Subject: **ANSWER TO EAC FEEDBACK**

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Distribution **PEB**

Note: original EAC text extracted from Final presentation in Den Haag from Thierry Priol in black. Blue text (right justified): proposed actions.

General comments

- The EAC is very pleased by the momentum of work that has been achieved since the 1st conference at Cork
- There are both good management practices and strong motivation of the participants to match the project objectives
- A sustainable scenario for the next 4/8 years concerning the EGEE Grid production infrastructure must be developed

The EGEE-02 Task Force is limited in scope to 2 years, which is less than this. We therefore need another body. The eIRG looks more at long term issues and has influence. We need to relate this to FP7. We also need political and industrial involvement.

A pattern representing a possible solution is emerging in the form of the closer link between eIRG and ESFRI. This automatically brings in long-term roadmapping aspect to the work of the eIRG. The EGEE project has been very proactive in its support of the work of the eIRG, which would offer a natural channel information exchange between stakeholders developing long-term vision and policies and the EGEE project.

- EGEE should not solve problems in an isolated manner that others have to solve
  - Security, network,…

Need to promote our work better.
This refers to cross-project collaboration, more than standard body (e.g. GGF and not just within the EU but also with the US and Asia (including via LCG). We need to collaborate more with other projects. Good example is security – the goal is to share the same security infrastructure. We need to reach-out to the US, national and industrial partners/projects. We already hosted an EU Concertation event, we should host the one after March's.

Concerning networking, EGEE JRA4 Network Performance Monitoring (NPM) aims to standardise interfaces allowing transparent access of network performance information from Measurement Frameworks (such as the GN2-JRA1 framework). EGEE expected these frameworks to be widely deployed throughout Europe (and beyond) to perform network tests and provide network performance information.

EGEE JRA4 NPM expects that these Frameworks are able to provide performance results through the standardised GGF NM-WG Schema interface. They define that an NM-WG Report that provides the network measurement data can be provided through the submission of a NM-WG Request which gives information on the nodes, characteristic, time etc. that the user is interested in.

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Comment: Overall editing of the answer: Matti. Ake will cover the security aspect, Ian our involvement with the US, Frederic for GGF, Matti on the EU and Kostas/Peter on computer networking

We have taken a contact with GNE/SA3 for the Network Operational Interface, about the Trouble Ticket System wich is being developed in GN2 by the PERT Team, the aim is to work with GN2, FZK(GGUS) in order to define network interface and procedures between EGEE and GN2 (includeing the NRENs).
The work on SLAs which begins involved a closed relationship with GN2 because it is necessary to have common criterions in SLA processing and their monitoring. And don't forget that the TNLC is a liaison board between EGEE (SA2, JRA4, SA1) and GEANT/NRENs.

Security:
This is a topic that is well addressed and is already common between projects. Specifically the following are explicitly common activities with various US grid projects:

- Incident response plans
- Joint Security Policy Group

Proposed security service challenges - starting with walkthroughs of incident response procedures

Operations monitoring
[EGEE and the ?? projects] Recognise that we have very similar problems and issues to address. Again, agreeing common schema to report the problems will allow viewing across the grids. The other issue would be to agree common metrics for operations performance and reliability. This couuld lead into development of common monitoring "dashboards" and/or common site validation tests (perhaps with an approach of a common sub-set of tests). Perhaps even more fruitful area of collaboration would be common application validation suites for a site (if feasible).

Accounting
[EGEE and the ?? projects have] again very similar problems to solve as with job monitoring, although the mechanisms are different. However, a strategy as above can be used - the Grid3 MonaLisa service could export directly into R-GMA allowing a top level query across infrastructures. We already both use the same (GGF-recommended) accounting schema.

Job monitoring
Discussions are under way to agree job flow states [for the EGEE and the ?? projects]. The idea is to build a common tool that can be used in the same way to view job states in either infrastructure.

These 3 monitoring-like topics (job monitoring, operations monitoring, and accounting) can all potentially use the same architecture, schema, and tools to provide common views across both infrastructures. It is hoped that common schema can be defined, allowing for differences but with certain common parts so that for example job monitoring for an application can see both grids as combined - view all jobs in a single query for example.

Storage interfaces
SRM is the de-facto standard that most of the production-oriented Grid projects are deploying. Both [EU and US?] groups work together within GGF and outside to develop this standard and its implementations. Interoperation between storage systems has been demonstrated and is in production.

