

Cyprus Grid Day

Research and Industrial Perspectives

DATE: 21/1/2008

VENUE: Hilton Cyprus Hotel, Nicosia

AIM and CONTEXT

The **University of Cyprus**, in collaboration with the **Research Promotion Foundation of Cyprus**, the **University of Nicosia**, and the **Cyprus Research & Academic Network**, organize a workshop titled "**Cyprus Grid Day: Research and Industrial Perspectives**." The workshop will take place in Nicosia, Cyprus, on January 2008, and follows a series of successful events organized in Cyprus since 2002 by the Cyprus Grid Initiative (CYGrid) of the University of Cyprus.

This workshop aims at bringing together Cypriot academic and research institutions, decision-makers and local business players in order to present and discuss:

- recent developments in Grid technologies and e-Infrastructures, in Cyprus and the European Union;
- the development of a national strategy for e-Infrastructures and the establishment of a National Grid Initiative
- the potential that Grid computing brings to small and large enterprises of various sectors, which can now benefit from sophisticated computing resources not available in traditional IT infrastructures.

Furthermore, the workshop will examine the potential of Cyprus becoming an e-Infrastructure center in the Eastern Mediterranean region, the benefits that such a move can bring to the cypriot services sector, and the measures that need to be taken in that direction.

Organizing Committee

Marios Dikaiakos, University of Cyprus

Maria Poveda, University of Cyprus

Michael Tingherides, Cyprus Research Promotion Foundation

Ioanna Dionysiou, University of Nicosia

George Athienitis, Cyprus Research and Academic Network

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PROGRAM

Opening Session

- 08:30–09:00 Registration
- 09:00-09:05 **Welcome from the Organizing Committee**
- 09:05-09:10 **Opening Address**
Mr. Achilleas Patzinakos
Director General, Cyprus Research Promotion Foundation
- 09:10-09:15 **Welcoming Address**
Prof. C. Christofides, Vice Rector for Research and Academic Affairs
University of Cyprus

Session I: European Grid Infrastructures

- 09:30-09:50 **The European Grid Initiative**
Prof. Dieter Kranzmueller
University of Linz
- 09:50-10:10 **The Cyprus Grid Initiative**
Dr. Marios D. Dikaiakos, Associate Professor
University of Cyprus
University of Nicosia and Grid Directions: Our vision
Prof. Catherine Demoliou, Dean of the School of Sciences and Engineering
University of Nicosia
- 10:10-10:30 **Grids in the Mediterranean Region: the Eumedgrid infrastructure**
Dr. Agathoclis Stylianou, Executive Director
Cyprus Research and Academic Network
- 10:30-10:50 **The RPF's role in supporting the development of Research Infrastructures in Cyprus**
Mr Michael Tingherides
Cyprus Research Promotion Foundation
- 10:50-11:00 **Discussion**
- 11:00-11:30 Coffee Break

Session II: e-Infrastructures in Industry, Business and Healthcare

- 11:30-11:50 **The EGRID experience: using the GRID for financial research**
Dr. Stefano Cozzini, National Research Council, Italy
- 11:50-12:10 **BREIN - Towards an intelligent Grid for Business**
Mr. Eduardo Oliveros Diaz, Telefónica R&D, Spain
- 12:10-12:30 **WISDOM: a large scale drug discovery application on the grid**
Jean Salzemann / Dr Vincent Brenton, National Centre for Scientific Research, France
- 12:30-12:50 **ICGrid: Towards a Grid Infrastructure for Intensive Care Units**
Dr Demetris Zeinalipour
Open University of Cyprus
- 12:50-13:10 **Privacy and Security aspects of medical data storage on Grids**
Mr Jesus Luna, CoreGrid Fellow
University of Cyprus and Inst. of Computer Science/FORTH
- 13:10-13:15 **Closure**
- 13:15-14:00 Lunch

