



EchoGRID eNewsletter, November 2008

EchoGRID at ICT2008, 25-27 November 2008, Lyon, France

EU & Chinese Co-operation on Grids, ProActive/GCM Demonstration, International Village, D20

(http://ec.europa.eu/information_society/events/cf/item-display.cfm?id=485)

Priorities for Future Research on Grids: EU & International Perspectives

Networking Session, Thursday 27 November, 9-10.30, Salle Rhone

(http://ec.europa.eu/information_society/events/cf/item-display.cfm?id=635)

Report on EchoGRID 2nd International Conference, 24-25 October 2008, Shenzhen, China & Beijing Workshop, 28 October 2008

EchoGRID (<http://echogrid.ercim.org/>) fosters win-win partnerships between Europe and China in the grid computing arena by defining short-, mid-, and long-term visions in the field. To this end, EchoGRID has produced 3, 5 and 10 years roadmaps developing a shared European and Chinese vision of future grid research perspectives for academic and business communities on which both sides may cooperate. Additionally, EchoGRID has supported a series of EU-China Interoperability Grid Plug Tests to test and improve mechanisms of grid middleware.

A key achievement has been offering networking opportunities between EU and Chinese organisations at international events focusing on grid developments, future challenges for grid research led by both academia and industry, as well as key issues like interoperability and standardisation. Participants from both regions have contributed to identifying points of co-

operation, defining common strategies and future activities with standardisation development organisations like ETSI, OGF and W3C.



ICT2008 offers a prime opportunity for EchoGRID to build on these achievements and spearhead synergies with a number of EC-funded projects and technology platforms. The joint Stand showcases technologies recently launched on the market and prototypes for the private and public sector, while the Networking Session on Thursday 27 November highlights current and future developments and areas for future cooperation of interest to both Europe and China.

**EU & Chinese Co-operation on Grids,
ProActive/GCM Demonstration, International
Village D20**

The joint Stand showcases the benefits of grids across a range of commercial and public sectors with live demos from Bridge and GridCOMP showcasing cutting-edge technologies developed with partners from China and other world regions. Bridge presents three application scenarios designed to demonstrate co-operative design, simulation and data access between European and Chinese partners, with special emphasis on the interoperability approach to combine heterogeneous Grid infrastructures, as well as the workflows in the Bridge application domains. The three application scenarios focus on **simulation and design in aerospace; environmental disaster prediction; and drug discovery**. Developers of Problem Solving Environments, Technology Providers, Software and Application Developers are the **target users** of these technologies.

Bridge (<http://www.bridge-grid.eu/>)



Bridge is aimed at demonstrating the benefits of grid technologies for international co-operation, particularly between China and Europe; developing, enhancing and interconnecting EU (GRIA) and Chinese (GOS) grid middleware technology; and providing a software platform supporting distributed product and process development while protecting intellectual property rights (IPR).

The GridCOMP ProActive/GCM Interoperability Demonstration tackles the increasing need for both **improved business performance** and optimal **energy efficiency** now facing enterprise IT. GridCOMP has developed an **Open Source** reference implementation in the ProActive Parallel Suite library that enables businesses to globalise their IT infrastructure while lowering costs and accelerating applications. The highly visual presentation centres on several commercial sectors, including the **financial services industry, life sciences, manufacturing and telecommunications**.

GridCOMP (<http://gridcomp.ercim.org/>)



Information technologies require standards for interoperability as a catalyst for scientific and business development. GridCOMP aims to define and implement a Grid Component Model (GCM) for the IT sector to ensure that standard grid components enable the seamless creation of application and services deployed on large-scale infrastructures.

Visitors to the stand will also learn about the achievements of EchoGRID in connecting actors from EU and China through a series of events in both regions to deliberate top-level challenges for new computing paradigms and define research priorities moving forward.

Priorities for Future Research on Grids: EU & International Perspectives

Networking Session, Thursday 27 November 2008, 9-10.30 in Salle Rhone 1

This Session looks at different **research agendas** around Grid from multiple yet complementary perspective, with the future evolution of distributed computing and software and services firmly in mind. Each of the hosting projects, **EchoGRID**, **NESSI-GRID**, **CHALLENGERS** and **3S**, will give a brief talk on the main outcomes of their road-mapping activities and White Papers. Bridge then takes the floor to showcase current achievements in grid developments, paving the way for an interactive discussion.

An interesting session focusing on the future priorities for academia-industry collaborations across organisational & national boundaries and driven by the specific needs and challenges of business and research posed by the adoption of grids. Vassiliki Andronikou, National Technical University of Athens, Greece.

