



Enabling Grids for E-sciencE

IT Cluster Summary

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- Restructured NS components to reduce dependencies
 - cleaner common/client/server separation
- Removed some dependent UI components
- NS is deprecated
 - it may survive for a short time in a 3.1 WMS built with the old gLite build system
 - will soon disappear from ETICS builds



- Memory profiling and leaks removal -- still on-going
- Served Requests limiter
 - Configurable max number of requests served by WMProxy instance before exiting
- Review interaction with LB
- New delegation interface (aligned with the GT4 one) -- still on-going
- Support for non-DAG-collections -- still on-going

- JDL library
 - Memory profiling and leaks removal -- still on-going



User Interface - APIs

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Java API

 Accept user's proxy credential from stream (fulfill requirement from g-Eclipse project)

Python API

 New executable added for locally signing proxy requests to be used for delegation

C++ API

Configurable client request timeouts

User Interface - CLI

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- C++ CLI
 - Purging for DAG nodes
 - Nodes are now purged by default after output retrieval
 - New --nopurge option allows to keep them until the whole DAG output has been retrieved
 - Remove dependency from org.glite.wms.configuration
 - Component uses private conf file
 - This also removes dependency from Condor (of the UI metapackage)

Python CLI

- Restructuring for separation of NS-dependent and NS-independent modules
- SWIG layer memory leaks fixing



- Memory consumption understood and under control
 - use of google-malloc
 - global limit on the number of DAG node planners
- Support for Bulk Match Making, a.k.a. DAG-less collections, available as a prototype
 - functionality not fully complete
 - some aspects, like ranking, need some refinement
- Job Wrapper
 - VO Hook
 - Allowing jobs to find middleware
 - Customization points backported to 3.0
- Dismissed RLS support



- New sensors leveraging Maarten Litmath's log
 - deployed within INFNGrid
- New hierarchical infrastructure for the HLR servers
 - used to collect information from a set of low level HLR in order for a single server to have broader view of the accounting informations
 - deployed within INFNGrid
- The information collected in the databases have been extensively compared with the raw data from the LRMS logs
 - results are satisfactory.
- The queries can be performed on the basis of the VOMS
 FQAN of the proxy used to submit the jobs



VOMS & VOMS-Admin

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- Main new developments:
 - VOMS-Admin 2.0 finally released.
 - Almost completely new code base.
 - Easier to maintain and work with.
 - Fully capable of using the new features from VOMS:
 - Generic Attributes
 - VOMS 1.7.15 released
 - Ability to make voms-proxy-init from Java.



- Setup in preview testbed completed
 - Now also for site G-PBoxes
- Rework of the APIs



ICE & CREAM / gLite CE

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See specific presentations



3.1 version backported to 3.0

Improvements

- fixed problems in the creation of the accounting account informations
- added startup script and configuration file for the parser
- new configuration parameters to the config file
- support for cream



- Usual support and bug fixing activities
- Analysis of internal and external dependencies
 - already achieved some results
- Porting activity for all components
 - new build system (ETICS)
 - new platform (SLC4)
 - new compiler (gcc 3.4.6)
 - new VDT
 - still supporting the old ones
 - Dependencies as well!



- JobDir (replacement of filelist) integration slowly progressing in the relevant components
 - WMProxy, WM, JC, LM, ICE
- gSoap
 - Confusion due to different versions hopefully solved
- gridFTP
 - We have a patched version with support for the "magic group" to manage sandbox transfers through the NS
 - Once NS is abandoned we can adopt a "standard" gridFTP
- New testing organization
 - Responsibility is INFN's