

## UC Advanced Research Computing center – July 2021

### How Can We Help You?

- Need computational or data analytics tools? Request resources on the UC community HPC/HPDA cluster: [UC HPC Project Request](#)
- Need help using or accessing the system? Send an email to [arc\\_info@uc.edu](mailto:arc_info@uc.edu)
- Need priority access to HPC resources for your time-sensitive research? Contact Jane Combs at [combsje@uc.edu](mailto:combsje@uc.edu) or [arc\\_info@uc.edu](mailto:arc_info@uc.edu) to [invest in the ARC HPC cluster](#).
- Need more information? Visit [arc.uc.edu](http://arc.uc.edu) (must be on campus or connected to VPN)

### Research2030 Invest for Impact: **Data Center modifications for HPC**

In preparation for the installation of the new HPC cluster, Heapy, Inc., recommended a modification to the data center to install water cooled infrastructure and use [HPE's Adaptive Rack Cooling system \(ARCs\)](#) to house and cool the HPC racks, removing the load from the data center HVAC systems. The water cooled system decreases the power/cooling consumption by more than 40% saving at least \$30,000 annually.

The project is near completion and thanks to the Office of Research's commitment to research infrastructure the data center can safely and efficiently house our growing HPC resources.

### **Research data transfer and dedicated research storage - Coming Soon! (Fall 2021)**

Transferring data to and from UC is a common need for researchers and can be especially time-consuming when working with large datasets. Using the new dedicated data transfer nodes can significantly speed up this process for applications that require a direct connection to the internet or can use large bandwidth connections to transfer data. Researchers with large data transfer requirements or the need to share their data will also be able to use UC's [Globus Online Platform](#) subscription.

### **Global Supply Chain Impacts CPU and GPU purchases**

The arrival of UC's second HPC cluster has been delayed due to global supply chain challenges. HPE's estimated delivery is mid-September. Faculty who are waiting for nodes that they purchased will be given fair share boost on existing nodes until the additional equipment arrives.

**We've moved!** In January 2021, the ARC support team (Jane Combs, Amy Latessa, Kurt Roberts) moved to a new department, Research Technologies – Research Computing and Data (RCD), within the OoR Strategic Programs and Signature Initiatives division. This reorganization positions the research computing and data services team to better serve the UC research community.

*Come visit us on the 2nd floor at the Turner Building on Short Vine or at the Faculty Enrichment Center (FEC) during Office hours 1st Tuesdays, 1 - 4pm | 3rd Fridays, 9:00am - 12:00 pm | Zoom or in person starting 9/1/2021*

## **Maintenance (2nd Tuesday of every month)**

Maintenance reservations will be set to make sure that jobs are not started during this time. You will see jobs labeled as "(ReqNodeNotAvail, reserved for maintenance)" This is expected, and jobs will resume once maintenance is completed.

Next Maintenance: Tuesday August 10, 2021 7am - 7pm

July maintenance performed:

Updated IDRAC and bios of all compute nodes

Completed memory test for failing compute-7

Updated Singularity configuration to work with non-root user namespaces

# Research Computing & Data Training & Consultation

Research Computing and Data hosts a variety of training available at no-charge to you.

Upcoming remote workshops:

- August 4 – 5: [Workshop: Advanced Computing for Social Change Curriculum](#)
- August 10 – 11: [XSEDE HPC: Big Data & Machine Learning](#)
- August 31: [Machine Actionable Data Management Plans and the Dmptool](#)
- September 8: [R Introduction Workshop](#)
- September 14: [ESRI's StoryMaps](#)
- September 22: [Series R: Introduction Workshop](#)
- September 29: [Series R: Introduction Workshop](#)
- September 30: [Writing a Good Data Management Plan](#)
- October 6: [Series R: Advanced Workshop](#)
- [Explore online/on-demand training options here.](#)

## Advanced Research Computing Consultation Hours

**1st Tuesdays, 1 - 4pm | 3rd Fridays, 9:00am - 12:00 pm | Zoom**

Schedule ahead of time or drop in the ARC virtual office hours for personalized assistance for your research computing and data storage needs. Consultations are available to any UC student, faculty or staff member. We can assist you with getting up and running on the ARC system, discuss research & data needs, ask questions or share an idea!

Join Zoom Meeting

<https://ucincinnati.zoom.us/j/92504797987?pwd=UEhScDQ4c2Vkk2pYUjZ2lxTmtYZz09>