9:00-9:05	<i>Introduction – Research Agendas Mapping the Potential for Future Collaborative Developments</i> , Michael Wilson, Science & Technology Facilities Council (STC), UK <i>European Roadmaps Defining Future Research Priorities for academia, industry & international Co-operation</i>
9:05-9:15	<i>NESSI-GRID's Strategic Research Agenda for Business Grids</i> , Andrea Manieri, Engineering & NESSI-GRID
9:15-9:25	<i>The CHALLENGERS Vision and Research Agenda</i> , Konstantinos Tserpes, National Technical University of Athens (NTUA) & CHALLENGERS
9:25-9:35	<i>ECSS White Paper: Initiative for the Future of an Integrated SSAI Community</i> , Eva García Muntión, RTDI Management & Strategy, Spain and 3S.
9:35-9:45	<i>EchoGRID – Shared Visions for Future European and Chinese Co-operation on Grids</i> , Thierry Priol, INRIA, France & Scientific Co-ordinator of EchoGRID
9:45-9:55	<i>Bridge – European & Chinese Knowledge Exchange on Grids, Future Challenges & Priorities</i> , Gilbert Kalb, Fraunhofer, Germany & Bridge <i>Interactive Discussion</i>
9:55-10:30	<i>Future Priorities with perspectives from business and research</i> Interactive round-table debate on future collaboration opportunities and priority technology challenges with particular reference to cloud computing, SOA and the future of the internet.
10:30	<i>Conclusions & Wrap-up</i> , Andrea Manieri, Engineering

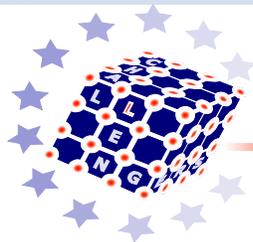
Backgrounder



The EchoGRID Roadmap focuses on six key thematic areas with promising research directions and effective forms of European-Chinese collaboration: New Programming Paradigms, Grid architectures - SoA, Grid Management, Virtual Organisations, Component Models, Workflows & Business Processes.



The Networked European Software and Services Initiative (NESSI, <http://www.nessi-europe.com/Nessi/>) aims to create a Strategic Research Agenda (SRA) for European research in services and their foundations. NESSI-Grid supports the Service Oriented Infrastructure (SOI) NESSI Working Group (NWG) in its task of defining a vision and strategic research agenda (NESSI-Grid SRA) for grid-like infrastructures used in business settings, particularly in NESSI scenarios. The industry-driven SRA has identified the most relevant core business scenarios and associated business requirements, covering the short to long-term.



CHALLENGERS

CHALLENGERS – “Against Mainstream Research” (<http://challengers-org.eu/home-page/home-page.html>) evaluates the multiple facets of the technical, social and business aspects associated with complex technology changes, such as grids and service oriented architectures. ICT must become knowledge-oriented at the technological level and service-oriented at the user level. CHALLENGERS explores the landscape of these challenges placing special emphasis on the needs of real-world business settings. A select group of grid experts bring business foresight and technical expertise, drawing on practical experiences and focusing on the participation in the decision-making process that shapes the future of ICT and technological competences.



european community
for software
& software services

architectures ■ infrastructures ■ engineering

Strategy for Software & Services within the European Research Area, or 3S (<http://www.eu-ecss.eu/>), is aimed at supporting EU’s priority of boosting competitiveness driven by advanced technologies and strategic research programmes. 3S offers a platform for knowledge exchange and networking through the European Community for Software and Services (ECSS) website and has defined shared, long-term views for key areas of software and services through the ECSS White Paper presented during the Networking Session. The White Paper aims to detail the prerequisites to ensure that Europe will gain a competitive edge in software and services, architectures and infrastructures, as well as to provide recommendations with regard to policy making and R&D programme designing.

Fostering strong international partnerships - EchoGRID's International Events

EchoGRID's 2nd International Conference, 24-25 October 2008 in Shenzhen, China, took place in conjunction with the 7th International Conference on Grid and Cooperative Computing (GCC2008). EchoGRID's Scientific Co-ordinator, Thierry Priol from INRIA, delivered a keynote focusing on the transition from conventional to unconventional Grid programming during GCC2008. Dedicated Tracks explored the evolution of grids by addressing future trends and challenges surrounding **cloud computing** from both an academic and industry perspective. The panel discussion focused on how cloud computing will impact grids, new research challenges and how grids and clouds could be merged to transform computing into a true utility.



EU-China Cooperation workshop on 28 October 2008 in Beijing, which was jointly organised by EchoGRID, ERCIM, Beihang University and Fraunhofer, showcased successful partnerships between China and Europe in grids, software and services and e-infrastructures, with the aim of fostering future collaborative developments to tackle new challenges.



The Workshop brought together one hundred European and Chinese representatives, including the European Commission and the Chinese Ministry of Science and Technology (MoST) officials, EU projects such as EchoGRID, BRIDGE, XTreemOS, GridCOMP, Qualipso, ECGIN, EU-ChinaGrid and Floss Include, as well as Chinese and European industries (Huawei, AVIC, China Mobile, ENG).

"It was an important event to sum up key achievements and define challenges and priorities moving forward", says Professor Depei Qian, Beihang University.

EchoGRID Roadmap online Consultation

The grid community is warmly invited to take part in the online consultation process and play a part in shaping future R&D cooperation on grids and related technologies: <http://echogrid.ercim.org/content/view/36/1/>