



Contribution ID: 165

Type: Poster

Integrating Windows Compute Cluster Server 2003 in GRID Environment

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).

In 2006 Microsoft entered the High Performance Market with Windows CCS 2003 (Comp. Cluster Server) and until now it has been rather separated from the Grid. But what if Grid users want to run Windows Applications on the cluster? The prototype, which will be described below, shows a way of how to integrate CCS into the Grid and how to provide a convenient way to the users to access both Clusters. Then, scientists will be able to submit jobs to both Grid and Windows CCS 2003 from the same UI.

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.

Key services of this prototype are Globus-Gatekeeper and the modified job Scheduler on Linux side. They will run on a special Computing Element which has a dedicated job-manager for every Windows Application that shall be executed. Jobs for the Windows Cluster are submitted through the globus-job-run command and this makes sure that the job gets to the correct CE.

The job scheduler will need to submit information to a Web Interface which runs on a Web Server (Internet Information Server) on the Windows Head Node. From there the scheduling mechanism of Windows CCS takes care of the execution.

However, at the moment there are still issues about the polling for job status and cancelling jobs. In addition to that, this version of the prototype only forwards command line input. Future versions of this prototype will improve this and provide a way to get the output of Windows Application to the User Interface.

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 added value is that scientists will now be able to submit jobs also to a Windows Cluster, in case they need to run simulations on a Windows platform. In addition to that they don't have to leave their User Interface, to which they are already accustomed. Everything will be accessible from a single point of entry.

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Track Classification: Demo and Poster session