



Contribution ID: 80

Type: **Oral**

NDGF approach to serve the non-LHC communities needs: Nordic Material Science VO

Wednesday 14 April 2010 14:20 (20 minutes)

We present the joint NDGF and CSC (Finland) project on setting up and supporting a new Nordic Material Science Virtual Organization inside NDGF (Nordic MS VO). The activities are focused on making the flexible and Nordic MS VO users friendly grid environment available on ARC enabled resources.

Conclusions and Future Work

The work is in progress. Within the next few months the applications to be checked on grid usability, mainly the licensing issue. Up to 10 scientific application will be chosen to be at the VO support level. VO support will prepare Runtime environment configs, and end-user documentation on the NDGF wiki. After the installation and preparation phase is over the ongoing user support work will be continued.

Detailed analysis

The Nordic material science community - physicists and chemists and other computational scientists, but not limited to a particular field of science - is spread over all Nordic countries. Therefore NDGF support for the community is a natural addition to its list of supported virtual organizations (VOs).

The main target of the VO supporters is non-LHC computational scientists. The main goal of the project is to get those scientists running their jobs on ARC enabled resources. We identified several factors which make a grid service attractive and usable for the computational scientists. Namely (i) availability of the pre-installed scientific applications on the grid resources, (ii) solid MPI environment support, (iii) possibility to run long time jobs and (iv) working environments for the interactive use.

In this project we address the first two issues.

The project has been started in Oct 2009 and will last till the end of the 2010.

Impact

The approach is based on the solid numbers. We have collected the statistical information from the VO participants identifying their needs in application software. We have also found out type of the most popular MPI flavour and collected statistics about CPU number usage by applications.

The impact is that the Grid must become a user-friendly environment for the former cluster and mainframe users. Nordic MS VO to be easily expandable. Starting with the 10-15 participants from the Nordic countries we can easily add more. Having 5-10 top applications pre-installed from very beginning we can consider other applications pre-installation, based on the upcoming end-users needs.

Keywords

Nordic MS VO, NDGF, end-user environment, ARC, runtime environment

URL for further information

<http://ndfg.org/>

Author: Dr DEGTYARENKO, Ivan (CSC - IT Center for Science Ltd.)

Presenter: Dr DEGTYARENKO, Ivan (CSC - IT Center for Science Ltd.)

Session Classification: Regional Activities, International Projects and Collaborations

Track Classification: End-user environments, scientific gateways and portal technologies