



Enabling Grids for E-science

CESGA Status Report

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SA3 All Hands Meeting, Dublin

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www.eu-egee.org



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

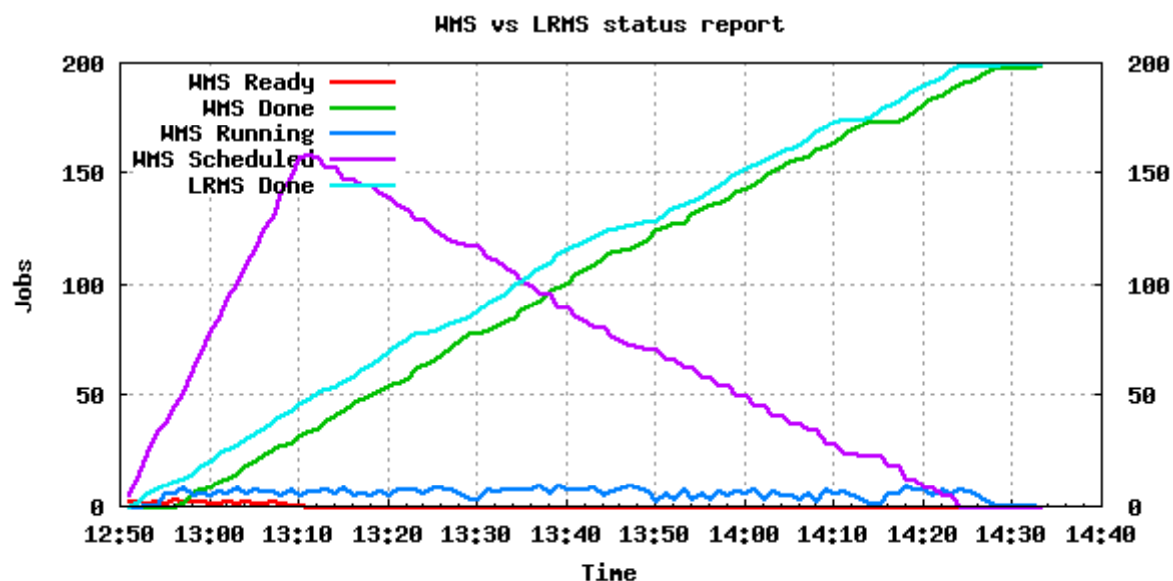
Main achievements since May

- For SA3 services we use Paravirtual machines: SL4 allow us to use kernel 2.6 without modification to the OS
- Migration from Classic SE to DPM_MySQL
- 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 SL3 sa3-mon.egee.cesga.es
 - SE_DPM: VM SL3 sa3-se.egee.cesga.es

