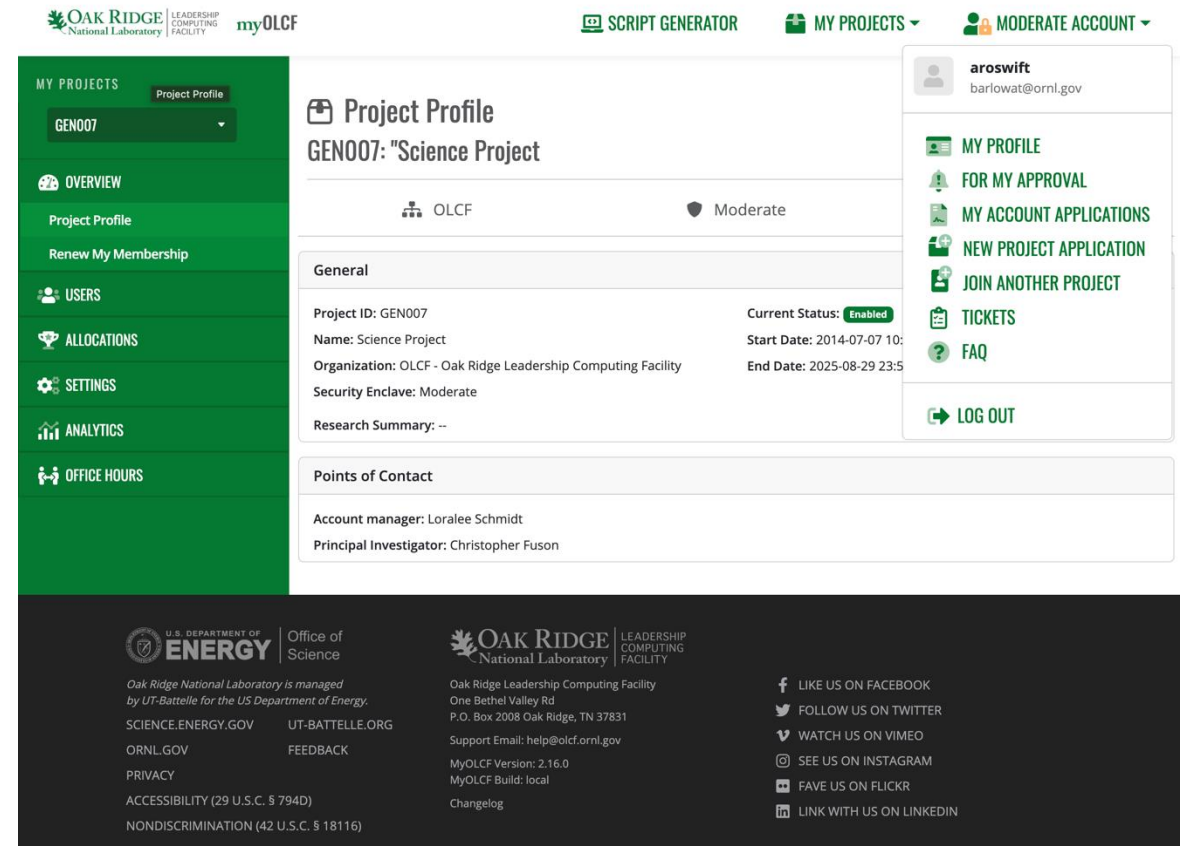
OLCF's Public Self-Service Portal

Publicly available application that extends management capabilities and provides insights into available resources for OLCF users



my.olcf.ornl.gov

myOLCF Application



The screenshot displays the myOLCF application interface. At the top, there are logos for Oak Ridge National Laboratory and Leadership Computing Facility, along with navigation links for 'SCRIPT GENERATOR', 'MY PROJECTS', and 'MODERATE ACCOUNT'. The main content area shows a 'Project Profile' for 'GEN007: Science Project'. The profile includes a sidebar with navigation options like 'OVERVIEW', 'USERS', 'ALLOCATIONS', 'SETTINGS', 'ANALYTICS', and 'OFFICE HOURS'. The main content area displays project details such as 'Project ID: GEN007', 'Name: Science Project', 'Organization: OLCF - Oak Ridge Leadership Computing Facility', and 'Current Status: Enabled'. A 'Points of Contact' section lists the account manager as Loralee Schmidt and the principal investigator as Christopher Fuson. A footer section contains contact information for the U.S. Department of Energy, Office of Science, and Oak Ridge National Laboratory, along with social media links for Facebook, Twitter, Vimeo, Instagram, Flickr, and LinkedIn.

