UW Advanced Research Computing Center

UW's next generation HPC: Coming Soon (2024)

- State of the art hardware
- More GPUs
- Expanded AI Capabilities

UW Hosted HPC Resources:

- **Beartooth** - Managed under the condo paradigm (Hardware Summary) and *available to UW researchers at no cost.*
  - The Beartooth compute environment allows researchers to perform computation-intensive analysis on large datasets. Using Beartooth, researchers have control over their data, projects, and collaborators. Built-in tools and software help users get up and running in a short period of time.
    - Researchers can request custom tools and software on Beartooth to fine-tune their research procedures.
  - **Southpass** is a publicly accessible implimentation of OnDemand allowing access to Beartooth over a web-browser.
- **Wildiris** - Specialty cluster
  - Created to enable outreach for the IDeA Network for Biomedical Research Excellence (INBRE) and Wyoming community college students.
- **Loren** - A Specialty GPU based HPC cluster for private use by the High Bay Research Group
- **Coming Soon**: ARCC's next generation HPC cluster with expanded GPU capabilities (2024)

UW Advanced Research Computing Center

UW Hosted Data Storage Resources:

Research is increasingly data-intensive. With this in mind, UW ARCC provides research data storage as a core service. High performance research data storage is primarily provided through the resources listed below.

- **Alcova** - High Performance Data Storage
  - Alcova high performance data storage is geared towards project-oriented data storage. Allocations on Alcova allow researchers to reliably store and exchange data with anyone located anywhere in the world. Additionally, Alcova provides storage for published research data.
- **Pathfinder** - Cloud-like Low-Cost Data Storage
  - Pathfinder serves as a low-cost storage solution enabling a cloud-like presence for research data hosted by UW ARCC. This system is built to be expandable and provides data protection. Core functionality also hosts onsite backups and enables data sharing and collaboration

Additional Resources:

- **Gitlab**
  - Available at https://gitlab.arcc.uwyo.edu
  - Community Edition
  - A collaborative code development service hosted on ARCC resources
- **Globus**
  - Cloud-Based software used to transfer, share, sync, and publish large amounts of data.
  - Designed to move very large data in an efficient manner managing file transfers, monitoring performance, reports status, and performs fault recovery whenever possible.
- **Investment Program**
  - Ability for researchers to invest in compute nodes, storage, or specialty infrastructure on ARCC hosted HPC resources.

User Support Resources

- **Software Services**
  - Assistance installing and troubleshooting software on our HPC platforms.
- **Linux Desktop Support**
  - UW ARCC maintains a license for RedHat Enterprise and users may request RedHat installations on UW owned equipment.
  - UW ARCC provides support for RedHat and Ubuntu. Users may request ARCC's assistance for these Linux distributions.
- **Training and Workshops**
- **Training Account Checkout**
  - Utilized for Short Courses hosted on ARCC HPC resources
- **HPC Project Migration**
  - UW ARCC can provide assistance migrating project data and code onto and off of our HPC resources.
- **General User Support**
  - https://arccwiki.atlassian.net/wiki/spaces/DOCUMENTAT/pages/623029/User+Services#Office-Hours
    - ARCC User Support staff are regularly available Tuesday and Thursday between 1:00-3:00PM MST virtually over zoom.
  - Individual Consultation