Information system - BDII
Grid3 are interested in deploying the BDII, and we would like to bring the Grid3 information system and the LCG-2 IS together using the BDII and either filters to adapt the different schema interpretations or by ensuring that the GLUE schema (result from collaboration between EU FP5 DataTAG and US iVDGL projects, which is used by both Grid3 and LCG-2) evolves to include the requirements of both Grids. Effort is identified to evolve the GLUE schema in common.

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Job submission

Once the information systems are better aligned, cross-grid job submission should be possible. However, there are several policy-like issues that need to be addressed: user mappings (Grid3 jobs assume the same mapping [always same local user id/certificate??]), fork jobs on the CE (not allowed in LCG-2), etc. We are defining interoperability milestones to achieve this [reference document??].

Dealing with multiple VO's; generic VO's

This is recognised as a problem on both sides and could be a point of collaboration on how to deal with VOs. Since we all [EGEE and ??] use the same basic authentication and auhorisation infrastructure this should be feasible.

Common operations policies

The following have been discussed at recent EGEE/LCG and Open Science Grid Operations workshops. Use similar site service level definition (site charter in Grid3). Agreement on providing operations coverage across infrastructures ("day-night")? Agreement, tools on reporting and tracking problems between grids (will be needed if we have cross-grid jobs)?

We have also discussed collaborating on the cookbooks and playbooks that we both need. (Cookbooks are planning guides, and playbooks elucidate tested strategies to be used by operation staff to address specific problem scenarios).

Foreseen risk

There exists a high risk that the project may not meet its objective due to conflicting requirements and interests in the development of the gLite middleware

We need something else than a technical body like the PTF. We need more political involvement. However, we need to be able to stand back between releases and bring all the inputs together (e.g. applications, deployment, development) and prioritise the next set of features accordingly. This text will be updated following the conclusions of the Management Task Force.

(from Cal): One of the primary problems with getting a consistent, global view of the requirements for EGEE software is that those requirements exist in many widely-dispersed documents. Early in the project, NA4 took the lead in using a requirements database to manage the NA4 requirements. Other activities have expressed an interest in using the tool, so this will become a project-wide database. This centralization will help in forming a global view of the EGEE requirements.

Part of the PTF mandate is to review and prioritize those requirements. It has already begun the process. Unfortunately the existing requirements vary wildly in their usefulness to the developers and testers. The last PTF meeting focused on how to make the requirements as concrete and useful as possible. We reached a consensus on this and the existing requirements will be updated and the new requirements from other activities will be added in early in the new year.

- The project is facing a difficulty in the development of gLite with two possible scenarios
  - Focus JRA1 integration and testing on AliEn components
    - High-energy physics application will take benefit of such a scenario
  - Continue delivery to pre-production service as planned
    - Most of the applications will benefit of such a scenario
- Such situation must be addressed urgently by the Project Director having in mind the objective of the project
  - "Enabling Grids for e-Science in Europe"
  - We recommend thus to follow the second scenario

From Fab's slides:

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The Project Mgmt Board unanimously supported the plan to adhere to the project work-plan (Annex 1) and ensure a release of gLite is ready for deployment in March 2005

ALL effort (funded or unfunded, full-time or part-time) in JRA1 will be concentrated on bringing a selected set of high priority components to production-ready status. *This process is currently taking place.*

Any groups that wish to take earlier versions of gLite are welcome to do so but the support of these deployments is not the responsibility of JRA1

This text will be updated following the conclusions of the Management Task Force.

Middleware

- Need better support for the management of licensed software

We had several discussions about this in Den Haag, but not clear solution yet. We need to address this issue through a new dialogue with commercial software vendors and application developers. Need to work one-on-one with companies to explore solutions and influence licensing policy.