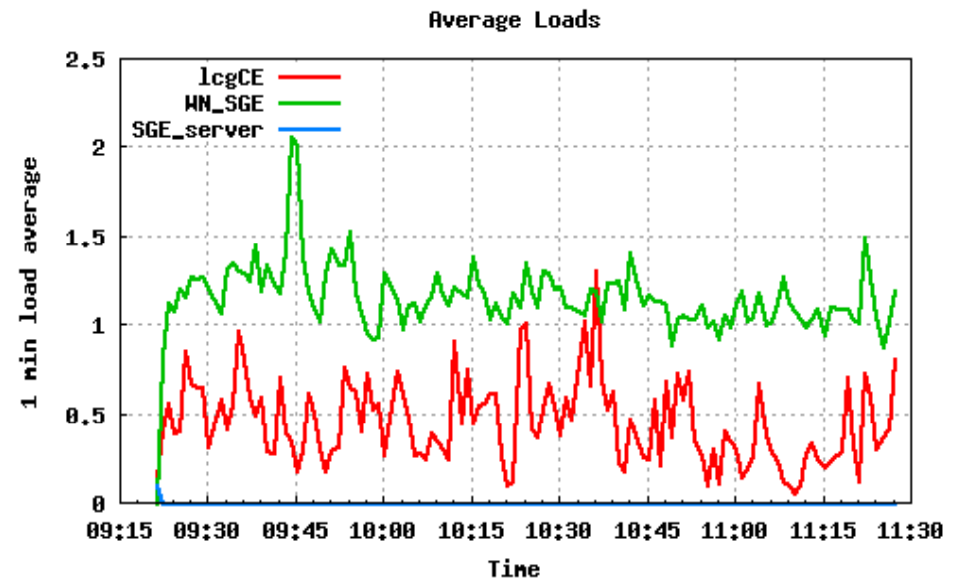
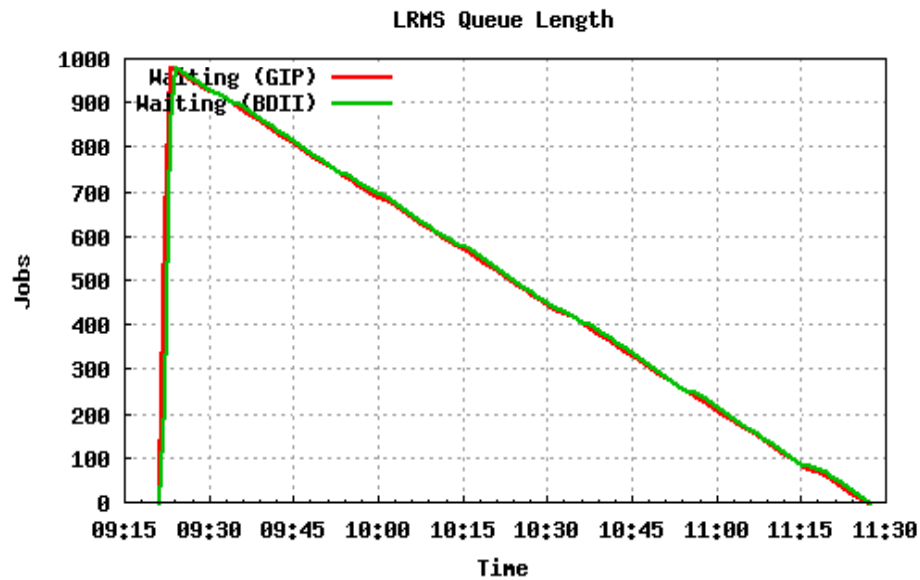
- **NOTE: This task is a joined effort between IC, LIP and CESGA**
- **Integration in LCG-CE SL3 ready**
 - SGE v6.0u6 RPM packages tested
 - Yaim 3.x scripts developed
 - Testbed finished successfully
 - Edited SGE cookbook v1.3 available in EDMS
 - SGE SA3 wiki updated
 - Certification process stopped, SL3 is no longer maintained

- **Integration in LCG-CE SL4 in progress**
 - New SGE v6.1u2 RPM packages tested in SL4
 - New Yaim 4.x scripts developed
 - SGE functions added to ETICS repository
 - Tested SGE IP v0.9
 - Patch #1474 to enable SGE support to lcg-CE (SL4) in certification state