Key Features

Self-Service Management

- Apply for and renew projects and accounts
- Keep information updated
- Approve application requests

Usage & Reporting

- Track compute usage
- Allocation & filesystem usage
- Generate reports & charts

Automation and Support

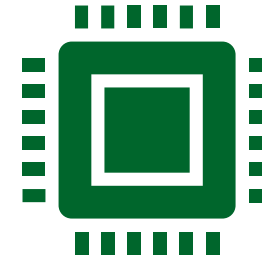
- Schedule office hours
- Submit and track help tickets
- Generate Slurm batch scripts

Year in Review



21 Deployments

~1.9 per month

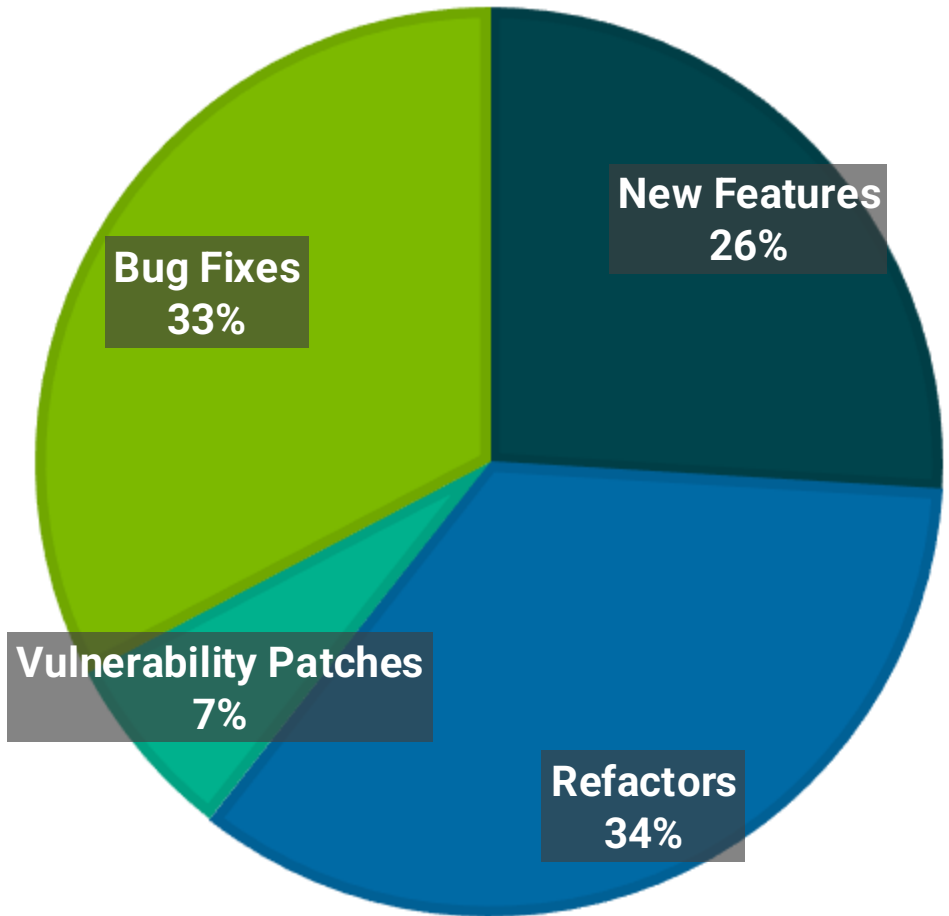


105 Software Features

~9.5 per month

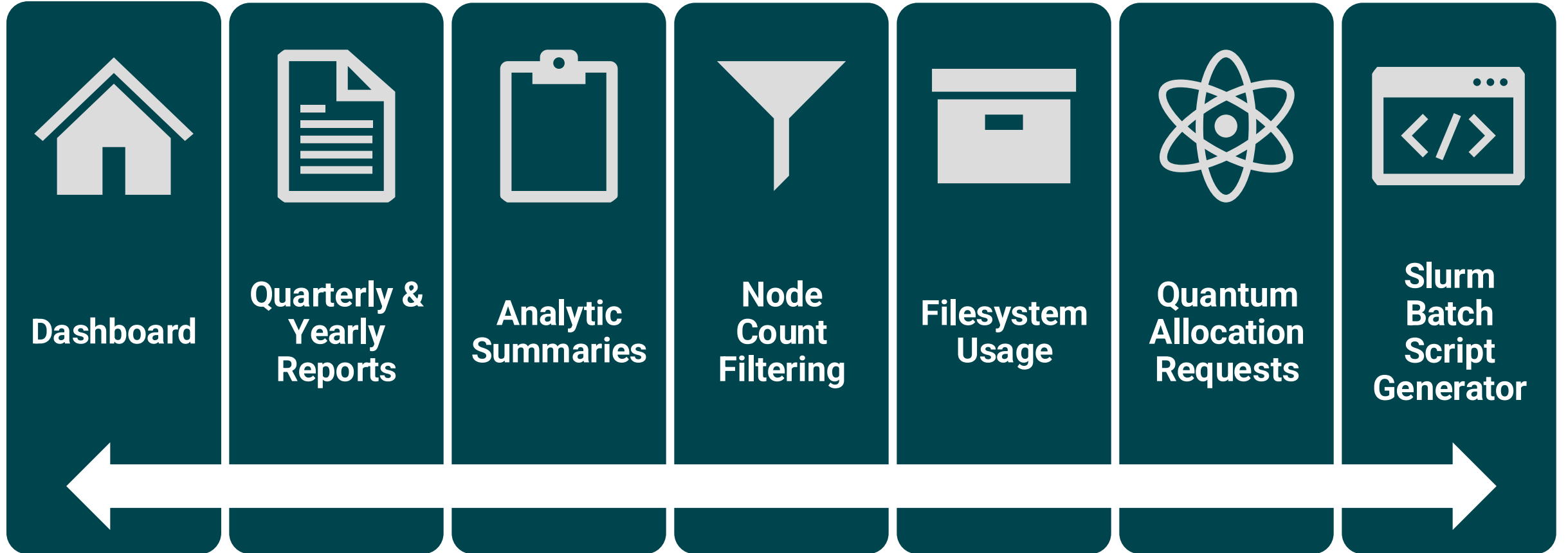
Software Features

■ New Features ■ Refactors ■ Vulnerability Patches ■ Bug Fixes



Sept 6th, 2024 – Aug 1st, 2025

New Feature Highlights



New Feature: Dashboard

Moderate Dashboard

MY PROJECTS

GEN007-NVFLARE

OVERVIEW

Project Profile

Renew My Membership

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

OFFICE HOURS

Pending Actions

Created	Action	Description	
Jul 30, 2025	Approval	Requesting access to STF040	Details
Jul 30, 2025	Approval	Requesting access to GEN192	Details
Jul 30, 2025	Approval	Requesting access to GEO152	Details

Allocation Usage Summary

10 entries per page

Search:

Project	Expires	Resource	Hours Awarded	Usage
GEN192	07-30-2025	frontier	6200	1.03%
GEO152	07-30-2025	andes	2500	0.00%
GEO152	07-30-2025	frontier	20000	7.26%

Showing 1 to 3 of 3 entries

News

Frontier Scheduled Maintenance
