

GPGPU workshop: Introduction

Monday, 16 September 2013 14:10 (20 minutes)

How best to facilitate the integration of General Purpose Graphic Processing Units (GPGPUs) into the European Grid Infrastructure as first-class grid resources was discussed at the last EGI Community Forum in Manchester. The focus of this session is:

- i) a look at some of the intermediate results since this meeting; and
- ii) and to look at how the community of resource providers and users can drive this process forward through a new proposed GPGPU Working Group.

Description of Work

TO BE UPDATED

In this workshop we will look at a number of key technical areas that need to be further investigated as part of a community-driven solution to the problem of grid-enabling access to Computational Accelerators. These areas include: Computational Accelerators/GPGPU LRMS Integration; Computational Accelerators/GPGPU Glue-schema definition and User Requirements; Information System Providers; Nagios Probes; GOCDB integration; and Accounting.

As an outcome of the workshop, we will seek to assemble a team of experts to drive forward a community-derived grid-standard and solution to this integration problem. Participation is welcome from parties interested in supporting and advancing the provisioning of grid-enabled access to Computational Accelerators.

Wider Impact of this Work

TO BE UPDATED

The short-term goal is to develop a greater understanding of the range of technical problems that currently hinder tighter integration of Computational Accelerators into the grid infrastructure. If possible, we would like to encourage Resource Centres to converge towards an early prototype standard access method. In the medium-term, we would like encourage interested parties to volunteer and participate in the development of a user-community driven standards and solutions to these integration issues.

Session, double-session

1 session

Printable Summary

TO BE UPDATED BY J. WALSH

The EGI GPGPU Resource Centre survey indicated the increasing deployment and usage of commodity massively parallel "Computational Accelerators" - for example, the so-called "general purpose graphics processing units"(GPGPUs) - on the grid infrastructure over the next 18 months. Despite this increased usage of Computational Accelerators, they cannot currently be discovered or accessed using the standard methods familiar to the grid user-community. Many other issues remain to be solved before they can be treated as a "first-class" grid resource. This workshop brings together experts from the grid community to discuss these integration issues.

Primary author: WALSH, John (TCD)

Presenter: WALSH, John (TCD)

Session Classification: Resource Centre Forum