egee

IT Cluster Summary

JRA1 All Hands Meeting

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www.eu-egee.org

www.glite.org

Information Society and Media

Enabling Grids for E-sciencE

- **Most effort dedicated to the certification of a 3.1 WMS**
  - Patches #1116 (beginning of April), #1140, #1167, another coming
  - Hopefully ready for production soon
  - Already used by the experiments because much better than the current production version
    - DAG-less collections
- **Bug fixing**
  - many bugs now discovered during certification
  - due to load or unexpected conditions
    - e.g. mod_fastCGI, rotatelogs
  - Experimental services idea was very successfull

- **Only interface to the WMS, the NS being removed**

- **Memory leaks removal**
  - use of smart pointers
  - done on the client side and jdl manipulation
  - on-going on the server side
    - meanwhile WMProxy still commits suicide after N requests

- **Removed support for checkpointable & partitionable jobs**

- **New approach for MPI jobs**
  - still some work to do in the WM
  - difficult to find resources for testing

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- **Support available for Bulk Match Making, a.k.a. DAG-less collections**
  - current functionality satisfactory but not fully complete, e.g. cancellation missing, recovery inadequate
  - ranking problems have been solved

- **Job Wrapper**
  - interoperability with OSG
  - working on limiting the size of the Output Sandbox

- **Restructuring**
  - In CVS head
  - Join all mm components into one, one component per ism purchaser
  - Rewrite the framework

- **New python interface**

  - LB status/event codes automatically generated/loaded

    - protection against LB interface changes

  - more user-friendly libs with enriched documentation

- **Reduced set of needed rpms**

  - due to reduced dependencies for wms.client, on which the UI is based

  - in particular no more need of condor (indirect dep)!

- **Focusing mainly on certification and cross-check activities on the Italian Production Grid**

- **Restructuring**
  - restructuring of the sensors, to decouple UR production and delivery
  - rewrite of dgas2apel to drop deps on PERL* and to be able to run it also on a 2nd level HLR
    - in C++
  - common logging format
    - syslog already supported
  - good occasion to review code, database schemas, deployment and configuration procedure, etc.

- **VOMS**

  – Preliminary work on globus independence

  – Work on conformance to logging recommendations

  – Short FQANs

- **VOMS-Admin**

  – 2.0.4 in certification

    ▪ Currently in production @ CNAF (OMIIEurope VO)

    ▪ Oracle OCI driver support

    ▪ Compatibility with gLite configuration scripts

  – Design work

    ▪ Multiple certificate support

    ▪ Evolution on the AuthZ framework

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- **Re-engineering of the GUI to improve usability**

- **Ongoing functionality and performance tests in the preview testbed**

- **Tentative release date of v. 1.0: 23rd July 2007**

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- **Bug fixes, esp. memory leaks**

- **With DAG-less collections, jobs can now go to CREAM**

- **Split JobRegister/JobStart in ICE**
  - More reliable, slightly less performant

- **Support for JobDir (not fully tested yet)**

- **Tests, tests, tests**
  - ICE is enabled on the experimental WMS, although there is currently only one CREAM CE in Padova
  - Done with the collaboration of the experiments (ATLAS and CMS)

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- **Testing continues**

- **See specific presentation**

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- **"low hanging fruits" already applied in 3.1**
  - e.g reduced UI dependencies
  - ETICS helps

- **More serious effort started in CVS head**
  - Join/split/simplify components
  - Code review (including Makefiles), re-engineering

- **Slowed down by the effort necessary to certify the 3.1 WMS**
  - Still based on the old gLite build system

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- **Usual support and bug fixing activities**

- **Porting activity slowed down by other priorities**
  - it will continue when the adoption of ETICS is complete

- **Testing of JobDir (replacement of filelist) has started**
  - only as input to WM for the moment
  - encouraging results

- **Migration to boost 1.34?**
  - released the 12th of May
  - we are still at 1.32
  - good occasion to change boost.m4

- **Recommendations are suitable to our needs**

- **But:**

  - no adequate high-level library is available for C++

    - log4cxx is not. From their web site:

      "At this point, log4cxx-0.9.7 is substantially out of date, has known serious deficiencies that have been resolved in the CVS, and should be avoided for new code."

      - version 0.9.7 was released ~3 years ago

      - rely on their devel branch?

  - adhering to the proposal will require quite some effort

    - review all our logging statements

    - adopt the "standard" format

    - write syslog wrapper; change existing code

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- **Should we adopt a common configuration mechanism?**

- **Currently WMS has a centralized approach**
  - Automatically generated library based on a "definition file" that contains the configuration attributes for all components
    - Also the private ones
  - A modification in the "definition file" in principle requires all WMS components to be re-built
  - Pros: errors in accessing a configuration attribute are caught at compile time
  - Cons: tight dependencies

- **What do others do?**