Frontier will be offline for scheduled maintenance on July 10, 2025 (02:00–06:00 UTC)

Read more...

New Script Generator Tutorial
A step-by-step video guide to our Script Generator is now live—learn how to auto-generate Slurm...

Read more...

2025 OLCF User Workshop
Registration is open for the 2025 OLCF User Meeting (Aug 5–6).

Read more...

Quick Links

- [OLCF Docs](#)
- [Training Videos](#)
- [OLCF Website](#)
- [Feedback](#)

New Feature: Quarterly & Yearly Reports

MY PROJECTS

STF040

OVERVIEW

USERS

ALLOCATIONS

REPORTS

Reports

SETTINGS

ANALYTICS

OFFICE HOURS

STREAMS

Below are the project reports for the specified project. If the "Edit" button is disabled, that means you have already submitted a report here or by email to us in the past. If you wish to update your report after submission, you can email your report to: OLCF-Reports@ornl.gov. Submitted reports must be processed internally before they are available to redownload.

Project Reports 4

10 entries per page

Search:

Report Name	Cycle	Due Date	Report Submitted	Edit	Download
Overhead HPC Usage	q1	2025-03-30	✓	Edit	Download
Quantum Entanglement Report: Submission Request	closeout	2025-09-30	✗	Edit	Download
Quantum Entanglement: Early Checkup	q3	2026-07-30	✗	Edit	Download
System Utilization: Quantum vs HPC Utilization	q1	2026-04-30	✗	Edit	Download

Showing 1 to 4 of 4 entries

New Feature: Quarterly & Yearly Reports Cont.

