

Standard Policy for Researcher Owned Hardware in CHTC

CHTC provides the UW-Madison campus with computing services at no fee that are backed by a pool of shared capacity. PIs with computing needs beyond these standard CHTC services can use hardware that joins CHTC's shared computing systems and is prioritized for their group. There are two ways to gain priority access:

1. Provide the CHTC with funds through a University Transfer.
2. Place hardware owned by the PI at the CHTC to be operated by the CHTC.

This document summarizes CHTC policies around the second option - researcher-owned hardware.

For departments constructing a startup package for new faculty, it is *much better* to arrange prioritized access through the first option described above. In this scenario, the cost for prioritized access is paid directly from the department, college, or OVCRGE to CHTC. This can be arranged for the duration of the tenure clock and does not tie the researcher to the specific hardware. This requires the department or college to coordinate with CHTC prior to the initial offer letter.

The CHTC team is always happy to meet with researchers to help them understand if the researcher-purchased hardware option is right for their use case.

Recommendations Before Purchasing

It is best to pursue a hardware purchase only after a group has already started using CHTC services and leveraged its existing shared capacity. In many cases, CHTC's shared resources are sufficient for a group's work; if there are limitations, existing use of CHTC systems can better inform what type of hardware is needed to best support the group's goals.

Groups who have not purchased hardware with CHTC before are required to meet with CHTC staff before proceeding with the purchase process. For returning purchasers, CHTC staff will decide whether a consultation meeting is required.

Researcher-owned hardware is meant to supplement our existing shared systems, with some of the capacity of the researcher-owned hardware used by other CHTC users via a backfill mechanism (see more details under Sharing and Prioritization below). CHTC is not a generic hosting service - for PIs who would like exclusive access to a server just for their group, there are other options available through DoIT. CHTC will maintain the host within the common compute environment; the research groups won't have 'superuser' access, be able to run web services, or have the ability to select a custom operating system; the security and access

controls will be the same as campus-owned hosts. As with any CHTC systems, groups *will* be able to install and use preferred software environments through the use of containers.

Purchase Process

Researcher hardware purchases **MUST** be coordinated with CHTC in advance to ensure compatibility with the CHTC infrastructure. We strongly recommend purchasing hardware during our annual spring hardware purchase to take advantage of volume discounts.

The server hardware is owned by the researcher's home department. The department is responsible for ensuring asset tags are given to CHTC and CHTC can help with the annual capital asset audit.

Hardware Support

Once purchased, CHTC is responsible for hosting and managing the researcher-owned hardware. CHTC agrees to host and support the hardware for the length of its warranty period, working with the vendor to address any problems that arise. Once the hardware is out of warranty, the center will continue support until the hardware is five years old or until the server becomes non-operational, whichever comes first. The purchasing PI remains the owner of the physical hardware throughout. If the owner wants to remove the hardware from CHTC management for any reason all that is needed is a one month notice to arrange an orderly pickup from the datacenter.

Sharing and Prioritization

Researcher-owned hardware is administered as part of our shared computing systems and can only be accessed through batch, interactive job submission, or through a Jupyter notebook. The hardware will be prioritized for members of the PI's research group and collaborators. Prioritized access is tied to the specific researcher-owned hardware; if the hardware is down there is no prioritized access. Researchers can choose whether a job or job set will target their owned hardware, CHTC's shared capacity or both.

When not in use, CHTC will backfill the hardware with computational work from other users on the relevant system. As providing a shared resource pool for campus is part of our core mission, **our expectation is that a researcher-owned node will contribute a reasonable percentage back to the community through backfill capacity.** We reserve the right to deny future purchases for a group who has exhibited use patterns that prevent this sharing of resources.

Hardware Retirement

Once an out-of-warranty node has become non-operational or reached the five year support maximum (whichever comes first), the PI has the option to donate to CHTC (where we may repurpose it or send it to university SWAP) or reclaim the hardware.

Contact

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