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SPEAKERS

Vincent Breton received his Engineer degree from Ecole Centrale de Paris in 1985 and his PhD in Nuclear Physics from the University of Paris XI- Orsay in 1990. Since 1990, he has been a research associate at the French National Centre for Scientific Research (CNRS). In 2001, he founded a research group (<http://clrpcsv.in2p3.fr>) on the application to biomedical sciences of the IT technologies and tools used in high energy physics. The team started the development of a Monte-Carlo simulation platform for nuclear medicine and radio/brachytherapy in collaboration with the University of Lausanne. This platform, based on the GEANT4 toolkit developed by the high energy physics community to describe the transport of particles through matter, has turned today into the GATE collaboration (<http://opengate.in2p3.fr>) gathering more than 20 research laboratories around the world. He is also investigating the relevance of grid technology for biomedical applications. Co-founder of the Healthgrid initiative, chairman of the first European conferences on grids for health in January 2003 and January 2004, he is leading application support and identification in the EGEE european project (FP6).

Stefano Cozzini is a Developing Scientist of CNR/INFM working at National Simulation Center DEMOCRITOS hosted at Sissa (Trieste, Italy).

He is presently technical director of SISSA/eLab, a joint SISSA/Democritos laboratory for e-science, which coordinates and maintain all the HPC and Grid resources of the two institutions. He is also external consultant for cluster and grid computing at ICTP (International Center of Theoretical Physics). He recently coordinated the Italian EGRID project and is now technical coordinator of the EU-IndiaGrid project.

His main professional interests are in the field of High Performance Computing and Grid Computing applied to computational physics.

Catherine D. Demoliou was awarded her B.Sc. in Biochemistry (1976, University of Toronto, Canada) and her Ph.D. in Biochemistry (1981, McMaster University, Canada). She received recognition as a University Teacher in 1990 (University of London, UK) and the CertEd in On-Line Education and Training (Institute of Education, University of London, UK) in 2003. Her academic and research career include: (1980-85) Post Doctoral Scientist, Dept. of Biochemistry, Imperial College of Science Technology and Medicine, University of London; (1985-89); Research Scientist, Molecular Neurobiology Unit, Medical Research Council Center, University of Cambridge; (1989-91) Lecturer and (1991-96) Senior Lecturer, Imperial College, University of London, UK and Head of Cell Biology (Thrombosis Research Institute, 1989-96); Honorary Senior Lecturer, Imperial College between 1997 and 2001. She joined Intercollege in 1998 as an Associate Professor and was promoted to Professor of Biochemistry at the Dept. of Life and Health Sciences in 2000. Since 2001 she holds the post of Dean of the School of Sciences at Intercollege, now the University of Nicosia. Between 1996-2006 she has held the post of Honorary Senior Scientist at the Cyprus Institute of Neurology and Genetics.

Marios D. Dikaiakos is an Associate Professor of Computer Science at the University of Cyprus, where he established and leads the High-Performance Computing Systems Laboratory. Dikaiakos received his Ph.D. from Princeton University (1994), an M.A. degree from Princeton (1991), and a Dipl.-Ing. degree from the National Technical University of Athens (summa cum laude, 1988). He was a Research Associate at the University of Washington in Seattle (1994-1995) and spent a pre-doctoral internship at the Paris Research Lab of Digital Equipment Corporation (fall 1991). He has been a Socrates/Erasmus visiting professor at the University of Crete and ICS FORTH (10/2004), and a visiting research professor at the Department of Computer Science, Rutgers University (Spring 2005).

Dieter Kranzmueller is a professor of computer science at GUP, the Institute of Graphics and Parallel Processing at the Johannes Kepler University Linz, who has worked in parallel computing and computer graphics since 1993, with a special focus on parallel programming and debugging, cluster and Grid computing, and scientific visualization. He has participated in several national and international research projects and has co-authored more than 150 scientific papers in journals, and conference proceedings. He is deputy head of the institute, visiting professor at the University of Reading, UK, appointed national representative of Austria and member of the troika in the EU e-Infrastructures Reflection Group (eIRG), a member of the Austrian Grid Executive Board, Area Director Applications of the GGF Steering Group, and involved in HPC for Europe Taskforce and leader of the EGI and its proposed Design Project.

