



Enabling Grids for E-science

JRA1 status

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*EGEE II All Activity Meeting
Bologna, 16-17 January 2007*

www.eu-egee.org
www.glite.org



- **Manpower situation**
- **Milestones and deliverables**
- **Main achievements and current issues**
- **Reviewers recommendations at the EGEE reviews**
- **Future plans**

Partner	From TA	Actual	Comments
CERN	3	3	
CESNET	5	5.1	
CCLRC	7	6.875	
DATAMAT	5	5.2	
INFN	20.5	20.5	(2.5 reduction in the TA amendment)
SWITCH	3	3	
UH.HIP	2	2	
FOM	2	2	
UvA	2	2	
UiB	1	1	
KTH	1	0	Person identified now

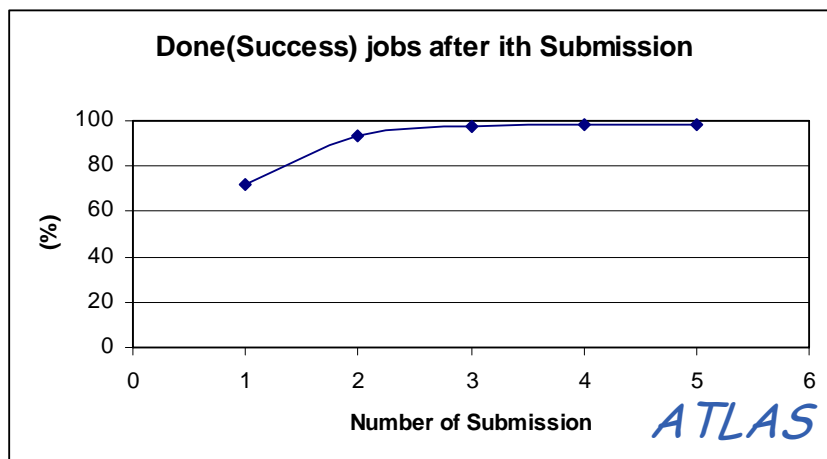
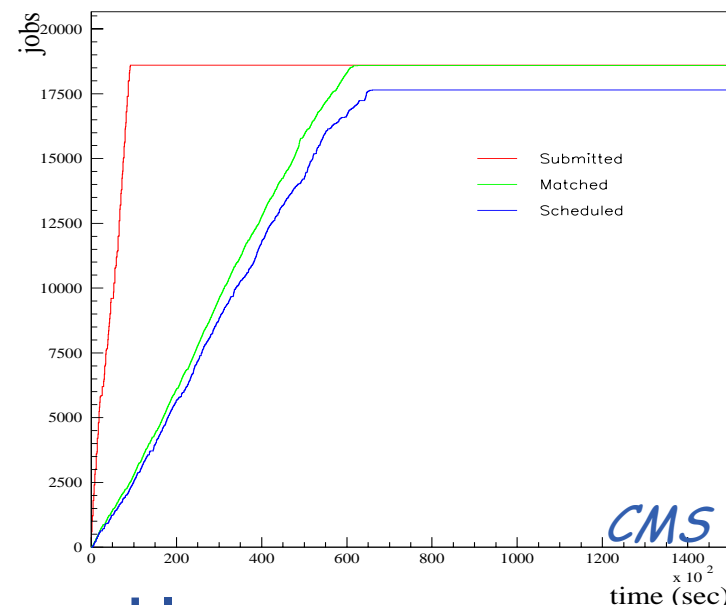
- **MJRA1.1.1: *Support plan, definition of common components and tools, strategy for multiple platform support***
 - Due PM1 (end April)
 - Delivered and approved by PEB but:
Need to better plan for the multiple platform support since our planning was considered inadequate!!!
- **MJRA1.2: *Functional Description of Grid Components***
 - Due PM3 (end June)
 - Delivered and approved by PEB
- **MJRA1.3: *Grid Components Reengineering Workplan***
 - Due PM 4 (end July)
 - Delivered and approved by PEB
- **MJRA1.4: *Shibboleth interoperability through dedicated SICS***
 - Due PM 6 (end September)
 - Delivered and approved by PEB
- **MJRA1.5: *Shibboleth interoperability with attribute retrieval through VOMS***
 - Due PM 9 (end December)
 - Delivered, under review

- **DJRA1.1: *Report on Middleware Service Reengineering***
 - Due PM 10 (end January '07)
- **MJRA1.6: *Update of Functional Description of Grid Components and associated Workplan***
 - Due PM 11 (end February '07)
- **MJRA1.1.2: *Update of Support plan, definition of common components and tools, strategy for multiple platform support***
 - Due PM 14 (end May '07)
- **MJRA1.7: *Shibboleth interoperability with SAML support***
 - Due PM 21 (end December '07)
- **DJRA1.2 *Final report on progress of middleware reengineering***
 - Due PM 23 (end February '08)

