

**CHPC Owner Node**  
**Faculty Resource User Agreement**

Effective Date  
April 15, 2014

**Purpose/Objective**

This document outlines the agreement between the Center for High Performance Computing (CHPC) at the University of Utah and [Faculty Member] for the provisioning and support of owner nodes. The purpose of this agreement is to:

1. Document CHPC policy regarding the support of owner nodes.
2. Establish a shared set of expectations regarding the operation, support, and life cycle of the owner node.
3. Provide a framework for bidirectional communication regarding issues and overall satisfaction with the service.

**Service Description**

Often research groups need either more computing resources that CHPC can provide via the allocation process or hardware that is in some way different (e.g., CPU, memory, local disk) from that provided by CHPC. In these cases a PI may purchase nodes that will be added to an existing CHPC compute cluster. Nodes will be added to the current CHPC production cluster at that time, as determined by CHPC. CHPC retains full operational control over the node, including having root access, specifying the operating system and version, and all security policies.

**Service Cost**

The Owner will pay the acquisition cost of the node(s) and the required portion of the high speed interconnect (currently Infiniband) needed to attach the node(s) to the cluster.

CHPC currently provides the environmental infrastructure (racks, power and cooling) and provisions and supports owner nodes free of charge to the customer. CHPC also provides the base Ethernet and management networking, the OS, core applications, scratch resources, and basic home directory options that can be used with these nodes.

CHPC reserves the right to review and change this agreement at most twice annually. Changes to this agreement are subject to the approval of the IT Governance Research Portfolio.

**Owner responsibilities regarding owner nodes**

The PI or the PI's specified delegate will:

- Meet with CHPC and describe computational needs so that an appropriate hardware solution can be identified.
- Work with CHPC to establish batch policy on compute nodes.

- Communicate with CHPC any issues regarding use of the nodes.
- Agree to use these nodes in a manner that does not negatively impact other CHPC users, as owner nodes have access to shared resources (e.g., file systems, networks).

### **CHPC responsibilities regarding owner nodes**

CHPC staff will:

- Obtain quotes and place the order for the nodes.
- Provision the nodes and perform hardware verification testing to insure nodes are in working order.
- Maintain and house these nodes in the cluster for as long as they are under warranty. Once off warranty, CHPC will maintain the nodes in a “best effort” model, including diagnosing any hardware issues, and if applicable, obtaining a quote for any repairs and discussing repair options with PI or the PI’s delegate.
- Provide support for the use of these nodes, including installation of libraries and applications.
- Work with the PI or delegate to determine policy on the node. CHPC will make a best effort to accommodate any special needs and machine specifications that the PI requires, however CHPC cannot guarantee that these needs can be met.
- Mount all of the appropriate file systems (scratch, home directories, group spaces) on these nodes.
- Restrict ssh access to any owner interactive node to the members of the PI’s group.
- Have access to all owner nodes for the purpose of providing support on these resources.

Once nodes are off warranty, CHPC reserves the right to retire nodes from the clusters in the event that maintaining them exceeds available resources (staff time, power, cooling, and machine room space) or if the entire cluster is being retired.

### **Usage Priority Policies**

Standard CHPC policy for the shared use of owner nodes is:

- Users in the PI’s group will be given the highest priority for running on owner nodes.
- Users in the PI’s group will compete against each other for priority and CHPC will use fair share and other techniques to determine scheduling. Parallelism will be rewarded. CHPC will work with the PI or the PI’s delegate to make any adjustments needed in the default policy.
- In order to maximize the benefits of the considerable shared resources that support owner nodes within CHPC, general CHPC users will be allowed access to owner nodes in a pre-emptible fashion when they are idle. The guest usage of all owner nodes of a cluster will be tracked.
- The PI may request that CHPC suspend guest access for periods of time when necessary.
- CHPC will suspend guest access if an issue is found with the implementation of preemption within the batch scheduler until a fix or work around is implemented.

### **CHPC Hours of Operation and contact information**

Phone: 801-581-6440 (during normal University Working Hours)

**E-mail: [issues@chpc.utah.edu](mailto:issues@chpc.utah.edu)**

Normal CHPC business hours are Monday-Friday 8AM-5PM, except on University holidays and closed days. CHPC personnel strive to acknowledge the receipt of messages submitted to the issue tracking system within three hours during these business hours.

Date: \_\_\_\_\_

Signature of PI: \_\_\_\_\_