Contribution ID: **10** Type: **Demonstration**

DRM4G: Aggregation of distributed resources for scientific communities

Monday, 16 September 2013 09:00 (8 hours)

Description of Work

DRM4G application does not need to be deployed by resource administrators on a specific kind of machine such as a grid user interface or cluster front-end (UI). Because of that, a scientist can deploy it on their desktop or laptop, and then configured the access to their UIs, typically a ssh access configuration. Following this idea, we want to further expand the possibilities of scientist communities to integrate DRM4G into their computing models. One example of that is WRF4G framework which is used by climate communities in order to simulate weather experiments. This framework takes advantages of DRM4G providing transparent access between scientists and resources. The benefits of using DRM4G allow WRF4G users to have access to resources needed for large-scale applications that otherwise they could not have.

Relevant URL (if any)

http://www.meteo.unican.es/software/wrf4g
http://www.meteo.unican.es/trac/meteo/wiki/DRM4G
http://www.bsc.es/marenostrum-support-services/res
http://www.gridway.org

Printable Summary

Nowadays, there are available a huge variety of computing resources such as PCs, workstations, clusters or grid services, among others. But the usage of these resources in a distributed form impose new challenges on scientific communities. Recently, we have started an effort for developing a tool called DRM4G, based on GridWay, which enables the submission and control of jobs from distributed resources managers –FORK, PBS, SGE, LSF, LoadLeveler and SLURM–to grid services –Globus and gLite–. The demo is going to show how DRM4G gives concurrently access to distributed resources such as several EGI VOs and the RES infrastructure. And, it will demonstrate the scalability of the system handling large-scale tasks.

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