

Agenda

EU & Asia-Pacific Grid Collaborations and Future Challenges

16 September 2008,

OGF24, 15-19 September 2008, Singapore

The Workshop is organised in collaboration between two EU FP7 projects, the **EGI_DS** (*European Grid Initiative Design Study*) & the **OGF-Europe** project (*Mobilising & Integrating Communities on Grids, Standards & Best Practices across Europe*).

The purpose of the workshop is to provide the community with a snapshot of the success of EU & Asia Pacific collaborations offering a panoramic overview of results achieved to date and success stories. The workshop has a balanced mix between European & Asia Pacific representatives allowing each to offer their organisation's perspective & ROI on their contributions to support & future perspectives. The day will look at the developments of creating sustainable grid infrastructures in AP, i.e. the GARUDA India NGI, which has been just approved for its phase two with C-DAC, IN as the Project Coordinator.

Overall Conveners of the Workshop are Silvana Muscella, Technical Director of OGF-Europe and Dieter Kranzmueller, LMU Munich, Leibniz Supercomputing Centre (LRZ), and EGI_DS Strategic Director.

09:00 Introduction – European & Asia Pacific co-operations

European Commission EC– Kyriakos Baxevanidis, Acting Head of Unit Géant & eInfrastructures , EC Brief introduction on the EC's strategies for international co-operation & future directions

National Grid Office Singapore – Dr HingYan Lee Director of NGO. National strategies on supporting distributed computing initiatives and future activities.

09:30 -10:30 Rationale of the day & current EU-AP ongoing initiatives

European Grid Initiative Rationale Dieter Kranzmueller – LMU, DE director of the Leibniz Supercomputing Centre (LRZ) of the Bavarian Academy of Sciences and Humanities & EGI-DS Strategic Director.

Overview of the EU-IndiaGrid Project - Giuseppe Andronico INFN , IT EU-IndiaGrid project-(*Joining European & Indian Grids for e-Science Network Community*)

GARUDA India NGI phase 2 A.C Natraj, Henry Sukumar CDAC, IN

National Knowledge Network Project & Evolution of TEIN3: impact on Indian Grid Infrastructure. S Meharban Singh ERNET, IN

InterNetworking Power into Mobile IPTV Application Scenario - EC-GIN project (Europe China Grid Interworking) -Shaohua Liu, CN

10:30 Networking Coffee

11:00 -12:30 International collaboration efforts within an OGF context

OGF-Europe shaping international collaborations David Wallom, **oERC, UK** Overview of OGF-Europe future expectations, results to date & its international relations.

Overview and Development of the Requirements Process EU-AsiaGrid project Alex Voss, ESRC National Centre for e-Social Science, University of Manchester

Work achieved on the open source GridSAM project (an implementation of the OGF JSDL and BES standards). OMII-UK/OMII-Europe and OMII-China Steve Crouch, OMII-UK

The integration of an Asian NGI with European counterparts. Eric Yen Academia Sinica Grid Computing Center (ASGC) Taipei, Taiwan

12:30 – 13:30 Networking Lunch

13:30 -15:30 Roundtable on Findings Chair Dieter Kranzmueller EGI_DS strategic director understanding what is currently lacking in distributed computing so we may report to help shape the Work programme 2010 -2011 of the European Commission and have representatives from the National Grid Office in Singapore & in the area of international co-operation help in shaping regional funded efforts.

15:30 Networking Coffee & End of Workshop

Speaker Profiles & Abstracts

Title "European Grid Initiative Rationale"

This talk provides an overview of the European Grid Initiative (EGI), an effort to establish a sustainable production grid infrastructure in Europe. The talk summarizes the latest results from the EGI Design Study with special focus on the collaboration between Europe and Asia as well as between EGI, OGF and OGF-Europe.

Presenter Profile: Dieter Kranzlmüller is full professor at the Department of Computer Science of the Ludwig-Maximilians-Universitaet Muenchen (LMU) and director of the Leibniz Supercomputing Centre (LRZ) of the Bavarian Academy of Sciences and Humanities. He currently serves as Strategic Director of the European Grid Initiative Design Study (EGI_DS), is a member of the OGF-Europe Project and Area Director Applications within the Open Grid Forum (OGF).

