

Increase the throughput of your VO in 10 mins: fully integrated DG resources into EGI infrastructure

Tuesday, 17 September 2013 09:00 (8 hours)

Description of Work

The demonstration will focus on showing how to utilize both volunteer and institutional resources provided by the IDGF desktop grid technology.

The first part of the demonstration covers how a VO can access and submit jobs to the EDGeS@home volunteer BOINC project. During the demonstration a link between a gLite VO and the BOINC project is established and jobs will be submitted seamlessly.

The second part of the demonstration addresses how a VO can access and submit jobs to its own institutional desktop grid site established e.g. in an IaaS cloud. During the demonstration a complete desktop grid infrastructure will be setup in a cloud automatically and will be configured to accept incoming jobs from a given gLite computing element belonging to an EGI VO.

Relevant URL (if any)

<http://desktopgridfederation.org>

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

Tue

Printable Summary

Desktop Grids, 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.

As a result of the IDGF-SP EU-funded support project, the latest desktop grid technologies have been consolidated to support the easy access and efficient utilization of volunteer and private resources of the emerging Desktop Grid systems. The IDGF-SP project provides numerous tools and mechanisms: submission, monitoring, accounting, virtualization, application tuning, etc. for EGI scientific groups to seamlessly access volunteer resources of Desktop Grids handled by the IDGF-SP project and the IDGF organization. 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 about 300 Million normalized CPU hours (i.e. 300 Million credits in BOINC terminology) computing power for the scientists since October 2009. Moreover, not only volunteer, but institutional (campus-wide PCs or cloud) desktop grids can also be utilized easily. The demonstration will show how to utilize volunteer (EDGeS@home) and private (or cloud based) desktop grid resources by an EGI VO.

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