Submit a Project Report



Select your project report for submission. Valid file types are: **.docx & .pdf**. If you encounter issues during submission, you can email your report to: accounts@ccs.ornl.gov

* Report Name

Quantum Entanglement Report: Submi

* Report Due Date

2025-09-30

* Report Cycle

closeout

* Project Report

Choose File No file chosen

✓ Submit

Search:

Edit

Download

Edit

Download

Edit

Download

Edit

Download

Edit

Download

New Feature: Project Usage Analytic Summaries

MY PROJECTS

STF040

OVERVIEW

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

Project Usage

Compute Jobs

Filesystem Usage

Aggregated Usage

OFFICE HOURS

STREAMS

Project Usage

Selected Filters: Project: STF040 Resource: summit Time Period: allocation

Filters

Summary

Timespan 2022/04/01 to 2023/07/31

Total Allocation Amount 1000 node hours

Based on filtered data:

Total Usage 383.30 node hours 38.3% total allocation

GPU-Enabled Usage 105.20 node hours 10.5% total usage

Capability Usage 0.00 node hours 0.0% total usage

Project Usage

Burn Rate

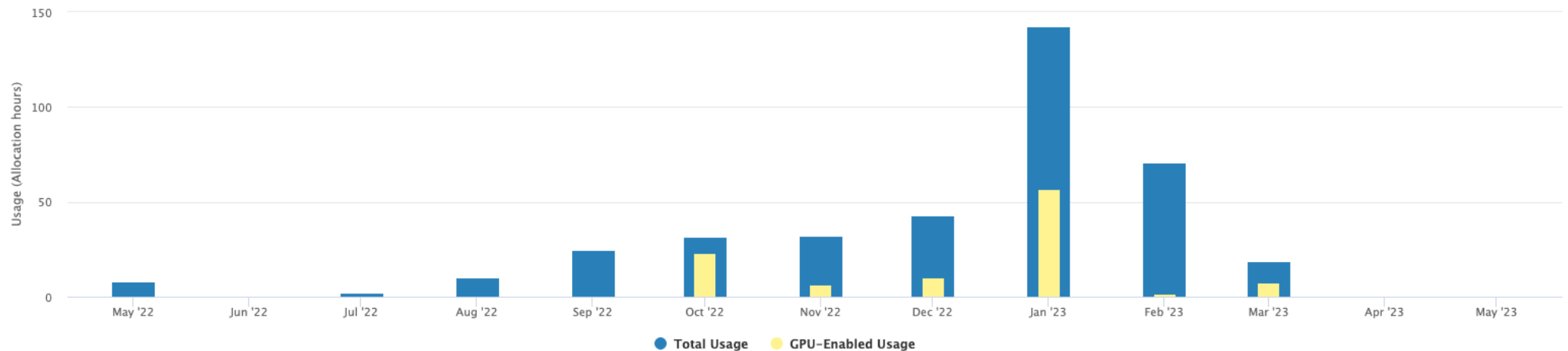
GPU-Enabled Usage

Capability Usage

Usage by User

GPU-Enabled Usage

Export Options



Existing Feature: Downloading Usage Reports

MY PROJECTS

STF040

OVERVIEW

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

Project Usage

Compute Jobs

Filesystem Usage

Aggregated Usage

OFFICE HOURS

STREAMS

Project Usage

Selected Filters: Project: STF040 Resource: summit Time Period: allocation

Filters

Summary

Timespan 2022/04/01 to 2023/07/31

Total Allocation Amount 1000 node hours

Based on filtered data:

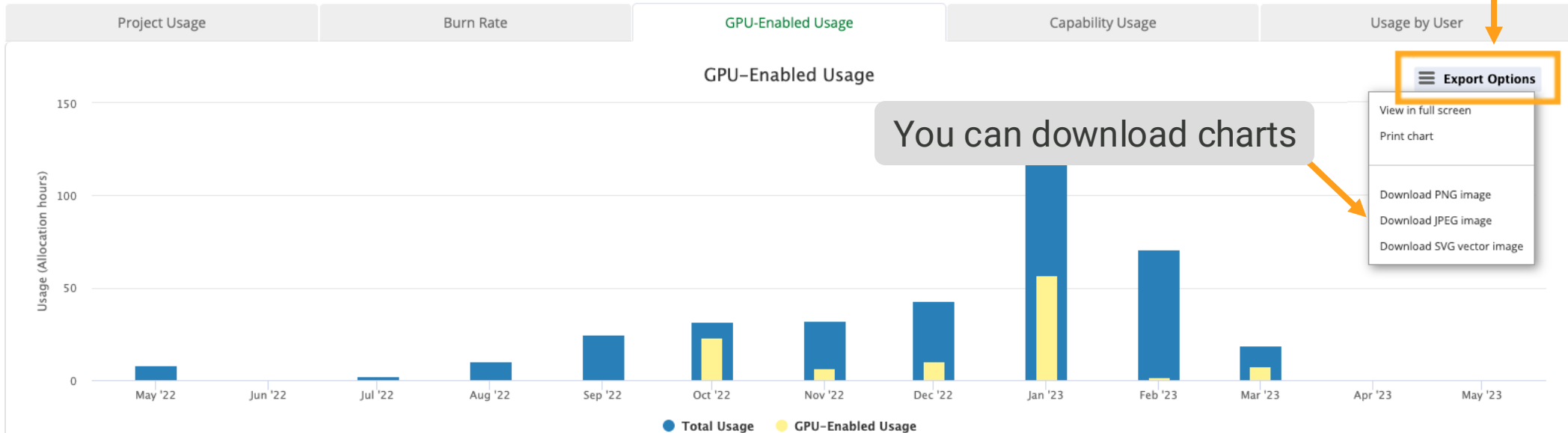
Total Usage 383.30 node hours 38.3% total allocation