Mr. Natraj is a team coordinator of System Engineering and Networking Group, C-DAC, Bangalore India. He works for C-DAC's Terascale Supercomputing Facility (CTSF) administrating the High-Performance computing clusters. He has been involved in deploying grid softwares in Garuda Grid Partners' sites which consists of 45 leading academic institutions and government R&D laboratories. His professional expertise include system and storage administration of High performance clusters.

Title: EUAsiaGrid - Overview and Development of the Requirements Process

Presenter Profile: Alex Voss works for the ESRC National Centre for e-Social Science at the University of Manchester. He is a computer scientist with a strong interest in the social organisation of ICT use and conducts research on the determinants of uptake of e-Research technologies as well as ways to foster the embedding of e-Infrastructures in research practice. He leads the EUAsiaGrid workpackage on requirements and coordination policy definition, manages the e-Uptake project led by NCeSS and has been a research theme leader on adoption and sustainability at the e-Science Institute.

Title: Market-Oriented Grid Computing : The Gridbus Perspective Abstract

Grid computing has enabled a partial realization of the vision of utility computing. However, this idea cannot truly be realized until there are mechanisms that provide consumers the freedom to select services from different providers based on the price and quality of services. Many research groups around the world are presently looking into market-inspired techniques to realize these mechanisms. This talk will present an overview of current research in this area undertaken by the Gridbus Project at the University of Melbourne, Australia. It will also highlight collaborations we have with other groups around the world in this regard.

Presenter Profile: Dr. Srikumar Venugopal is a Research Fellow in the Grid Computing and Distributed Systems (GRIDS) Laboratory in the University of Melbourne and has worked on Grid and market-oriented

technologies for nearly six years. He is the lead architect of the Gridbus resource broker and has been involved in Grid-enabling many applications.

Title "Integrating Europe-China Grid InterNetworking Power into Mobile IPTV Application Scenario"

The Grid would see the countless mobile devices becoming its mainstream users in near future. By collaboration between European and Chinese partners, the project EC-GIN (Europe-China Grid InterNetworking) designed tailored network technology in dedicated support of Grid applications. This presentation will introduce current research in the Mobile IPTV application scenario which integrates many enhanced networking components and modules developed by the EC-GIN consortium.

Presenter Profile: Dr. Shaohua Liu is an assistant professor in the International Research Laboratory, School of Telecommunication Engineering, Beijing University of Posts and Telecommunications. He has undertaken many projects related to Grid and Mobile applications in recent years. Currently he is working on the emerging Mobile IPTV technology and applications.

Short summary of the Indian national grid initiative - garuda foundation phase

GARUDA initiative is a collaboration of science researchers and experimenters on a nation wide grid of computational nodes, mass storage and scientific instruments that aims to provide the technological advances required to enable data and compute intensive science of the 21st century. One of GARUDA's most important challenges is to strike the right balance between research and the daunting task of deploying that innovation into some of the most complex scientific and engineering endeavors being undertaken today.

The objective of this phase of the project is to bridge the PoC phase of the project which is completed on March, 2008 with the Main phase of the project which is yet to be approved by the Department of Information Technology. In this phase of the of Garuda grid, major efforts will be directed to address the evolving R&D in emerging grid technologies, demonstrate operational pilot of select few applications, stabilize a robust, manageable, secured and friendly grid infrastructure. Also attempts will be made for community and capacity building, attending technology migration & interoperability issues and addressing further international cooperation and collaboration. The talk will briefly update on the current developments on the technology migration and the applications that will be ported on this infrastructure.

About OGF (<http://www.gridforum.org/>) & OGF-Europe (<http://www.ogfeurope.eu/>)

OGF and its European Chapter, OGF-Europe, is an open community committed to driving the rapid evolution and adoption of applied distributed computing. Applied Distributed Computing is critical to developing new, innovative and scalable applications and infrastructures that are essential to productivity in the enterprise and within the science community. OGF and OGF-Europe are chartered with fostering open forums that build the community, explore trends, share best practices and consolidate these best practices into standards.

About EGI_DS (<http://www.eu-egi.eu/>)

The European Grid Initiative (EGI) represents an effort to establish a sustainable grid infrastructure in Europe. Driven by the needs and requirements of the research community, it is expected to enable the next leap in research infrastructures, thereby supporting collaborative scientific discoveries in the European Research Area (ERA). The EGI Design Study project performs the preparatory actions towards this goal.