

Guide to Getting Started on the ALCF Lighthouse Allocation

Welcome to the Lighthouse allocation at [Institution Name]. We're excited to help you test, port, and scale your work on Argonne Leadership Computing Facility (ALCF) systems. The ALCF Lighthouse Initiative is a partnership between your institution and the ALCF—a U.S. Department of Energy Office of Science User Facility at Argonne National Laboratory—providing leadership-class supercomputers and expert support to advance open scientific discovery.

Starting Point: Below you will find detailed steps on how to join your institution's Lighthouse allocation [Allocation Name] and get started using ALCF resources.

- 1. Create or Reactivate Your ALCF Account.** Visit the myALCF web portal (my.alcf.anl.gov) to create an ALCF account.*
 - If you are a new ALCF user: Request an account using your institutional email and specify the allocation project name: [Allocation Name].
 - If you are a returning ALCF user: Log in and request to join the allocation project name: [Allocation Name]. You can reactivate your account if needed.
- 2. Set Up Secure Access to ALCF machines.** Enroll in multi-factor authentication (MFA) by creating your ALCF Mobile Token to securely log in to ALCF systems. Look for instructions in your welcome email.
- 3. Complete User Agreements and Get Started.** Review and sign ALCF user agreements and review facility policies. To get started on ALCF systems, check out the ALCF user guides and training videos linked in the **Support** section below.
- 4. Meet Your Support Team and Align on Goals.** Determine goals for porting, performance, and scaling your workflows. Identify target systems on which to run your workflows and set up a first test plan. If needed, reach out to your institution's support team for additional guidance. Contact details are in the **Support** section below.
- 5. Transfer Data and Run Your First Job.** Move any needed input data (use Globus if appropriate) and use example job scripts from ALCF to run an initial test. Example scripts are linked in the **Support** section below.
- 6. Iterate, Optimize, and Scale.** Work with your institutional support team to profile and tune code performance, select job size/queues, and capture scaling results. Share brief progress updates upon request—Lighthouse partnership may conduct periodic check-ins.
- 7. Graduate to Your Own Allocation.** When your code runs and is scoped for science:

- Apply for a [Director's Discretionary \(DD\) allocation](#) with guidance from your institution's support team and the ALCF Lighthouse team.
- As your compute needs grow, plan towards applying for an [INCITE](#) or [ALCC](#) allocation using scaling/performance results gathered on Lighthouse and DD allocations.

Lighthouse Allocation Expectations:

- **Community Guidelines.** The Lighthouse allocation is shared among other researchers at your institution. Please consider job number and size limits when submitting jobs to the shared allocation and focus on testing/porting/scaling rather than long production jobs.
- **Data.** Use approved data transfer tools (e.g. Globus); follow storage quotas and purge schedules; do not place export-controlled or sensitive data on ALCF systems without written authorization.
- **Research Acknowledgement.** "This research used resources at the Argonne Leadership Computing Facility, a DOE Office of Science User Facility, via the [\[Institution Name\]](#) Lighthouse allocation (project: [\[Allocation Name\]](#))." Please notify [\[Compute Center Contact\]](#) and lighthouse@alcf.anl.gov of publications and notable outcomes.

Support and Helpful Links:

- Please contact [\[Compute Center Name\]](#) at [\[Compute Center Contact\]](#) with questions. This team is your primary support for your institution's Lighthouse allocation and can coordinate with ALCF support as needed.
- The ALCF Support webpage offers additional training opportunities and user guides for our systems. alcf.anl.gov/support-center
- Visit the ALCF Facility Policies webpage to familiarize yourself with the policies and procedures for ALCF users. docs.alcf.anl.gov/policies/
- ALCF User Guides: docs.alcf.anl.gov
- ALCF Training Videos: youtube.com/@argonneleadershipcomputing8396
- ALCF GitHub Beginners Guide: github.com/argonne-lcf/ALCFBeginnersGuide
- Example Job Scripts: docs.alcf.anl.gov/running-jobs/example-job-scripts/

*Account creation can take 1-3 weeks depending on user nationality.

[Similar footer as the Get Started Handout for the Lighthouse Institutional Support Team: **Argonne logo**, **DOE logo**, lighthouse@alcf.anl.gov, alcf.anl.gov/lighthouse]