

CRC-P1: Community-Owned Research Computing and Data Infrastructure Policy

Adopted on: 08/16/2024

Purpose: This policy outlines the framework for the use of community-owned research computing clusters and storage infrastructure at the University of Pittsburgh. The goal is to provide a sustainable computing environment for researchers by balancing ease-of-use with delivering a level of service that incentivizes integration into a central cluster environment.

Scope: This policy applies to all researchers, departments, and industry collaborators who use the community-owned research computing clusters at the University of Pittsburgh.

Definitions:

- **Community-owned research computing clusters:** computing hardware and supporting software that has been paid for by a university entity or in whole or part by grants or contracts in support of individual principal investigators but is centrally located and maintained and available to other university approved users. Formal ownership of the computing hardware will not be affected by incorporation in central computing clusters.
- **Data infrastructure:** storage capacity, backup, networking, software, and data transfer nodes to facilitate movement of data.

Policy:

- **Ownership:** Investigators can become owners under the community model by purchasing capital equipment for computational resources through grants, startup or departmental funds, and/or other funding sources. These resources are integrated into the central cluster and made available to the broader community when not in use by the owner.
- **Access:** There are two levels of access to the community-owned clusters: general and owner. General access is available to the university community on a first-come, first-served basis. General users' jobs will be preempted when owners need the resource. Owners will have the highest priority and are guaranteed on-demand access interactively or batched commensurate with their investment.
- **Subsidies:** The University provides subsidies to keep costs affordable for researchers and to incentivize the use of a centrally managed research computing and data environment. These subsidies cover the costs of supporting infrastructure, power and cooling, data center space, system support, security monitoring, and hardware and software updates.



- **Hardware Acquisition:** The Center for Research Computing (CRC) will consult and provide hardware purchase recommendations based on owners' needs, budget, and compatibility with CRC's ecosystem. The CRC will order all equipment. The CRC will install and configure purchased equipment within one month of delivery to the Pitt datacenter.
- **Hardware Lifecycle:** Nodes are purchased with a 5-year warranty but can remain in production for up to 7 years if functional*. After 7 years, the PI will be notified that the hardware is about to be sent to university surplus. The PI will have 2 weeks to request and arrange for the nodes to be returned to the PI, if they choose to do so.
- **Data Storage:** Owners can leverage the CRC data storage ecosystem. The initial allocation is free to principal investigators. Additional capacity can be purchased.
- **Support:** The CRC team will respond to hardware and software issues within 1 business day. Requests for support are submitted through the CRC ticketing system. Resolution times may vary depending on the complexity of the issue and other factors.

Contact Information: For inquiries or to express interest in the community-owned research computing clusters at the University of Pittsburgh, please contact the Center for Research Computing (CRC) by emailing crchd@pitt.edu.

*Functional is defined as hardware that is operating without error. Once any hardware issue is encountered, the equipment will be removed from production. At the discretion of the CRC, an extended hardware warranty may be purchased by the PI through the CRC.