GPU-Enabled Usage 105.20 node hours 10.5% total usage

0.0% total usage

These provide downloadable usage reports

Click "Export Options"



New Feature: Compute Jobs Analytic Summaries

MY PROJECTS

STF040

OVERVIEW

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

Project Usage

Compute Jobs

Filesystem Usage

Aggregated Usage

OFFICE HOURS

STREAMS

Compute Jobs

STF040: "Operations: Software Services Development (US/LPRs Only)"

Summary

Timespan	2019/07/30 to 2025/07/30
Resource	summit
Project	STF040

Based on filtered data:

Average Node Count	1.60 <i>node(s)</i>
Average Duration	3903.92 <i>seconds</i>

Filters

* Project

STF040

* Resource

summit

* Start Date

07/30/2019

* End Date

07/30/2025

* Minimum Nodes

1

* Maximum Nodes

200

Submit

Results

10 entries per page

Search:

Job ID	Username	Start Time	End Time	Duration (Seconds)	Node Count	Job Name	Job Type	Batch Script
2071860	longcoyaj	2022-05-19 08:16	2022-05-19 08:26		638	1 Not_Specified	cpu only	Details
2071920	longcoyaj	2022-05-19 09:06	2022-05-19 09:17		637	1 Not_Specified	cpu only	Details
2071971	longcoyaj	2022-05-19 09:20	2022-05-19 09:24		271	1 Not_Specified	cpu only	Details
2071980	longcoyaj	2022-05-19 09:29	2022-05-19 09:39		637	1 Not_Specified	cpu only	Details

New Feature: Compute Jobs Node Count Filtering

MY PROJECTS

STF040

OVERVIEW

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

Project Usage

Compute Jobs

Filesystem Usage

Aggregated Usage

OFFICE HOURS

STREAMS

Compute Jobs

STF040: "Operations: Software Services Development (US/LPRs Only)"

Summary

Timespan	2019/07/30 to 2025/07/30
Resource	summit
Project	STF040

Based on filtered data:

Average Node Count	1.60 <i>node(s)</i>
Average Duration	3903.92 <i>seconds</i>

Results

10 entries per page

Job ID	Username	Start Time	End Time	Duration (Seconds)	Node Count	Job Name	Job Type	Batch Script
2071860	longcoyaj	2022-05-19 08:16	2022-05-19 08:26		638	1 Not_Specified	cpu only	Details
2071920	longcoyaj	2022-05-19 09:06	2022-05-19 09:17		637	1 Not_Specified	cpu only	Details
2071971	longcoyaj	2022-05-19 09:20	2022-05-19 09:24		271	1 Not_Specified	cpu only	Details
2071980	longcoyaj	2022-05-19 09:29	2022-05-19 09:39		637	1 Not_Specified	cpu only	Details

Compute Job Filters

Filters

Filters

* Project

STF040

* Resource

summit

* Start Date

07/30/2019

* End Date

07/30/2025

* Minimum Nodes

1

* Maximum Nodes

200

Submit

Search:

New Feature: Filesystem Usage

- MY PROJECTS
- AL0888
- OVERVIEW
- USERS
- ALLOCATIONS
- SETTINGS
- ANALYTICS
- Project Usage
- Compute Jobs
- Filesystem Usage**
- Aggregated Usage
- OFFICE HOURS

Filesystem Usage AL0888: "Science Project"

Selected Filters: Project: **AL0888** Filesystem: **all filesystems** Cluster: **all clusters** Timespan: **all time**

Filters

Filtering Filesystem Usage

Filtered Usage

This represents the sum of filesystem activity we have for this project. Please note that this data may be incomplete, not up-to-date, and may not reflect all of your available filesystem and clusters.

