

Cluster computing resources

[20200407]

Policy Title	Policy on Cluster computing resources
Policy #	URI 03.XXX
Policy Owner	URI IT Governance Committee
Responsible Office	Office of the CIO
Contact Information	Questions about this policy should be directed to the CIO
Approved By	Administrative Policy Committee
Effective Date	To be added by the VPAF Office
Next Review Date	To be added by the VPAF Office
Entities Affected by Policy	All users of the shared cluster computing resources
Who Needs to Know About this Policy	All faculty and researchers of the University
Definitions	Cluster Investor: Any individual or group of individuals at the University who have purchased hardware components of the shared computing cluster. May include faculty researchers, colleges, institutes and divisions. For the purposes of this policy, organizational unit investments are treated as individual investments by the unit leader.
Statutes, Regulations, and Policies Governing or Necessitating This Policy	None
Reason for Policy/Purpose	<ul style="list-style-type: none"> To provide investors an understanding of how investments in the shared resource will be managed and how compute time will be allocated. To provide guidance for ITS staff implementing scheduling policies and allocating storage space.
Abstract	
Forms Related to this Policy	None

Policy Statement

This policy sets forth how investments in the shared computational cluster are managed and allocated to researchers. This policy defines two types of cluster users - those that have contributed funds to the cluster and those that have not. Cluster investors have priority use of cluster resources they have purchased. In exchange for the systems management and infrastructure support by URI, all investors agree to allow non-investors to utilize their hardware resources when not in use by investors.

Investors purchase compute nodes and shares of common infrastructure such as disk resources and networking components. These investments are pooled, and new hardware purchases are made on a bi-annual basis to maximize cluster homogeneity.

Cluster resources shall follow the university depreciation schedule and be considered obsolete and investor rights shall terminate five years after investment. If the equipment is still functional at the end of this period, it shall be used to support the research, teaching, and learning missions of URI. Within this group of resources, teaching and learning shall receive priority access and all research use shall be on a first-come, first-serve basis.

Investors may be individual scholars, groups of scholars, or representatives of the administration. Investors have the right to add and remove individual cluster users and determine relative priority of users within their sponsorship group. Cluster users may be members of any number of such groups. Investor-sponsored computation shall have no more than a 24-hour wait time before being started. Investor-sponsored computations may have either unlimited or limited run-time duration on the investor resources at the sole discretion of the investor.

Non-investors shall be pooled, and their jobs shall be sequenced on a first-come, first-serve basis. Their computations shall be started when there are sufficient unused resources on the cluster. The computations, once started, are guaranteed at least 24-hours of runtime. At that point in time, the job may be terminated at any time if an investor job is submitted to the same computational resource.