Ilifu User-Supplied Equipment Resource Allocation Policy

Version 1.0 Adopted: 2 March 2018

Introduction

The ilifu computing equipment comprises equipment funded directly from the DIRISA ilifu grant as well as various institutional / user-supplied contributions. These include the substantial contributions to the ilifu pool of the IDIA computing nodes and also computing resources from a UCT bioinformatics grant from the US NIH. This document provides the high level policy for resource allocation of such "user-supplied" equipment.

Policy

User-supplied equipment will become part of the common pool of resources available to ilifu approved projects. The monetary value of the equipment comprising the ilifu cluster will be used to determine the share of resource allocation of the cluster and applied according to Fair-share task scheduling approaches which seek to ensure that **users get their fair share of machine resources as measured over a long period of time**. Here "long" will be taken as a period of a month and resource utilisation would, in the first instance, typically be focused on CPU usage rather than storage though certain reasonable storage quotas will also be applied. The relative allocation of the "shares" in the cluster will be re-evaluated with each new addition of equipment and will be based on the relative monetary valuation of all the ilifu equipment at the time of re-evaluation. For example, if a user has supplied equipment valued at 30% of the resources of the cluster as per the latest cluster valuation date and assuming that the cluster was fully utilised by a number of users, that user should end up with approximately 30% usage of the full cluster resources.

Implementation

The ilifu Computing Resource Allocation Committee shall be responsible for implementation of this policy and reporting on allocations to users of user-supplied equipment as part of the broader ilifu resource allocation.