Lustre		
Orion	16,222,887 Files	694.0 TB

GPFS (Spectrum Scale)		
No cluster data found for this filesystem.		

New Feature: Filesystem Usage Cont.

MY PROJECTS

ALO888

OVERVIEW

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

Project Usage

Compute Jobs

Filesystem Usage

Aggregated Usage

OFFICE HOURS

Filesystem Usage

ALO888: "Science Project"

Selected Filters: Project: **ALO888** Filesystem: **lustre** Cluster: **orion** Timespan: **2024-01-01 – 2025-01-01**

Overview

This represents the sum of filesystem activity for ALO888 on the Lustre filesystem within the Orion cluster, spanning the selected timespan. Update the selected filesystem, cluster, project, and timespan with the filters button.

Lustre

Orion

5,205,211 Files

Filesystem filters

Filters

Filters

* Filesystem

Lustre

* Cluster

Orion

* Project

ALO888

Time Period

Date Range

* Start Date

01/01/2024

* End Date

01/01/2025

Submit

Jan 2025						
Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18

New Feature: Request Quantum Allocation

MY PROJECTS

CFD176

OVERVIEW

USERS

ALLOCATIONS

Current Allocations

Historical Allocations

Quantum Allocation Request

SETTINGS

ANALYTICS

OFFICE HOURS

Request Allocation

CFD176: "Science Project"

+ Quantum Allocation Request

* Project ID

CFD176

* Justification for Quantum Computing Resources

We aim to benchmark quantum linear-system solvers (HHL/VQLS) on discretized CFD matrices (Navier-Stokes/Laplacian operators). This allocation will let us: ✓

1. Measure fidelity and runtime on real hardware
2. Test error-mitigation (measurement correction + zero-noise extrapolation)
3. Compare hardware platforms and guide development of hybrid quantum-classical CFD solvers

* Job details

Algorithm: Harrow-Hassidim-Lloyd (HHL) for solving $Ax=b$ where A is a 16×16 Laplacian matrix from CFD discretization ✓
Circuit: 8 data qubits + 4 ancilla qubits (12-qubit register), depth $\approx 1,500$ gates
Shots: 8,192 per parameter set \times 5 parameter sweeps (total $\sim 40,960$ shots)
Error mitigation: measurement-error correction + zero-noise extrapolation
Estimated runtime: ~ 2 min per circuit + 5 min for calibrations $\rightarrow \sim 15$ min total queue time

Please provide details including job information, circuit information, algorithms used, number of qubits, number of shots, and other pertinent information that has gone into the time estimate for the allocation you are requesting.

* List any simulations you have done

2. Noisy Aer simulations using IBM Jakarta noise model
 3. Pilot VQLS (variational Lagrangian) runs on classical simulator
- Fidelity vs. depth sweeps to calibrate error-mitigation parameters ✓

* Resources requested

IBM

* Credits or minutes

120 ✓

New Feature: Slurm Batch Script Generator

Script Generator

This tool generates a Slurm batch script for submitting a compute job on an OLCF system based on a desired number of tasks per node. The **"GPU Binding"** tab generates syntax for binding to GPUs on a given system, allowing you to specify the number of tasks per GPU. The **"CPU Only Binding"** tab is a separate option for those not interested in using the GPU, allowing you to modify the number of hardware threads per physical core.

The customization options here **do not** represent all that you can do with `srun`, and task layout constraints are enforced based on general recommendations of OLCF staff. This is meant as a guide to point users in the right direction -- always test with your application to confirm it is performing properly.



It is highly recommend to use this in conjunction with [hello_jobstep](#) to help verify how your application is being mapped to the compute node(s). For more thread mapping examples, please see the relevant system guide:

- [Frontier Guide](#)

Configuration

* System

Frontier (Batch Partition)

Select the system on which you want to submit your job. *Please review the [batch](#) and [extended](#) partition queue policies.

* Application Name

/home/barlowat/solora/solora_batch_job.sh

Specify your application including the path. This is the parallel code that will be launched by srun.

* Job Name

Solora

Specify a name for your job. Valid characters are A-Z, 0-9, _ - and must start with a letter.

* Email Address

barlowat@ornl.gov

Specify your email address to get notified when the job enters a certain state.

* Project ID

New Feature: Slurm Batch Script Generator Cont.

