

Location: DATAMAT
Chair: Francesco Prelz

Tuesday 13 September 2005

Coordination issues (14:00->15:30) Francesco Prelz

A. Status of EGEE-II proposal.

EGEE II proposal

Available at <http://egee-members.web.cern.ch/egee-memebrs/EGEE-II/documents/partB07-09-2005.pdf> (with cern account)

Main Changes:

- 1) software integration and testing activity – all moved from JRA1 to SA3. Two different groups of people joined together under Markus Schultz for testing activities. They take in charge the testing and bug fixing activities and are free to apply fixes when needed.
- 2) Incoming large reorganization inside Cern (gagliardi is leaving on November 1st), relationship with reviewers can change a bit (maybe tougher)
- 3) JRA1 will remain as a development cluster, however, not lead by cern anymore. INFN is supposed to take care of overall jra1 coordination. Claudio Grandi is the possible candidate for JRA1 managing.
- 4) Five clusters are meant to be created: security (JRA3 will no exist any longer), Resource Access accounting and brokering (INFN), logging bookkeeping and provenance (CESNET), Data Management (CERN), Information (CCLRC). There are some doubts about which cluster some activities belong to (policies, voms...).
- 5) Number of people increased. Large groups meeting can be less productive. In the future more virtual meeting approach may be used to save time and to be more efficient.
- 6) Incoming group: TCG (technical coordination group) who is supposed to tell people what to do, what features could be needed. Problems with deadlines (wmproxy and shallow resubmission were supposed to work much earlier), the cause may be underestimated effort; anyway, remember and pay much more attention when developing. However, Strict fixed deadline approach though is not always the right one (could be a bit flexible sometimes)
- 7) Distinction between application: high-level glite services (WM, RM, visualization, workflows, grid economies etc) and foundation grid middleware component services (Security model and infrastructure, CE, SE, Accounting, info and monitoring).

Proposal evaluation result should be known by the end of September 05. Project will last for a couple of years.

Proposal page 244: other operating systems are to be supported; software should be easily installed by a non-privileged user, support providing for SA3 for testing activities. Giacomini complains that he found some problems with quality assurance, supposed support was not provided properly. Systems diagnostics should be improved: errors should be reported properly, i.e. with clearer and more descriptive messages. (i.e. globus-url-copy' error messages are much more verbose and clear than socket++ APIs' ones)

Couple of TAG issues:

- 1) Wms 1.4 tag will have to be merged back into working branch
- 2) LB 1.4 tag contain both Shallow resubmission and Lbproxy (but not yet fully tested)

B. **Integration issues**

Status of issues with the 'per-component' dependency machinery.

Compilation problems

Giacomini complains that the building system does not work properly. A code building (just configure and Makefile) target could be useful. Cross-dependency feature generate problems while making tags and cleaning the context.

C. **Issues from the PTB**

If any.

Any

Short-term issues (15:30->18:30)

A. **Status and issues with shallow resubmission.** Francesco Giacomini

Test started at the end of last week (5-9 of sept.). Some bugs were found and corrected, some are currently under investigation. The job successfully removes the token, if not able the job fails. Current problem with logging-info, it generates a segmentation (under investigation with Ales). Only tested with one single job (some compilation problem delayed test activities). Problem with logging bookkeeping, which may not be backward compatible. Giacomini is committed to merge shallow resubmission code into Rc1 branch once the meeting is over (14-16 of setp.) to allow the big merge during the next week. Ales would like to summarize all logging operations needed by shallow resubmission. Question (Pacini): Ns should be able to log to Lbproxy. ?? Commitment: allow Lbproxy enabled by default in wmpoxy branch (if not yet) Hint: LB and LBProxy methods are contained in the same headers and libraries, no further change is to be made on lb half.

B. **Planning for CVS merge of WMS subsystem.**

WMS components

Problem: HEAD has relevant modifications such as new boost version (mainly the file system libraries) some differences can arise when merging. Scheduled plan: shallow resubmission merge into rc1 branch can be done by the end of the week (12-16 of sept.), therefore rc1 branch merge into HEAD can be done by September, 22. This is possible when lower-level components are merged during the very first days of the next week (i.e. from the 19 of September on). Giacomini suggests compiling everything with *-WALL*, which would put in evidence possible bugs and/or problems. Eli will take care of common parts. Wms-ui subsystem is only to be copied. Problem: gsoap version

can be updated, versions are not fully compatible, and some effort for upgrading glite code is not to be underestimated. Question about upgraded incoming (not yet linked in CVS repository) version: 2.7.5 or 2.7.6? Same question for Axis: not all components migrated to newest available version.

