Grid2Win: gLite on Microsoft Windows platform.

Wednesday 9 May 2007 19:30 (20 minutes)

Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).

Grid2Win is a joint development of the EGEE GILDA Team and the TriGrid VL Project (http://www.trigrid.it) funded by the Sicilian Regional Government.

Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.

At the moment, our experience is based on a set of tests we made to verify the validity of the system and to evaluate performances. We have just put in production a Windows-based site in the GILDA t-Infrastructure. Tests made executing simple Windows applications were successfull. We are now preparing a more complex set of tests to be done in the next weeks.

With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possible, point out the experience limitations (both in terms of existing services or missing functionality)

During the process of porting, we encountered many problems in terms of portability of the code. There is no a unique way to build packages and software. For each package, a different solution has been found and adopted. There are no documents describing the source from a developer point of view and we were obliged to make a very deep analysis of the code. Moreover, we were obliged to adjust some portions of the code to be able to execute on Cygwin POSIX environment.

Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications

The goal of the Grid2Win project is to port gLite services to MS-Windows based platforms to be integrated into the Sicilian grid

e-Infrastructure of TriGrid. Main

services on which we are focusing are the User Interface, to let

also Windows users

access the grid services, and the Computing Element, to add

Windows applications to

the set of the ones already deployed on the infrastructure as $% \left(1\right) =\left(1\right) \left(1\right$

well as to exploit the

large computing power provided by existing Windows clusters.

Currently, we have already ported the gLite User Interface and

developed our first

Grid2Win Graphical UI (Grid2Win GUI) running on Windows desktops.

Further, we have

already built a Torque/MAUI based Computing Element on Windows XP

and published it

into an Information System as a grid resource.

Next steps are the deployment of an entire Windows XP cluster on

our infrastructure

and the integration of a new type of CE built on top of the

Compute Cluster Server

(CCS) local resource manager recently released by Microsoft.

Author: Dr RUSSO, Dario (INFN Catania)

Co-author: Dr SCIBILIA, Fabio (INFN Catania)

Presenter: Dr RUSSO, Dario (INFN Catania)

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