* Tasks per Node

How many tasks, e.g. MPI ranks per node, do you want to use? Max is 56 for this system.

* Threads per Task

How many OMP threads per task do you want to use? Max is 1 for this configuration.

* Tasks per GPU

How many tasks per GPU do you want to use? Note that multiple tasks per GPU is not recommended but possible with core restrictions. Allowed Tasks Per GPU for your Task Per Node configuration are [0,4]

Generate Script

Output

Copy

```
#!/bin/bash
#SBATCH -A Solora
#SBATCH -J Solora
#SBATCH -o %x-%j.out
#SBATCH -e %x-%j.err
#SBATCH -N 24
#SBATCH -t 00:30:25
#SBATCH -p batch
#SBATCH -q normal
#SBATCH --threads-per-core=1
#SBATCH --mail-user=barlowat@ornl.gov
#SBATCH --mail-type=ALL

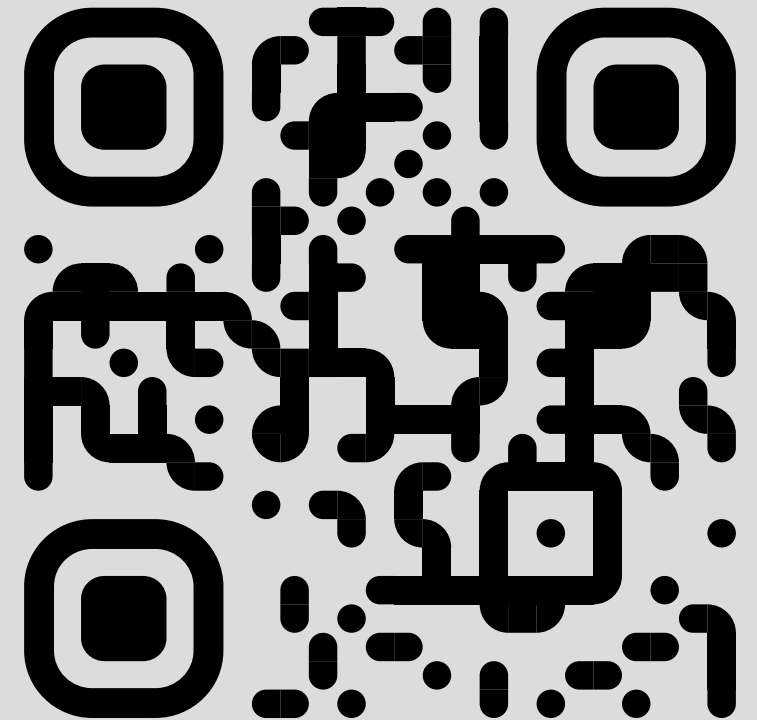
#OpenMP settings:
export OMP_NUM_THREADS=1

#run the application:
srun -n 768 -c 1 --threads-per-core=1 /home/barlowat/solora/solora_batch_job.sh
```

Notice: ORCID ID Requirement

- ORCID stands for *Open Researcher and Contributor ID*
- Ensures unique researcher identification and funding attribution
- All OLCF users required to have ORCID ID attached to account
- Deadline to add ORCID is **October 1st, 2025**

orcid.org/register



Notice: Adding ORCID to OLCF Account

MY PROJECTS

MLT092

OVERVIEW

Project Profile

Renew My Membership

USERS

ALLOCATIONS

SETTINGS

ANALYTICS

OFFICE HOURS

Moderate Dashboard

Pending Actions

No pending actions right now

Allocation Usage Summary

10 entries per page

Search:

Project	Expires	Resource	Hours Awarded	Usage
ALO888	07-31-2025	andes	2500	0.00%
ALO882	07-31-2025	frontier	30000	99.37%
MLT092	07-31-2025	andes	2500	47.52%
ALO319	07-31-2025	frontier	60000	4.50%

Showing 1 to 4 of 4 entries

Click Open/Moderate Account

Click My Profile

MY ACCOUNT

- MY PROFILE**
- FOR MY APPROVAL
- MY ACCOUNT APPLICATIONS
- TICKETS
- FAQ

LOG OUT

Quick Links

- OLCF Docs
- Training Videos
- OLCF Website
- Feedback

Notice: Adding ORCID to OLCF Account

MR. AARON BARLOW

Edit My Profile

← Back

BACK TO PROJECTS

MY ACCOUNT

My Profile

For My Approval

My Account Applications

New Project Application

Join Another Project

Tickets

To change your employer, please re-apply using the "Renew My Membership" page on any of your current projects. This will ensure we have the proper legal agreements in place with your new institution.

