

CESGA Status Report

Esteban Freire, Javier Lopez, Álvaro Simón / CESGA
SA3 All Hands Meeting, Praha
5 Nov 2008

- **Main Achievements since May**
- **Work on Deliverables/Milestones**
- **Issues/Problems**
- **Next Steps**

Main achievements since May

- **VM mounted like image files: New testbeds can be easily made only migrating files.**
- **Xen Virtual Machines (Dell Poweredge 1955):**
 - CE/site-BDII: VM SL4 sa3-ce.egee.cesga.es
 - WN: VM SL4 sa3-wn001.egee.cesga.es
 - MON: VM SL4 sa3-mon.egee.cesga.es
 - SE_DPM: VM SL4 sa3-se.egee.cesga.es
- **SA3 TAR_UI installed for testing purposes**

- **NOTE: This task is a joined effort between IC, LIP and CESGA**
- **Integration in LCG-CE SL4 ready**
 - SGE v6.1u3 RPM packages tested
 - Yaim 4.x and SGE scripts developed
 - Glite-yaim-sge-server-4.0.1-4
 - Glite-yaim-sge-utils-4.0.1-12
 - Lcg-jobmanager-sge-3.0.51-3
 - Glite-info-dynamic-sge-2.0.11-2
 - New SGE JM v0.51 released
 - SGE batch system was released to production sites

- **Integration with CreamCE SL4 in progress**
 - Tested SGE blah scripts with Cream-CE
 - Tested sge-info-reporter to support SGE on Cream-CE

- **Integration with lcg-CE MPI SL4 in progress**
 - New SGE JM for MPI jobs support has been wrote

- **Certified Patches:**
 - Patch #1809 New JobManager for SGE.
 - Patch #2253 New JobManager, Information Dynamic plugin and yaim utils versions for SGE.
 - Tested Patch #1873 (globus improvement packages) with SGE.

Work on Deliverables/Milestones

- **Task #5804: SL4 SGE enabled lcg-CE (done)**
 - CESGA maintains a SL4 lcg-CE with SGE
- **Task #8089: Write the script for SGE for the Info provider to show response time (in progress)**
 - New SGE IP is written by Keith Sephton from IC
- **Task #8271: SGE MPI Jobs support (in progress)**
- **Task #8270: SGE Cream-CE implementation (in progress)**

- **Opened bugs:**
 - Testing patch #2253:
 - Bug #42475: BDII failure on Xen VM without TLS libs.
 - Bug #42089: Problems on siteBDII, ldap is not working.
 - Bug #42477: Globus-gatekeeper failure on Xen VM without TLS libs.
- **Issues found:**
 - CE fails submitting jobs to different SGE qmaster server which uses non standard ports.
 - This issue was solved with #2253 patch.
 - Glite environment is not loaded submitting jobs directly using qsub.
 - Solved including: “execd_params INHERIT_ENV=false” option.
 - Job spool files in each node \$SGE_ROOT/default/node/job_scripts, can be read by all users.

- **SGE on cream-CE**
 - Write new SGE blahp scripts for Cream-CE integration.

- **SGE and MPI jobs**
 - Write new SGE JobManager to allow MPI jobs using int.eu.grid mpi-start script.

- **SGE Cookbook**
 - <https://edms.cern.ch/document/858737/1.3>
- **Xen Virtualization @CESGA**
 - https://swe-wiki.egee.cesga.es/cgi-bin/moin.cgi/XEN3_Virtual_Machines_-_CESGA-EGEE
- **SGE Wiki Page**
 - <https://twiki.cern.ch/twiki/bin/view/LCG/ImplementationOfSGE>