

OSC Champions

SUG Meeting 4.18.19



Champions Program

Purpose: To grant representatives from universities, colleges, or academic departments around Ohio access to tools and resources to help researchers at those institutions be successful in leveraging OSC services for their research activities. To evangelize OSC services to potential clients.

OSC provides: A research project with usage exempt from fees to institutions. Compute is limited to 10,000 RU per fiscal year, and storage is up to 5 TB on the Project service. Channels for communication with OSC support staff and with Campus Champions from other institutions.

Institution contact: Acts as a local campus resource for OSC users. Can use the Client Portal and their project to provide nearly-instant access to OSC services for small tests. Researchers can add the Champion's account to their projects to allow more direct assistance with running jobs. Can offer OSC training to their campus, and conduct "office hours".

Eligible personnel: Staff employees at the institutions. Determinations of appropriateness are made by OSC personnel.



Current Champions

- Case Western Reserve University
 - PDS0307: Cindy Martin
- Miami University
 - PMIU0146: Jens Mueller
- Ohio State University
 - PAS1308: Keith Stewart (OSU Arts & Sciences)
 - PAS1309: Sandy Shew (OSU Arts & Sciences)
 - PAS1310: Lee-Arng Chang (OSU Libraries)
 - PAS1439: Brian Swaney (OSU Arts & Sciences)
 - PAS1446/PAS1459: Brian Adler (CFAES)
- University of Akron
 - PBS0319: Christopher Martin
- University of Cincinnati
 - PES0742: Brett Kottman
 - PES0775: Kurt Roberts (College of Medicine)
- Wright State University
 - PWSU0470: Mike VanHorn



Communication Tools

- OSC Discourse Forum
 - Discourse.osc.edu



Training Materials

Hands on Workshop available on GitHub

- https://khill42.github.io/OSC IntroHPC/
- OnDemand based introduction to using OSC Clusters
- Feel free to share, offer locally, or make your own version



Training Materials

1. Introduction to HPC	What is High Performance Computing? Why should I be using High Performance Computing for my research? Don't I need to know how to program to use High Performance Computing?
2. Connect to the HPC	How do I connect to an HPC system?
3. Using a cluster: Introduction	What is a cluster? How does a cluster work? How do I log on to a cluster?
4. Using a cluster: Scheduling jobs	What is a scheduler and why are they used? How do we submit a job?
5. Using a cluster: Accessing software	How do we load and unload software packages?
6. Using a cluster: Using resources effectively	How do we monitor our jobs? How can I get my jobs scheduled more easily?
7. Basic UNIX Commands	What is the syntax of UNIX commands? How do I navigate the file system? How do I transfer files to HPC? How do I interact with files on the HPC?



OSC Survey (osc.edu/survey)

- 100 Responses so far
- Memory and CPU speed rated most important
- Work sensitive to size of clusters and software environment
- Software availability biggest impediment to switching clusters (but not big)
- Users least interested in XDMoD
- New/expanded services: bigger clusters, data archival

- Open ended comments:
 - Difficult to know how busy GPUs are
 - Scheduling reservations would be nice
 - More bioinformatics software
 - Local registry for container images
 - Slurm!



Discussion Questions

What can OSC do to support you?

Do you have any OSC activities planned?

