

Overview of IDGF infrastructure and its integration into the EGI infrastructure

Monday, 16 September 2013 09:00 (8h 30m)

Description of Work

The poster will detail the network of desktop grid sites belonging to the infrastructure of the International Desktop Grid Federation. Beyond the sites, we show the job entry points like science gateways and command-line submission possibilities. The infrastructure is monitored by Nagios and the performance is tracked through Munin graphs. Application Repository contains validated applications while thanks to the latest technology achievements non-validated applications can also be submitted. Clouds are playing an important role in batch completion time due to their dedicated resources which can be allocated for batches on demand. The poster will detail all the important components of the IDGF infrastructure and the possibilities for EGI users to utilize the resources.

Relevant URL (if any)

<http://desktopgridfederation.org>

Preferred Day if any (Demos - Mon, Tue, Wed)

Tue

Printable Summary

Desktop Grids (DG), aggregating the otherwise unused computing power of large numbers of Desktop computers from volunteers (globally) and campus-wide (locally), form a fast growing segment of the European Distributed Computing Infrastructure (DCI) for science in Europe.

International Desktop Grid Federation (IDGF) aims to consolidate DG-related software and know-how and aims to support the setup of new Desktop Grid sites. IDGF has a core set of volunteer and campus desktop grid sites while continuously extending with newly built ones.

The IDGF infrastructure contains desktop grid sites (both volunteer and campus), bridges, application repository, various science gateways and monitoring facilities. For scientific users command-line job submission (e.g. through gLite) is possible to these sites, while cloud resources are also part of the infrastructure to speed up the completion of jobs on demand.

One of the biggest volunteer project offered as a distributed computing infrastructure for the EGI users is the EDGeS@home BOINC-based project. EDGeS@home has already provided more than 300 Million normalized CPU hours (i.e. 300 Million credits in BOINC terminology) computing power for the scientists since October 2009.

This poster will give an overview of the current IDGF infrastructure and the sites which have been set up recently. Moreover, the poster will show how the EGI users can access to this enormous set of resources.

Primary authors: Dr KOVACS, Jozsef (MTA SZTAKI); Dr LOVAS, Robert (MTA SZTAKI)

Co-authors: Mr VISEGRADI, Adam (MTA SZTAKI); Mr MAROSI, Attila (MTA SZTAKI); Mr FARKAS, Zoltan (MTA SZTAKI)

Presenter: Dr KOVACS, Jozsef (MTA SZTAKI)

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