



Enabling Grids for E-science

2nd All Hands Meeting Wrap-up

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INFSO-RI-508833

- **Integration and nightly builds working**
 - 167 modules; building in 2.5-6.0h (depending on schedule)
 - Developers, please use scripts for subsystem/module creation – otherwise lots of debugging effort
 - CodeWizard not yet activated (can be used from AFS)
 - Clover needs to be finalized (95% ready)
- **Release management**
 - Based on CVS tags to be sent to ITeam by Friday 10:00am
 - Tagging supported by ant targets
 - No global tag mgmt toolkit, yet
- **Build on demand – is this needed or are the currently provided tools for the artifacts area (max. 60 min) enough?**

- **Need desperately a corporate approach for configuration files**
 - Strong feedback from SA1
 - Configuration stored in XML
 - One file for global values, one file per service
 - Each service has a service description file (SDF)
 - Node has a node description file (NDF) which contains 1-n SDFs
 - Should avoid static (i.e. requiring service restart) configuration values as much as possible
 - Monitoring of actual configuration values needed
 - Try to get a working framework for RC1
 - This will not include all the services yet
 - Need to define realistic timelines

- **I**Team implements service configurator, developers implement service logic with **standard mgmt interfaces**
- **Do we agree on common service configurators like the one proposed by Robert, Paolo & Joachim?**
 - What to do with legacy services?
 - 3rd party systems will use same config file but no attempts to make it use common configurators.

- **Checking of source packages – testing**
- **Dependency files for source/binary tarballs**

- **Service discovery**
 - Information stored in R-GMA
 - Is a specific service discovery API needed?
 - Service discovery – proposal from DM?
 - *Open schema issues*
 - Is the service tool useful?
 - Should it be added to all deployment modules?
 - Interface already to MonALISA – work on GridICE is ongoing
- **Bootstrapping of new VOs (i.e. service bootstrapping)**
- **Nesting of VOs – will this happen or are current groups sufficient?**
- **Common way of extracting status information out of services (cf. integration)**

- **Active participation is needed**
- **Use cases from deployment are needed to check schema evolutions**

- **Should static and dynamic information (configuration vs. monitoring) be separated?**
- **Need better inter-service relationship?**
- **What about new services (like GAS, PM, FPS,...)?**
 - Is service status enough?
- **Avoid optional arguments?**
- **Separation of resource and service?**

- **Relation with CIM?**

- **Interaction with FPS to retrieve files**
- **Being called from job wrapper, RB, GAS**
- **Packages need to be registered in FC**
- **Installation triggered either by user, job-wrapper, or WMS**
- **PM has state (stores the TTL)**

- **Package publishing and PM hierarchies not yet implemented**
- **Currently only using AliEn PM as backend**

- **How to deal with race conditions (in particular wrt removal)**
 - Removal is a special case and should only be allowed by VO mgr.

- **Propose to include a 'reservation manager' into WMS for simple and compound agreements**
 - Should this reservation mgr become a separate service so it is useful for others (like data mgmt) as well?
- **How are the different services acting on a resource represented? Hierarchical?**
- **Only SRM2 provides space reservation – currently none available (and not clear whether something will be available within the next 12 months)**
- **Should there be a standard port for reserveable services? Should this be represented in the service information?**

- **Long time to install EGEE version of VOMS server**
 - Bug fix integration
 - Manpower problems
 - Scheduled for this week
- **VOMS admin still changing rapidly**
 - Need to have a more stable version now
- **AC format in VOMS core not RFC compliant**
 - Scheduled for this week

- **LCAS/LCMAPS being used**
 - A few modifications planned but not for RC1
 - Unclear whether dynamic account system could be part of RC1
- **Site proxy – or however it will be called**
 - Need a name (Lasa?)
 - Will dynamically configure firewalls for allowing outside connectivity
 - Is this acceptable by site admins?

