



Enabling Grids for  
E-science in Europe

<http://cern.ch/egEE-jra1>

*EGEE All Activities Meeting, 13<sup>th</sup> September 2004*

# Testing Co-ordination

## Overview of EGEE testing activities

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# Outline

- Present status of all the testing activities in EGEE at the moment (JRA1, SA1, NA4-test team NA4-ARDA)
- Need for co-ordination of the different testing activities
- Conclusions from the recent testing co-ordination meeting

# JRA1 Testing – Status

- Testplan released at end of PM05 – will continue to evolve.
- Distributed testing testbed in place, 3 sites, 24 machines, migrating to EL now
- Automated tests of RPMs from nightly build now running
- Common XML output from all tests defined
- Reporting tools written to present the test results in HTML and pdf format
- Using CVS and Savannah
- Two test high level frameworks being assessed on the distributed testbed
  - Qmtest and NMI/Condor framework
- gLiteIO, WMS, R-GMA all being tested now on EL
- Alien prototype being tested on RH7.3

# JRA1- Schedule and priorities

Service or component	Expected release date to testing	Relative priority
R-GMA	September (PM06)	High
Logging and Bookkeeping	August (PM05)	High
Workload Management & Computing Element	September (PM06)	Very high
Tactical Storage Element (SE)	November (PM08)	Medium
Replica Catalog (RC)	September 04 (PM06)	Very high
Metadata Catalog (MD)	September 04 (PM06)	Medium
File Catalog (FC)	October 04 (PM07)	Medium
Catalog services (CS)	October 04 (PM07)	Medium
gLite IO (FIO)	August 04 (PM05)	Very high
File transfer service (FT)	September 04 (PM06)	Medium
File placement service (FP)	September 04 (PM06)	Medium
VOMS Server	August 04 (PM05)	High
Services with security	October (PM07)	Medium
Grid Access Service (GAS)	August 04 (PM05)	High
Accounting HLR server (HLR)	October 04 (PM07)	Medium
Package manager (PM)	October 04 (PM07)	Medium

# NA4 testing - test team

- Test plan available
- Test case template available
- Test cases being defined using the test case template
  - 9 test case definitions so far
  - Based on use cases from applications
- Expect to define 3-4 core (master) test cases
  - Implement these first
  - Validates these test cases with the applications
- No framework chosen – expect to use the same as JRA1
- NA4 cannot deploy a testbed for testing
  - Need access to some testing infrastructure
  - JRA1 testing testbed or SA1 pre production service

# NA4 testing - ARDA

- ARDA is \*not\* doing testing
- Focus is on creating examples which could be given to physicists as starting point for realistic data access
  - [http://lcg.web.cern.ch/LCG/peb/arda/glite/test\\_case.htm](http://lcg.web.cern.ch/LCG/peb/arda/glite/test_case.htm)
- Currently use the prototype testbed
  - Need a testbed that provides access to experiment data
- ARDA shares requirements with the rest of NA4
  - Different requirements being emphasized
  - E.g. \*Automatic\* parallel submission is \*not\* a requirement for us: this functionality is taken care within the experiments' framework (cfr. DIAL, GANGA, ...)
- See the role of NA4 test team as:
  - Complementing or streamlining experience from usage rather than from formal translation of requirements in test suites

# SA1 certification testing

- Large number of LCG test suites
  - 22 different tests
  - about 60% Installation, configuration, functionality tests
  - about 40% Stress tests
- Perl framework to run tests, extract and publish results
  - Tests inherently coupled to the framework
- How do we reuse these suites in the gLite environment ?
  - Would be a waste to loose all this work
  - Will understand the logic and re implement it in gLite test suites
- Which of the old commands will still be available ?
  - APIs in gLite are different so it is unlikely that existing test suites can be directly reused

# Testing co-ordination meeting

- Meeting between the three testing activities in EGEE
  - ↳ JRA1, NA4 (Test team + ARDA), SA1
- Boundaries of responsibility are unclear between them
- Need to ensure that we have good testing coverage of the gLite middleware and minimize unnecessary duplication of work
- Objective was to understand what is possible or desirable in terms of collaboration between the different testing activities
- Discussion focused on answering a number of questions asked before the meeting .....



# Co-ordination of testing activities (I)

- Common CVS repository
  - NA4 test team will use the same CVS repository as JRA1
  - Will release common JRA1-NA4 test suites
- Test case definitions
  - Agreed that both NA4 test team and JRA1 will converge on a common template for test case definitions
  - Test case definitions will be stored as documentation with the tests in CVS
- Test writing
  - JRA1 and NA4 will try to divide the work of implementing tests
  - Avoid duplication of effort
  - Ensure good coverage of requirements
  - Look to PTF for prioritization of requirements

## Co-ordination of testing activities (II)

- Tools and frameworks
  - JRA1 and NA4 test team will use a common framework.
  - SA1 are also interested in looking at a common framework
  - During Sept. someone from SA1, NA4 and JRA1 will assess frameworks
- Languages
  - Will not attempt to use a common language across the different testing activities
  - In any case available APIs will be available for several languages
- Reporting and results
  - JRA1 and NA4 test team will standardize on a common reporting format
  - Use common tools to report and publish results.