Comment: Responsibility for licenses to the Industry Forum and Guy Wormser, and propose GEMS and/or CGG as a reference example

- It has been widely recognized that a GRID infrastructure suc as EGEE should be capable of deploying applications based upon or containing proprietrary software. A two-prong approach is being followed to address this issue. On the "experimental" side, two new applications deployed on EGEE fall in that category : EGEODE, containing a CCG-owned seismologic code and Computational Chemistry where the proprietary GEMS code is used. The various EGEE teams in charge of application deployments (mainly NA4 generic team and SA1 team) will work in close partnership with CGG to understand all the consequences of this situation. The results will be fed back to EGEE management and EGEE Industry Forum. on a more "theoretical" side, EGEE Industry FOrum is now launching two working groups, one devoted to technological issues related to industrial usage of the GRID, chaired by Ian Guerin of IBM, the other devoted to business issues and economical models, chaired by M. Benard from HP. These working groups will make their first report in the next EGEE conference in Athens, which together with the experience gained from the EGEODE case will allow EGEE to define a well defined policy on this important issue. The main requirement for a middleware is its robustness and stability

Need to focus on key essential features first and get them right (part of plan above. Avoid spreading our resources to thin on too many less important features. Need to make sure enough resources are made available to support testing and deployment efforts.
Testing teams (JRA1/Testing, NA4/Testing and LCG-2/Certification) working together to thoroughly test the released gLite components/services. However, this only refers to functionality testing, it doesn't address configuration errors, which is to be addressed by the configuration strategy JRA1 is pursuing (How much of that will be in RC1?)
Pre-Production Service (PPS) is an important tool to assess deployment issues, on a small scale
We also need to involve more the Industry Forum, the eIRG and UK NGS.

- A common security infrastructure with other EU projects must be established

See point above on "General comments".
EGEE need to take a leading role on this topic. Which also means promoting our already leading work better.

Standardising on VOMS ans TLS is the current approach to establishing a solid and effective Grid security infrastructure for Europe, which can be suitable for the other projects on the timelines of the first EGEE project. With common Authentication infrastructure (i.e. EUGridPMA).

On the longer term, we should work /with/ those other projects, also via GGF, via an extended MWSG, via TF-EMC2, or whatever, to reach a more flexible authorization system that caters for other needs as well (e.g. digital libraries, student courses, etc) in line with what's described in the white paper (The Hague version 2.0). MLS is likely to be a longer term solution, which is more adapted to interoperability with other grid infrastructures (e.g. WS-Security).
Collaborate with OSG, OMII, etc
Automate VO management, less error and more secure.
The pseudonymity feature is to be provided though an external trusted third party that will have a role similar to that of a trusted CA and in the short term a client based encryption.
See further details from Ake in attached document:
http://agenda.cern.ch/askArchive.php?base=agenda&categ=a044542&id=a044542%2Fmoreinfo%2FEGEE_Security_Overview.ppt

EGEE is also preparing a reach-out statement to all the EU projects related to security issues, in order to ensure that the practical experiences from running of the service are disseminated in the developer community. At the moment this action is pending the concretization of the overall concertation plan of the EU projects.

Support, training & Documentation

- The project is producing a substantial amount of documentations and they must be kept updated
- The project involves a lot of participants. A "who knows what" register could help
- We recommend to build up a documentation tree for the VOs/users especially for new users
- Specific effort to be made to improve the documentation allowing autonomous installation of the gLite middleware

Several solutions exist: building an "EGEE-like Digital Library" to provide an integrated search engine to the EGEE content; however this will not be possible for Diligent to support this in the short term..
Improvement to content organisation through improve web site layout?

Applications & Demonstrations

- Play an important role to demonstrate the capability of the underlying Grid Middleware and not only the applications themselves
  - High responsibility of the persons who make the demonstrations

Will be improved through the demo rehearsal process

- Demonstrations should be prepared with a common template
  - Follow a unified approach

A template will be prepared by Bob/Meb

- Applications must identify the benefits of a grid infrastructure compared to classical ones
  - What have been made that was not allowed using classical computing infrastructure
- The EAC found that gPTM3D was the most successful demonstration

Already being selected

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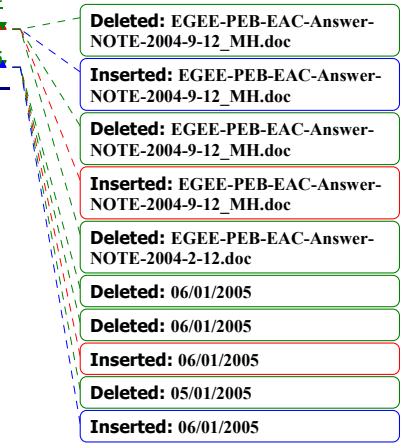

Contributions included:

Kostas Kavoussanakis (SA2 & JRA4, via MEB 16.12.2004)
Jean-Paul Gautier (SA2 & JRA4, via Bob 17.12.2004)
Ian Bird (5.1.2005)
Åke Edlund (21.12.2004)