

## **Grids for Business - Challenges at the Turning Point**

**Workshop 10a: 11:00 Friday 21 October 2005**

### **Abstract**

Grid technology is at a crucial stage of its development. It is on the verge of being adopted as a platform, not for doing science, but for doing business. To prove itself as a viable business platform it must not only demonstrate power and security, but awareness of business issues, including business models of virtual organizations and the concepts that the businesses deal with. The latter is addressed by semantic and ontology based approaches.

This workshop has been organized by:

Professor dr. Žiga Turk, University of Ljubljana

Professor dr. Carole Goble, University of Manchester

Dr. Steffen Unger, Fraunhofer FIRST

Vlado Stankovski, University of Ljubljana

### **Objectives**

The key objective of the workshop is to discuss the issue as to what is needed for the grid technology to become a true major player in IT infrastructures of immediate future; "grid technology" in its true and not commercially misused sense. What are the business cases for it? What are the major obstacles and what are the researchers doing to overcome them? The workshop will use the eChallenges environment to bring together an interdisciplinary mix of experts from various domains and business. It is one in a series of steps in a coordinated action that is enhancing the European grid technology base through concertation among the r&d projects and verification of their relevance through immediate feedback of the industry and business.

### **Target Audience**

Industry & business, R&D sector, R&D policy makers

### **Programme**

*Chair: Žiga Turk, University of Ljubljana*

#### **Session 1: Presentations (60 min.)**

The workshop focuses on the industrial requirements for grid based solutions. In the first part of the workshop the audience will follow presentations of selected EU projects from the IST "Grids for Complex Problem Solving" strategic objective.

#### **1. Data Mining Requirements for Emerging Grid Environments: Digital Libraries Use Case**

*Jernej Trnkoczy, University of Ljubljana, Slovenia*

Currently no coherent framework exists for developing and deploying data mining applications on the grid. The **DataMiningGrid** Consortium addressed this gap by developing generic and sector-independent data-mining tools and services for the grid. To demonstrate the technology developed, the project implements a range of demonstrator applications in e-science and e-business.

#### **2. Ontology Services for the Virtual Enterprise**

*Vlado Stankovski, University of Ljubljana, Slovenia*

The **InteliGrid** project's hypothesis is that the collaboration platform - the semantic grid itself - must be aware of the business concepts (e.g. car, airplane, house) that the VO is addressing. The goal

is to create an architecture and a prototype for such an infrastructure, based on existing grid middleware and test it in the context of industries mentioned above. The **InteliGrid** Consortium will create generic grid-related knowledge, infrastructure and toolkits that will allow for a broad transition of the advanced engineering industry towards semantic, model-based, ontology-committed collaboration on the grid.

### **3. Experience Management Based on Text Notes (EMBT)**

*Michal Laclavik, Institute of Informatics, Slovak Academy of Sciences, Slovakia*

### **4. Integrated Monitoring Framework for Grid Infrastructure and Applications**

*Bartosz Balis, AGH Institute of Science and Technology, Poland*

**K-WF Grid**'s main goal is developing a system that will assist its users in composing powerful Grid workflows by means of a rule-based expert system. All interactions with the Grid environment will be monitored and evaluated. Workflows will be dynamic and fault-tolerant beyond the current state of the art. The **K-WF Grid** system will be generic by providing domain-independent system components, freeing the user from the burden of complex Grid usage and maintenance.

### **Discussion: (30 min.)**

The workshop will proceed in a structured discussion forum moderated by the organisers. The audience is invited to actively contribute to the discussion on topics:

- what is needed for the grid technology to become a true major player in IT infrastructures of immediate future?
- what is different (if anything) about e-Business from e-Science or other domains that have pioneered the Semantic Grid?
- what technologies need to be in place for business to adopt Grid technologies?
- what business models are realistic for Grid-base solutions?