C. **Prototype/test setup issues.**

Installation Testbed organisation: Elisabetta M. set up several testing machines updated to 1.4 release. Alessio G. takes care of Prototype testbed instead. Eli provided a couple of machines (ghemon and spank) able for testing. Prelz complain that several changes were committed into some components without announcing it, maybe in the future at least open a bug or communicate it somehow.

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Longer term issues (09:30->10:15)

A. **WMS - CREAM integration** ([transparencies](#)) Luigi Zangrando & Moreno Marzolla

Previous meeting about this issue some time ago in Padova.

Job can be submitted directly by different parties (wms, user..). A new component is to be made, which is in charge to manage submission with cream party. Integration should be less intrusive as possible. WM has to be slightly modified; this is possible by a file list communication approach
New component (XYZ), still to be implemented, anyway it is going to have the following features:

It has to receive submission from WM through file list communication

It modifies the jdl to be CREAM compliant, rearranging some attributes.

It keeps cream&grid Jobid mapping

It will be developed in Cpp

It receives notifications when job status change (notification sent by using CEMon).

It supports suspending jobs though a SUSPENDED status might be useful. However, Ales says that a suspended flag attached to scheduled and running jobs would be much better

Bulk job Implementation: at the moment implemented by condor DagMan. All kind of DAG submission could be managed directly by CREAM CE (many users claimed). This can be stated by an attribute inside JDL

Implementation issues: reliability even if a component crashed: zombie jobs

Solution: Job Lease.

Proxy Renewal: Cream renewal should follow WMS renewal. Easiest (yet not most efficient) solution is polling

Questions / Issues /Clarification

- Dag handler approach will use the same syntax as in classad
- New component is CREAM specific
- Giacomini complains that several different components are able to suspend the job; therefore the user may not be able to tell who is responsible for holding it.
- Lot of discussion about JobId mapping: its usage and its need. Eventually the mapping approach is accepted and it is worth it.

Bug tracking session (10:15->11:00)

A. **LCG & Glite open issues.** ([lcg-glite-issues-roma-09-2005.ppt](#)) Massimo sgaravatto

Some bugs are still to be fixed from previous meeting (#3671, #3724, #3808, #4319, #4570, #5404, #7372)

New bugs: #10061, #10666

Pending issue: #4318 dispute between giacomini and salvo, who is up to take care of the bug

Lot of Glite-Bugs (not yet closed, still to be tested and integrated, anyway already patched)

Some in remind status.

Some bugs are still to be addressed: #4588, #5278, #7512, #7977, #8327, #8536, #8759, #8786, #9127, #9148, #9518, #9609, #9701, #10058, #10607 (Martelli promised to fix it by release 2.0) #10487,

dgas: #10630 & #10631 (Guarise says healready fixed in HEAD and will be ready by release 2.0) #9777

#9900 : coordination between NS and UI to exploit some new jdl inheritance features

#10047: old java UI problem, apparently the problem has been found out but not yet solved

#7662, #8021, #10072, #10431, #10702

Release 2 preparation. (11:00->12:30) Francesco Prelz	Description: We have a tag deadline on October 15. Items listed on the workplan (attached) will be reviewed for readiness.
	Material:  workplan.link

Possible sources of common Issues and new functionalities:

- new boost version 1.32.0
- new gsoap version: 2.7.5/6 preferably 2.7.6.
- Support for new JDL format for DATA reqs (if possible maintain backward compatibility, discussion whether it could be possible)
- Logmonitor & jobcontroller logging to Lbproxy
- Pilot Jobs
- Wmproxy
- Lb Proxy

Lot of discussion between prelz and Sgaravatto regarding forward requirements to local batch system

Full DAG submission to CE (will be support in CREAM). Giacomini & Maraschini will apply such patch for release 2.0 (together with -r option support for dags)

Job Provenance: Primary storage and LB data collection will be available. Index server prototype (probably). Server upload done in purger (LB people & Salvo M. coordination by sept. 22)

Lot of points to be done, incoming resuming mail from prelz by today (15 of sept)

All this commitments should be done two weeks before final release, i.e. October the 2nd.