Personal Information

* Title	* First/Given Name	Middle Name	* Last/Family Name
Mr	Aaron		Barlow
Suffix	Nickname	* Email	Alternative Email
		barlowat@ornl.gov	
* Preferred Shell (center-wide)	ORCID		
/bin/zsh	https://orcid.org/0000-0003-0363-209X		
* Employer	* Employment Level		
Oak Ridge National Laboratory	Faculty Member / Professional Staff / Research Scientist		

Add ORCID ID

[More information on ORCID](#)

Notice: New myOLCF Update Method

Edit My Profile

← Back

To change your employer, please re-apply using the "Renew My Membership" page on any of your current projects. This will ensure we have the proper legal agreement.

Click Update Available

5 minutes later:

UPDATE AVAILABLE

A new version of this application is available. Click the button below to refresh.

! Important: If you're currently working on an account or project application, please save your progress first. Refreshing without saving may result in loss of unsaved data.

Refresh

Personal Information

* Title

Mr

* First/Given Name

Middle Name

* Last/Family Name

Barlow

Suffix

Alternative Email

* Preferred Shell (center-wide)

/bin/zsh

* Employer

Oak Ridge National Laboratory

* Employment Level

Faculty Member / Professional Staff / Research Scientist

RSA Options

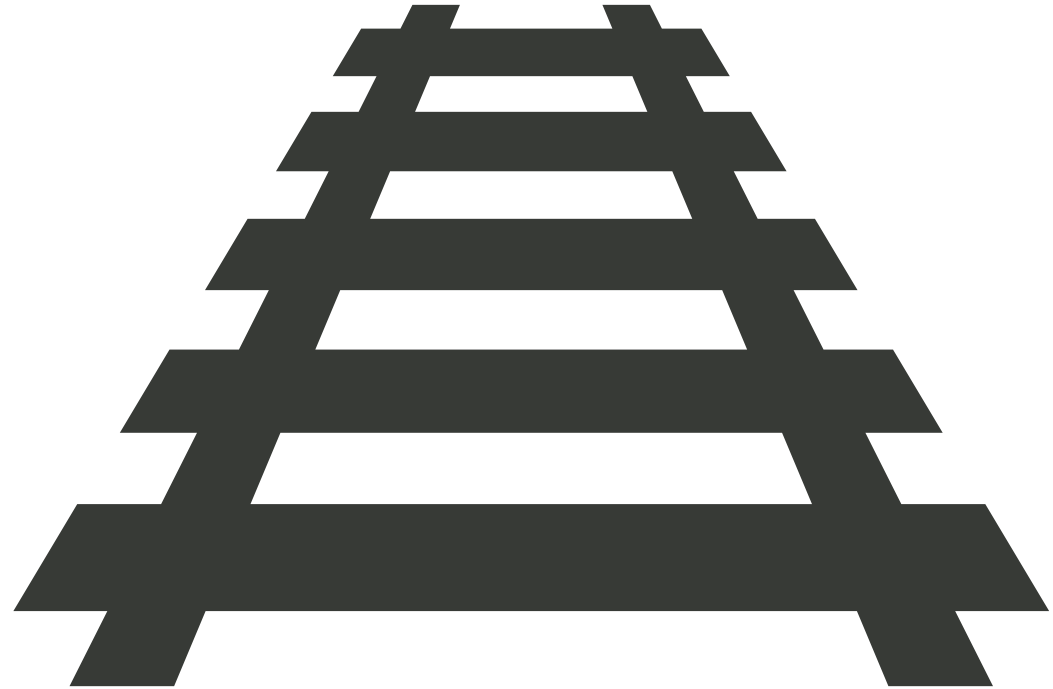
* I require a hard RSA Alternative

No

Addresses

Roadmap

- Detailed center status page
- OIDC authentication
- Enhanced user login
- More detailed filesystem usage
- User settings



OLCF Acknowledgement

This research used resources of the Oak Ridge Leadership Computing Facility at the Oak Ridge National Laboratory, which is supported by the Office of Science of the U.S. Department of Energy under Contract No. DE-AC05-00OR22725.

An aerial photograph of the Oak Ridge National Laboratory (ORNL) campus, showing various industrial buildings, parking lots, and green spaces, surrounded by dense green forest and rolling hills under a blue sky with scattered white clouds. The text "Questions?" is centered in the upper half of the image in a large, bold, black font. Below it, the email address "help@olcf.ornl.gov" is displayed in a smaller, green font, with a short green horizontal line underneath.

Questions?

help@olcf.ornl.gov
