

Contribution of HPC Assets to SHARCNET¹

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Background

Researcher contributions to SHARCNET of HPC infrastructure have enabled SHARCNET to substantially increase the computational and storage resources available to the general researcher community. This process has been facilitated by SHARCNET's focus on distributed and cluster computing, and by a good relationship with individual researchers. It is a fundamental objective of SHARCNET and Compute Canada to facilitate and foster such contributions.

The purpose of this document is to describe a consistent set of conditions, procedures and expectations for such contributions. The document covers the conditions for planning, purchase, installation, utilization, maintenance and decommissioning.

It should be noted that since the partner institution retains the legal ownership of the contributed researcher-funded equipment, any agreement must satisfy the four parties involved: the researcher, her/his institution, the institution or site at which the equipment is installed and SHARCNET. In many cases the installation site will be the same as the researcher's home institution but in some cases it may make more sense to install the hardware at another site.

Objectives

- Encourage continuation of the established process for contributions to SHARCNET of computational resources for the mutual benefit of the researcher, institution and SHARCNET community.
- Maximize the value of a researcher's grant by leveraging existing SHARCNET infrastructure.
- Recognize past ad-hoc verbal practices in a more formal manner with supporting documentation.
- Clarify that any such contributed equipment is owned by the institution and delineate when its use and disposition is governed by the SHARCNET Operating Agreement and when not.
- Recognize that there is a fundamental relationship between the researcher and her/his institution governing the expenditure and use of research funds.

¹ The commitments in this policy are subject to the availability of resources under the control of SHARCNET.

- Recognize the fundamental relationship with respect to tangible assets between SHARCNET and the institution as a member of the consortium.
- Ensure that expectations of the researcher, the member institution and SHARCNET are clearly outlined and accepted.

Process -- Key Steps and Activities

- The researcher wishing to contribute equipment to SHARCNET will contact SHARCNET and initiate discussions with the local site leader and technical manager to resolve any technical issues. This discussion needs to begin as early in the overall process as possible, ideally even before the grant proposal is written. Discussion will continue through the final purchasing and installation stage.
- SHARCNET will advise the member institution via the Research Office that the process has been initiated.
- The individual researcher together with SHARCNET's technical manager or Scientific Director will review the guidelines for contribution of assets.
- Normal practice will be that equipment purchases are conducted by the host institution.
- SHARCNET, the institution and the researcher will each receive a copy of a document detailing: a description of the equipment purchased; access rights beyond or different to those guaranteed to the researcher by "ownership" of the equipment; anticipated duration of support of the equipment by SHARCNET and decommissioning plans; any special terms and conditions negotiated amongst the parties prior to finalizing the agreement; and conditions for withdrawal of the equipment by any of the parties.

Guidelines for Contribution of Assets to The SHARCNET Consortium

These guidelines apply to the contribution of computational assets by an individual researcher, researcher community or institution to the SHARCNET consortium. It is recognized that by this process there are mutual benefits both to the researcher and institution, who contribute the assets and to SHARCNET. The researcher and institution have the assurance of receiving professional administrative services for the HPC assets contributed, as provided by SHARCNET's team of system administrators. The researcher also has the benefit of access to increased computational assets on a preferential basis. Through this process SHARCNET is able to acquire additional HPC assets and make them available to the research community. In the following the "researcher" is an academic member of an institution who is responsible for bringing the computational assets to SHARCNET; the "contributor" is the researcher's institution. This terminology recognizes that the researcher's institution is the legal owner of the contributed infrastructure. The following principles apply:

1. The researcher has a current account with SHARCNET and/or Compute Canada.
2. Potential researchers and/or contributors are required to consult with SHARCNET prior to purchasing any equipment related to computational facilities to ensure compatibility with existing SHARCNET equipment, the computational infrastructure and SHARCNET system use policies.
3. The contributor provides a complete description of computational assets, such as manufacturer, model, serial numbers, etc. for the equipment; this will ensure that equipment being contributed and the installation requirements are properly identified and documented.
4. Equipment will normally be installed in the same location as existing SHARCNET computational infrastructure at the contributor's or an alternative institutional site, to minimize connection costs and facilitate system administration by SHARCNET staff.
5. SHARCNET will arrange for installation of contributed equipment, provided that the sharing of any incremental costs will be mutually agreed beforehand. These incremental costs may include but are not limited to: commercial software licenses, electrical power and cooling costs and network connectivity.
6. SHARCNET, the researcher and the contributor will mutually agree beforehand on the duration of the support that SHARCNET will provide for the contributed infrastructure and the provisions that will apply when the equipment is decommissioned.
7. A contribution may be withdrawn from SHARCNET on 60 days written notice provided that the contribution can be reasonably separated from other SHARCNET equipment. Costs associated with such a withdrawal will be borne by the contributor. Any components funded by SHARCNET shall remain within SHARCNET and be governed by the Operating Agreement. A contribution that cannot reasonably be separated shall be governed by the terms of the Operating Agreement. Withdrawal terms will be agreed to at the time of contribution.
8. The researcher shall receive guaranteed access to the computational assets contributed, or equivalent, and to additional SHARCNET computational resources. Typically, cycles unused in a particular time period cannot be "banked" against future requirements except with prior mutual agreement. The contributor and SHARCNET will agree on the preferential terms that the contributor expects and that SHARCNET can offer. Normally the researcher will receive priority access to the contributed hardware.
9. Subject to the researcher's preferential use agreement, the contributed computational assets shall be available for the use of and integration into the SHARCNET pool of resources and will be available to all researchers (internal and external) similar to all other SHARCNET computational assets.
10. SHARCNET will provide all system administrative services for the equipment, including arranging for any warranty and maintenance services. The contributor is responsible for all warranty costs as part of the original purchase. Any additional maintenance and associated costs will be jointly shared by SHARCNET and the contributor by mutual agreement.