EUAsiaGrid:

The horsepower workpackages

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Bridging e-Science Collaboration in Asia

Power Horses

- **Requirement capture and coordination policy definition**
  - Workpackage 2
- **Support of scientific applications**
  - Workpackage 3

Project Objectives

- **Capture** local e-Science user **requirements** in terms of resources needed, Grid services, application software, and training needs, building on results of the EGI_DS project;
- **Build a EuroAsian Grid community** by identifying and aggregating new and existing user communities into a virtual Grid-based research space;
- **Assist regional integration** with the wider Grid infrastructure in collaboration with the EGEE III Asian Federation and the EUChinaGrid and EU-IndiaGrid projects, thus significantly contributing to the creation of a human network in the area of Grids, e-Science and e-Infrastructures between Europe and Asia;
- **Promote common e-Science applications** in Asia and Europe, by supporting the early user communities already engaged in Grid applications (Life Science, Particle Physics), and engaging new ones by coordinating common actions of dissemination and training;

Work Package 2

Requirements capture and coordination policy definition

Objectives

- Collect computing and storage requirements, to understand which scientific domains and applications could profit more from the use of the EGEE Grid middleware;
- Develop a model for the promotion of sustainable National Grid initiatives;
- Define a roadmap towards a common Asian Grid infrastructure for research, in coordination with other European initiatives in Asia.

WP2 (Cont'd)

Description of work

- **WP 2.1 Survey of requirements**
- WP 2.2 Forum development
- WP 2.3 Technical roadmap planning workshops
- WP 2.4 Development of a technical roadmap
- WP 2.5 Review of wider context

First Activities

- **Initial survey at kick-off meeting (at ISGC'08 in Taipei)**
- **Provided baseline information about**
  - state of adoption in partner countries
  - resources available to partners
  - existing initiatives (e.g., training)
  - existing understanding of issues
- **Fortnightly meetings using Jabber service**
- **Collection of existing evidence (surveys, strategy documents, etc.)**
- **Development of 'status, plans and requirements' documents**
- **Similar to and inspired by EGI Knowledge Base**

Requirements Survey

- **Aimed at researchers to establish general community requirements**
- **English language ‘master’ version, however regional languages used to widen the coverage**
- **Delivered using SurveyMonkey**
- **Local survey coordinators to promote and manage**

- **Follow-on through surveys and workshops**

SPR Documents

- **Status of Implementation**
  - Existing resources; level of network connectivity; part of (inter-) national grid infrastructures; ROC; community engagement programmes;
- **Implementation Plans**
  - Plans to contribute to EGEE; (national) roadmaps; other coordinating structures; funding mechanisms; plans to develop services / prototypes / applications / research environments / support activities

Survey Components

- **Requirements**
  - Major gaps in provision of services, training and support?
  - What support do you expect EUAsiaGrid to provide to address these?
- **Community Engagement**
  - What scientific communities are you engaging with?
  - What mechanisms are you using for this engagement?
  - Any funded initiatives to widen the uptake?
- **Obstacles**
  - What problems are you facing that are keeping you from achieving your implementation goals?

Work Package 3

Support of scientific applications

WP3 (Cont'd)

Objectives

- To attract user communities through explicit support of applications in specific areas:
  - Start with a set of applications already running on the gLite-based Grid (EGEE)
  - Search for new user communities that can benefit from the access to a Grid infrastructure
- To establish appropriate Virtual Organizations

Description of Work

- WP3.1 EGEE applications support
- WP3.2 Collection of specification and requirements of the regional applications
- WP3.3 Promoting new applications

WP3.2

Applications

- High Energy Physics Applications (ATLAS, CMS) *(INFN) – EGEE related*
- Computational Chemistry *(CESNET) – EGEE related*
- **Mitigation of natural disasters** ***(ASGC) -- New***
- Bioinformatics and Biomedics *(HealthGrid) – EGEE related*
- **Social Science Applications** ***(NCeSS) – New***

First Actions

- **Regular meetings (Jabber), mixed with WP2**
- **Wiki pages organized per application domain**
  - Generic overview
  - Resources
  - *Achievements*
  - Contacts
- **First new application area identified**
  - Cultural heritage

WP2 and WP3 Relationship

- **WP3 relies to some extent on WP2**
  - surveys and their interpretation
  - infrastructure status and availability
- **Contribution to WP2 survey with application related issues**
- **WP3 has to exploit and further built on the knowledge obtained from WP2 survey(s)**

Conclusions

- **Requirements capture and analysis (WP2) complemented by a targeted support of user communities (WP3)**
- **A survey to collect information**
  - More difficult to prepare also due to cultural and language barriers
- **“Classical” and “New” application areas considered**
  - Interesting from the Asia-Pacific region point of view
- **Community building**
  - Together with the Dissemination and Training workpackages
- **Input from EGEE (Application Support) and EGI (Surveys, Knowledge base)**

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www.euasiagrid.eu