A. **G-PBox/WM integration** ([jra1-12092005.ppt](#))

Grid Policy Box

Development: main modules finished. Currently PEP modules under development.

Voms interation: user can express policies by using admin interface

WMS integration and optimisation.

CVS integration: 4 modules created

Currently only ACL-like policies can expressed.

Next steps: software consolidation by Egee deadline (October 15), pdp extensions, gpbox interfaces for Dgas and gridCE.

B. **Changes to the JobWrapper**

Generation of JW to be more flexible, even to be configured at runtime.

Trying to separate data and logic. Strings, number (and possibly Boolean as a numeric wrapper) types supported by dumper.

Commitment to CVS planned to be done by release 2.0

Site reports (14:30->17:00)

A. **CESNET** A. Krenek, J Skrabal

Shallow resubmission:

- Job start execution, both JW and LM logs **Running**.
- Job grabs token, JW logs **reallyrunning**
- If the network connection breaks LM resubmits, logs **Done/Failed** and **Resubmission**

Tons of discussion about what to log.

Release Tag steps overview, different stable branches created then merged into HEAD

Other activities: job registration and file upload, usertag setting, job attribute retrieval, ftp backend, batch queries, incremental feed logic – all done

Job Provenance:

- Most work done
- Still to complete Index server (development started but still at primary stage).
- Some TODOs: full L&B plugin functionality, integrated tests, feed with realistic data, deed with ISB files (from NS/Wmproxy)
- Should provided by release 2.0

Next activity is to integrate LB into VDT

Issue: apparently (prelz said that alberto said) there are some LB tests in the build system that have been missing over the last days. LB people says it could be some version mixture problem, anyway they will check and feed back by the end of the week.

B. **DATAMAT** Fabrizio Pacini

Wmproxy Improvements for Release 2.0

- Purge for proxy cache area (delete expired proxies)
- Better use of dirmanager (was a kind of bottleneck for bulk submission)
- Sandbox bulk destination URI (all nodes dests retrieved at once)
- Tar/zipping of ISB files (all files retrieved with one step) – still waiting for libtarzip to be added to CVS

Partitioner component duality (both wms and wms-ui contained it) removed: wms.partitioner is the one

Python API for WMPProxy – after some compatibility problems eventually succeeded with SOAPpy (some slight changes had to be done) all main (submission, cancel, output, listmatch...) services working

Issues:

- proxy delegation requires, besides wmpoxy services, either a cpp or a java gridsite API call, but this is to be done on client side.
- Upgraded version of python (2.3) may be required (in order to contain PY SSL libraries by default)

C. **INFN-CNAF** Francesco G.

Agreement service

Ongoing collaboration with GRIDCC project.

Good news: a paper was accepted by GridNets2005

Voms:

1.6 version released

G-Pbox

D. **INFN-CT**

Todo muy bien

E. **INFN-MI** Prelez

BLAH development:

some memory leak bug fixed. Jobid format check added.

Storaindex /RGMA bugs, update and unit tests

Prototype: a test structure is under construction (Elisabetta M and Alessio) and will be used for bug fixes of glite middleware. Moreover a RB - Wmpoxy testbed for ECGI is set on a milan machine

F. **INFN-PD** Sgaravatto

Glite tag 1.2 was a bit corrupted: some bug found, then fixed in 1.3

1.4 tag is equal to 1.3 tag (From CEMON point of view)

Next Glite release will include bug fixes (10063), support for axis 1.2 and port to gsoap version

Changes since last meeting: notifier for job status changes

Test done: submission with 100 jobs to a cream CE

Impressive differences between several jobs submitted with a BLAH connector and a LSF connector: the former one seems to take much more time comparing time differences: 2 more seconds are needed for each job while passing through BLAH. Some discussion

Notifier of job status changes is to be done in any case (polling approach is not tolerable anymore)

Some Changes:

- Suspended&Resume operations
- Support for MPICH

- Support for DGAS integrated in CREAM
- cpp and java command line are in pretty good situation

Documentation produced properly, still missing a high level cream architecture: (internal) deadline fixed

Still to be done:

- Credential mapping
- Support for DAGs and bulk jobs
- Voms based Authorization
- Proxy Renewal functionality
- Shallow resubmission implementation
- Adress some bugs
- Prototype and testing activities

G. INFN-TO

Todo muy bien

AOB (17:00->18:00)

A. Dates for next meeting(s)

Turin, 7-8 of November