



Enabling Grids for E-sciencE

EGEE-IIIStatus and Plans

Erwin Laure EGEE-II Technical Director CERN, Switzerland

www.eu-egee.org







EGEE-III Planning

- This presentation shows the latest status of the EGEE-III project planning based on:
 - Input from PEB
 - Vision and mission document (with issues) prepared by the PEB https://edms.cern.ch/document/791303/1
 - Defined tasks with first manpower estimates though no division into activities has yet been made
 - Feedback received from PMB/PEB workshops held in October and December 2006

Contents

- Vision & Mission
- Goals
- Overall Principles
- Issues still to be addressed
- Consortium structure
- Dealing with collaborating projects
- Budget
- Timeline and roadmap



EGEE-III vision and mission

Enabling Grids for E-sciencE

- The main vision of EGEE-III is to make a strong move towards a sustainable world-wide production quality Grid infrastructure by appropriate technical and organisational decisions.
- This must be capable of providing services to a rapidly increasing number of application areas, and make Grid technology easily accessible and usable for these communities.
- Issue: how much support is EGEE expected to give to 3rd parties wrt middleware, distribution, operational support and related documentation?



EGEE-III Goals

- The provision of continuous operational and deployment support
 - with world-wide coverage which can cope with the predicted growth in sites and utilisation;
- To establish and encourage best practices regarding security
 - across all aspects of the project: applications, middleware, deployment and operations;
- The provision of reliable and performative Grid middleware foundation services
 - to users by development and maintenance services together with appropriate integration and deployment;
- The provision of selected high level middleware support services
 - for selected, priority application areas, with an associated integration and deployment process;
- Collaboration with mature applications domains
 - in particular via selected "centres of excellence", as primary source of innovation and collaboration with user communities;



EGEE-III Goals

- The provision of high quality support for VOs
 - ranging from the mature 'production' VOs to the large number of new VOs entering the Grid;
 - this would include the whole range of user support encompassing training, access to documentation and information, applications support and day-to-day Grid user support;
- Make significant advances in the transfer of Grid technology to a wide range of business communities;
- Enhance the distribution of information
 - to a wide range of prospective and current users to aid the expansion of the use of Grid technology world-wide;
 - 2 aspects: marketing and technical information and support;
- Ensure the overall world-wide coherence of the developments by ongoing work with other Grid projects, European and worldwide networking organizations, and world-wide standards organisations.



Overall Principles

Enabling Grids for E-science

- Clusters of competence
 - Avoid thinly spread manpower (shown to be ineffective);
 - Co-locate user, operations, and middleware support, training and dissemination where appropriate to increase synergies;
 - Invest in quality rather than full geographic coverage (quantity);
 - Minimum commitment of 50% for activity personnel.
- More flexibility in tasks assignments by activity mgrs
 - Often issues arise that were not foreseen at the time of writing the DoW;
 - Need more flexibility to assign people to these issues: encourage volunteers;
 - Partners should give more support to activity managers;
 - Could we change the management structure to better reflect the partner reality?
- Resource assignment processes need to involve resource owners
 - ROCs often cannot take appropriate decisions.
- Need to agree on overall project policies from which decisions can be derived



Issues still to be addressed

Enabling Grids for E-sciencE

- Clarify the role of National Grid Initiatives
- Ensure the project has a strong operational management structure that is capable of allocating resources (both computing and manpower) dynamically to address issues that arise
- Need to make developments in "automation" that will reduce the amount of effort required to operate/manage the infrastructure
- Clarify the relative weight of middleware innovation compared to its maintenance



Consortium structure

- EGEE-II counts 91 contractors and 48 JRU members
- Need to rationalise the consortium in preparation for EGI project
- National Grid Initiatives will be the mainstay of EGI structure
- JRU mechanism used in EGEE-II can serve as a mechanism by those countries where a NGI is not yet in place
- JRU Workshop held in Brussels on 1st December
 - Attended by 34 people representing 16 countries &
 Christophe Kowalski, financial and legal officer at DG INFSOM
 - http://indico.cern.ch/conferenceDisplay.py?confld=8424
 - Positive feedback from attendees on intentions to form JRUs

EGEE-III will accept only **one** public research/academic partner per EU-funded country. Those countries that have more than 1 potential public research/academic partner are invited to form a JRU and identify a single partner to sign the EGEE-III contract



Collaborating projects census: projects registered so far

















geographical or thematic coverage















Applications

improved services for academia, industry and the public

Support Actions key complementary functions

















EGEE-preferred aspects for collaborating projects

- Have well defined goals and concrete targets
 - Prefer deployment/demonstration projects rather than "paper tigers"
- Mobilise a user community on an international level
 - Bring together a number of groups working on a common goal
- Identify partners that are willing to make computing resources available for the application(s)
 - Either in a separate infrastructure or connected to EGEE
- Can make use of service(s) from EGEE's gLite middleware
 - Have software expertise to be able to gridify applications
- Identify common partners with the EGEE consortium
 - To ensure the collaborating project has sufficient Grid expertise and act as links to EGEE

- Expansion of the geographical scope of the infrastructure by use of EGEE operations & gLite middleware
 - BalticGrid, EELA, EUMedGrid, SEE-GRID2
 - highest level of support (but need to create/define a ROC)

- Interoperation with other grid programmes
 - EUChinaGrid, EUIndiaGrid, KnowARC, DEISA, Naregi, OSG, TeraGrid
 - need to determine work involved, how it will be funded and identify user communities that bridge both projects



EGEE-III Budget

- EU contribution capped at 35 Million €
 - INFRA-2007-1.2.3 e-Science Grid infrastructures is likely to be
 ~50 Million €
- FP7 cost models allow to charge up to 75 % of costs
 - This could reduce the total effort available within the project
- EGEE-III will aim at a total effort of 10,000 Person Months (compared to 11,165 for EGEE-II with ~37 Million €EU funding)



Timeline and Roadmap

Enabling Grids for E-sciencE

- **16-18 Jan**: Address open issues at EGEE-II meeting (PMB+AA in Bologna)
- 26/27 Feb: PMB Meeting for EGEE-III progress review and NGI workshop
- April: 1st draft of EGEE-III proposal ready

EGEE partners and participating JRU members must make known any intention to submit other proposals in the same Call as EGEE-III. Failure to notify EGEE of such proposals may cause the partner to be removed from the consortium.

- 9-11 May EGEE-II Consortium Meeting @ user forum event in Manchester
 - Present EGEE-III plan to all EGEE-II partners
- 15-16 May EGEE-II review:
 - EGEE-III proposal will need to take into account relevant feedback
- July: final draft
- Sept : Assume call closes for INFRA-2007-1.2.3 e-Science Grid infrastructures?
- Nov-spring'08: hearings and contract negotiation process
 - Produce Description of Work document
- 1 April'08: EGEE-III start?
 - Short time to complete negotiation (exact dates of call not yet known)
 - May be in the same situation as EGEE-II: start project before contract is signed
 - Still need to consider an extension in time to EGEE-II (e.g. 2 months)



Concrete next steps

PEB to make initial plans concrete

- Define clusters of competence
- Define technical work program and make tasks more concrete based on material produced so far
- Get initial partner/work assignments
- Pre-filled template will be distributed after AAM by PO
- PEB meeting on Jan. 25th to discuss details
- Define project-wide milestones (deliverables)
 - ½ day PEB workshop in February (proposed: Feb 22)
 - First concrete plans need to be available for that Feb 20.
- Further refinements during March