

Job Priorities update

Andrea Sciabà IT/GS Ulrich Schwickerath IT/FIO

Grid Deployment Board March 5, 2008



GS

CERN IT Department CH-1211 Genève 23 Switzerland www.cern.ch/it

GS Status of testing on PPS



- Tests on a CERN PPS CE with LSF
 - ce110.cern.ch
 - gLite 3.1 LCG CE on SLC4 64-bit running 32-bit middleware in compatibility mode
 - LSF
 - Shared queue with VOViews attached
 - grid_glite with 6 VOViews
 - VO:cms, DENY:/cms/Role=lcgadmin, DENY:/cms/Role=production
 - VOMS:/cms/Role=lcgadmin
 - VOMS:/cms/Role=production
 - VO:atlas, DENY:/atlas/Role=lcgadmin, DENY:/atlas/Role=production
 - VOMS:/atlas/Role=lcgadmin
 - VOMS:/atlas/Role=production
- Job submission with a CMS certificate using a gLite 3.1 WMS

CERN IT Department CH-1211 Genève 23 Switzerland www.cern.ch/it



GS Tests performed



- Goals
 - Verify that the jobs get assigned to the correct shares
 - Verify that the number of waiting and running jobs are correctly reported in the VOView information
 - Verify that the WMS takes the information used to calculate the rank from the correct VOView
- Method
 - Submit jobs with different VOMS FQANs and check
 - FQAN: /cms
 - FQAN: /cms/Role=production





Results and issues



- Job priorities functionality demonstrated also on a LSF computing element
- Issues
 - Shared grid queues
 - Added support for this in the info provider by just enabling the feature using the appropriate flag
 - Not controlled by YAIM
 - YAIM config file is managed by Quattor
 - Needed an update of the component
 - The default configuration of the LSF plugin of the info provider was not usable at CERN
 - Need to provide a customized version
- Overall, the mechanism could be deployed at CERN in a matter of hours, when it is released

CERN IT Department CH-1211 Genève 23 Switzerland www.cern.ch/it

(¬



GS Deployment roadmap



- Implementation of the recommendation of the JPWG
 - This is the job priority system using VO-views
- YAIM changes and info providers are being prepared now
 - Affects YAIM core
 - Will be released with next core release of YAIM
- Functional tests carried out with prototype versions
- Template scheduler configuration only for Maui/PBS
 available
 - Need this for LSF and Condor
 - No real showstopper since larger sites can handle this
- Estimate 2 3 months to production

M. Schulz, CCRC'08 F2F, 4/3/2008



CERN IT Department CH-1211 Genève 23 Switzerland www.cern.ch/it

GS Conclusions



- The Job Priorities mechanism has been successfully tested also on LSF
- Timescale to reach production is 2-3 months