- **LCG-gLite convergence did happen**
 - Thorough testing of gLite WMS/LB, first deployment of gLite CE
 - Still unstable; impossible to manage as a production service
 - Improved Data Management components
 - But new Encrypted Data Storage progressing slowly
 - *Old components still have to be supported*
 - glexec delivered and used on OSG also on WNs
 - DGAS accounting now in certification at INFN
 - Mechanisms to send information to APEL/GOC under test
- **Support to the production infrastructure**
 - Many tickets forwarded to the developers also if related to trivial reasons like proxy expired, etc...
 - This slows down the activity of the developers and should be improved

- **New software process. Work plans controlled by the TCG**
 - New bug tracking and release procedures
 - but adoption of ETICS tools is not painless!
- **gLite 3.1 release under preparation**
 - Migration to SL4 and support of 64bits progressing slowly
 - Complex code and heavy dependencies on external software
 - Dependent on migration to ETICS
 - Focus of developers is on supporting the production infrastructure
 - Would need a working SL4 build before addressing the 64bits support
- **First instance of the preview test bed**
 - Very slow start but probably opened to the users soon
 - Shibboleth interoperability prototype on the SWITCH test bed

- **New WMS deployed and thoroughly debugged**
 - CMS: 100 collections * 200 jobs/collection, 3 UIs, 33 CEs
 - ~ 2.5 h to submit jobs
 - 0.5 seconds/job
 - ~ 17 hours to transfer jobs to a CE
 - 3 seconds/job
 - 26K jobs/day
 - Negligible failure rate due to WMS
 - Shallow resubmission
 - failure rate drops to less than 1% with 3 resubmissions



- **Stability problems**
 - investigating also other deployment scenarios to make it more robust
- **gLite CE still to be tested and optimized**
 - Time scale starts overlapping with CREAM. TCG proposed a strategy

- **Work Plans presented in MJRA1.3 and approved by the TCG**
- **Changing version in**
<https://twiki.cern.ch/twiki/bin/view/EGEE/EGEEgLiteWorkPlans>
 - **Red** is used to mark modifications since last version approved by the TCG
 - Includes the first tag in which a functionality is delivered
- **Most of the development time being spent in**
 - Migration to ETICS
 - Migration to SL4
 - Migration to VDT ≥ 1.3

- **Proposed last summer**
- **Very slow start...**
 - problems identifying the resources
 - missing effort on version 3.1 of the gLite WMS due to high priority of the 3.0 version deployed on the production system
- **Now first functionalities are available:**
 - CREAM CE, reachable either directly or through the WMS
 - Job Provenance, that will allow a safe purging of the LB
 - glexec on WNs is being deployed now
 - GPBOX test sites added to the infrastructure

20 - “Fully complete the implementation of recommendation 32 of the second project review”
[“Make more effective use of the Industry Forum to realize industrial involvement in the development to achieve smoother technology transfer”]

- Collaboration with EGEE ITF, with CERN OPENLab, and with partners as HP and Platform (new MoU ready)

21 - “The EGEE grid infrastructure should continue to evolve, with a balance of application versus technology and/or standards driven evolution”

- Involvement in OGF increased while TCG keeps the control

22 - “EGEE should expand data management capabilities, such as:

- *Tools for the management and curation of data and*
- *Tools to monitor storage utilization on a per VO basis.”*
- New functionalities with SRM 2.2. EDS slowly progressing
- Storage accounting started in LCG and in NGIs

- **Complete migration to ETICS and start using new features**
- **Complete migration to VDT 1.3.X and support for SL4 and 64-bit**
- **Improve manageability (start/stop/... and standard log files)**
 - Reduce dependencies on external components to make gLite more “Lite”
- **Hooks for local/global monitoring (new Monitoring working group)**
- **Work will continue according to the plans agreed with the TCG and reported in MJRA1.3**
- **In particular:**
 - Continue work on making all services VOMS-aware
 - Including activities in the Job Priorities WG
 - Decouple bulk submission from DAGMan
 - Support the deployment of Job Provenance to optimize the use of L&B
 - Support for all LRMSs present on PS in BLAH/gLiteCE
 - Complete support to SRM v2.2
 - Complete the new Encrypted Data Storage based on GFAL/LFC
 - Complete and test glexec on WNs
 - Increase the use of Service Discovery in all services
- **Collaboration with EUChinaGrid on IPv6 compliance**

The next All Hands Meeting will be in Catania



Wednesday March 7th to Friday March 9th, 2007