Contribution ID: **151** Type: **Oral**

Integrating the ETICS services in the EGEE Grid Infrastructure

Thursday, 5 March 2009 17:00 (20 minutes)

ETICS provides software projects with an "out-of-the-box" build and test system. It allows users to submit builds and tests on a variety of platforms. Currently ETICS uses Metronome for the management of build jobs. The jobs are submitted to machines maintained within the ETICS project. The ETICS2 project is extending the ETICS services in order to use gLite's submission facilities to submit jobs using gLite. This will allow the integration of ETICS services into the EGEE infrastructure.

Impact

Projects currently using ETICS rely on the ETICS project resources, currently deployed at CERN, INFN and UoW, and managed using Metronome. Integrating the services in the EGEE infrastructures will allow software projects to use their share quotas on the EGEE infrastructures, thus ensuring the sustainability of the process after the ETICS2 project ends.
Projects that are new to ETICS will benefit too. Software projects typically need to dedicate a set of machines to the build and test processes. That set can become very large in size if builds and tests are needed on several different platforms. The real usage of such machines is typically not homogeneous, as needs for them suddenly increase when releasing software and decrease during development. The integration work described will allow software projects to move those dedicated machines to the EGEE infrastructure, fully exploiting them.

URL for further information

http://etics.web.cern.ch/etics/

Conclusions and Future Work

The presented work aims at integrating the ETICS services in the EGEE grid infrastructures, by using the job gLite job management facilities for the ETICS jobs. The integration requires the use of the security and job management services of the gLite middleware, VOMS, WMS, and Glue. The impact will be double, assuring sustainability of the software projects already using ETICS and allowing new projects to share their software development resources on the infrastructure when idle.

Keywords

ETICS, software engineering, job management, WMS, JDL, GLUE

Detailed analysis

ETICS jobs can be described using the Job Description Language (JDL). The Workload Management System web service interface, WMProxy, is used to submit the job to the EGEE infrastructures. GLUE Schema attributes are used in the JDL to assure ETICS jobs are executed on the operating system on which the software has to be build or tested.
We have envisioned two models for integrating in the EGEE infrastructures sharing systems. An ETICS VO will be created, moving part of the machines that currently form the ETICS pool to the EGEE infrastructure.

The ETICS VO will lend its resources to projects willing to use ETICS, that don't have shares on the infrastructures. This will be possible for as long as the ETICS project will be funded. On the other hand ETICS will integrate the gLite delegation mechanisms so that builds and tests executed on these resources are accounted to the submitter. The organizations that have shares on the EGEE infrastructures will be able to use their resources.

Authors: AIMAR, Alberto (CERN); DI MEGLIO, Alberto (CERN); RONCHIERI, Elisabetta (INFN); DINI, Lorenzo (CERN); CARPENE', Michele (INFN); VENTURI, Valerio (INFN)

Presenter: VENTURI, Valerio (INFN)

Session Classification: New Application Areas

Track Classification: Grid Services exploiting and extending gLite middleware