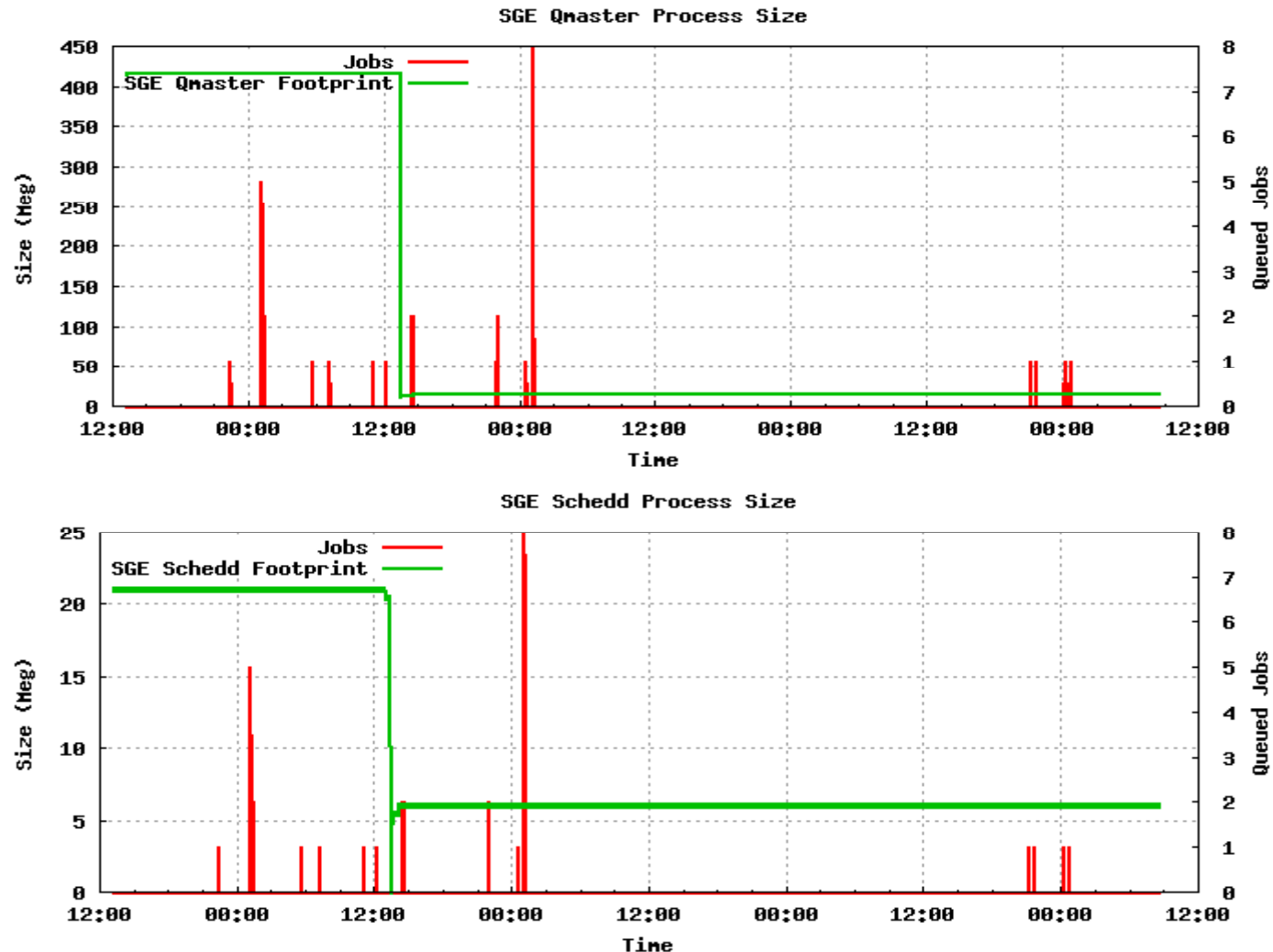
- Based on the Torque/maui tests developed @GRNET
- Modified scripts available on SA3 CVS
- Final results available in SA3 wiki
 - good response with large number of jobs
- Sending 200 jobs from WMS



- Sending 1000 jobs using qsub



- Stressing LRMS memory management



- **Task #5804: SL4 SGE enabled lcg-CE**
 - Certification in progress
- **Task #4928: SGE on glite-CE**
 - Deprecated
- **Task #4929: Yaim function for SGE**
 - Done

- **Job submission tests:**
 - Preliminary results show that optimization of default SGE configuration required
- **Improve SGE configuration to send back to CE stdout and stderr files**
- **Modifications required to run SGE on para-virtual machines (failure in arch detection)**
- **SGE SL4 integration:**
 - Minor issues encountered to be fixed in yaim functions
 - Bad rpm packages installed from dag repo

- **SGE is working on a lcg-CE. Next step: PPS release**
 - SGE will be tested by PPS Predeployment team

- **SGE on cream-CE**
 - We can re-use job done with SGE BLAH integration

- **GridICE sensors for SGE**
 - GridICE sensors for SGE daemons are needed

- **SGE Cookbook**

- <https://edms.cern.ch/document/858737/1.3>

- **SGE stress tesbed**

- <https://twiki.cern.ch/twiki/bin/view/LCG/ImplementationOfSGE>

- **Xen Virtualization @CESGA**

- https://swe-wiki.egee.cesga.es/cgi-bin/moin.cgi/XEN3_Virtual_Machines_-_CESGA-EGEEhines_-_CESGA-EGEE

- **SGE Wiki Page**

- <https://twiki.cern.ch/twiki/bin/view/LCG/ImplementationOfSGE>