- How to deal with expired proxies in case of transfer jobs spending long time in queues?
- Catalog updates would require message level security
- How to protect C/C++ webservices?

- **Grid username:**
 - Users have different DNs but all mean the same identity
 - No consensus reached – proposals will be put forward to SA1 session
- **Gridsite issues:**
 - L&B doesn't use apache framework so cannot use Gridsite but uses other mechanisms instead.
 - This approach could be interesting to others as well (in particular DM)
- **GPBOX:**
 - Developed by INFN
 - Need to find out how it overlaps or complements JRA3 work

- **Support for logical data sets (LDS) and generic queries**
- **WMS will have to deal with multiple catalogs**
 - Propose to use a prefix indicating the catalog interface to use for locating the data
 - Other possibility is to nest classads and specify the endpoint
- **JDL of WMS and AliEn TQ should (at least for a subset) converge**
- **DLI interface can use storage index**
- **Distribution of storage index?**
- **How does the WMS get the CE list out of the SE list returned by storage index**
- **Is the brokerinfo file still needed?**
 - Lfn information needs to be propagated to the WN

- **Local space management (on WN)**
 - Could 'tactical' SE help?
- **Is metadata handled by the job?**
- **Output data merging – who does that?**

- OS installation automated at all sites
- QMTest framework being used now
- Clean installs using kickstart or quattor (site dependent)
- Moving away from private communication to using savannah

- **Testing status**
 - Glite I/O - OK
 - WMS doesn't work yet
 - Initial Testcases defined; many legacy tests can be reused
 - R-GMA progressing

- **Plans for**
 - Catalogs
 - FPS/FTS
 - Security

- no plans yet for
 - AliEn components
 - DS
 - Package mgr

- **Faults & Versioning**
 - Should have a common fault base – GliteBaseFault
 - Or should we just have an inventory?
 - How to expose the version of the service?
- **Logging**
 - Need common message format
 - Need common logging levels
 - Where does logging information go
- **Messaging**
 - Being used by DM currently – how general is that? Other customers?



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Release Candidate 1

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- **According to TA:**
 - PM 9 (12/04): MJRA1.4 – Software for Release Candidate 1 enters integration phase – bugfixes only
 - PM 10(01/05): MJRA1.5 – RC1 enters testing phase
 - PM 12(03/05): DJRA1.3 – Release 1

- **In order to reach these milestones we need**
 - **Identify the components for RC1** (see following slides)
 - Need to be agreed with SA1 and NA4 next week
 - Components for RC1 need to consolidate now
 - “stable” tags (branches) – deadline end of next week
 - *Missing that means removal from RC1*
 - Installation/user/programmers guides – good drafts before Christmas
 - **No development after Christmas**, only bugfixing
 - Need to be clear what will be WS based and what not (yet)
 - Need this information by the end of this week (for Den Haag)
 - Take into account available manpower for integration/testing

- **WMS**

- Needs to include task queue and ISM
- ISM adaptor for CEMon is still missing!
- Query of FC is missing



- **CE**

- Globus gatekeeper, condor-C, blah to LSF and PBS
- CEMon
- LCAS/LCMAPS, DAS?



- **L&B**



- **R-GMA**

- pre-WS version



- **Catalogs**
 - AliEn file catalog, local replica catalogs (on Oracle and mySQL)
 - Fireman interface
 - Messaging system for updating the FC
 - Security?

- **Data Management**
 - FPS/FTS
 - glite-I/O
 - DS?

- **VOMS**
 - Installation on SL3?
 - This is a show-stopper for security

- **DGAS Accounting** ?

- **Package Manager**

- Only works with AliEn backend



- **GAS**

- Prototype



- **AliEn**

- TQ, CE, SE, shell
- Alice deployment will require quick reactions
- How compatible is this with the necessary integration and testing work towards release 1?
- Proposal: take advantage out of the Alice deployment which will result in feedback on installation, scalability, reliability etc. and based on this feedback work on inclusion of these components into release 1.1