Jesus Luna was born in Mexico City in 1972. He finished in 1995 his telecommunications engineering studies at the National Polytechnic Institute also in Mexico; afterwards in 2001 obtained the Master of Computer Sciences degree from the Monterrey's Technological Institute of Higher Studies (Mexico). In 2005 obtained a DEA degree in Computer Architecture from the Technical University of Catalonia (Barcelona, Spain), and is expected to achieve his Doctorate degree early next year from the same University with the lecture of his thesis "A Dynamic Validation Infrastructure for Interoperable Grid Services". From 1995 to 2003, Mr. Luna worked at the Central Bank of Mexico in charge of the design, development and implementation of the Public Key Infrastructure for the national payment system. From 2004 to 2007 was the Development Manager of SeMarket International, a spin-off company from the Technical University of Catalonia specialized in security-related solutions for the financial market. During that period he participated actively in the EU funded project CertiVeR and other joint projects with the "University of Naples" and the US' Department of Energy. Currently Mr. Luna has a CoreGRID Network of Excellence's post-doc fellowship to participate in security projects related with Data Grid environments with both, the Foundation for Research and Technology - Hellas and the University of Cyprus. His main research interests are Grid security, cryptographic protocols, security evaluation metrics and Service Oriented Architectures.

Eduardo Oliveros Díaz holds a Telecommunication Engineer Degree from Universidad Politécnica de Madrid (1997). He worked for Future Space (1998) where he participated in the project Infomail (Multimedia Messaging Server) of Telefonica R&D. He joined Telefónica R&D in 2000, in the "Messaging Services" division, participating in the development of different e-mail Systems, Directory and Voice Portals solutions for Spain and South America. Following he joined the "Real-time communications services" division (2005) where he was involved in several Telefónica Corporation innovation projects concerning Directory and Unified Messaging Systems. He has participated in the European project Akogrimo (IST FP6) involved in exploitation activities. Currently he is working as Administrative Coordinator in the European project BREIN (IST FP6).

Jean Salzemann is currently an IT research engineer at the French CNRS (National Centre for Scientific Research) in Clermont-Ferrand. He joined Vincent Breton's team in 2004 where he started to work on grid environments especially designing and managing grid middleware solutions for life sciences. He is one of the lead designers of the WISDOM production environment and he is involved in the EMBRACE project doing technology recommendation and managing grid deployments.

Agathoclis Stylianou holds a BSc in Systems Information Management and a PhD in Computer Science, both from Brunel University, London. He worked for a period as a Lecturer at Brunel University before taking up the post of Director of the Information Systems Service at the University of Cyprus. He is also Co-founder and holds the posts of Executive Director of the Cyprus Academic and Research Network and Administrator of the .cy Country Code Top Level Domain Registry. Dr. Agathoclis Stylianou has also served as the Treasurer of TERENA Executive Council, the Trans-European Research and Education Networking Association

Michael Tingherides holds a degree in Accounting and Finance from the University Of East Anglia (UEA), and a Masters Degree in Business Administration (MBA) from Cardiff University (UK) with specialisation in e-commerce and Innovation. He has been working in the Research Promotion Foundation (RPF) as a Scientific Officer in the National Research Programmes Unit since November 2007 and he is the National Contact Point (NCP) for Research Infrastructures Activity of the 7th Framework Programme for Research & Technological Development (2007 - 2013). From 2002 until 2007 Mr. Tingherides was employed at the Cyprus Institute of Technology.

Demetrios Zeinalipour-Yazti is a lecturer of Computer Science at the Open University of Cyprus. Previously, he was a visiting lecturer of Computer Science at the University of Cyprus (2005-2007). His research interests include Distributed Query Processing, Network Data Management and Storage and Retrieval Methods for Peer-to-Peer and Sensor Networks. He holds a Ph.D. (2005) and M.Sc. (2003) in Computer Science and Engineering from the University of California - Riverside and a B.Sc. in Computer Science from the University of Cyprus (2000). He has been a visiting researcher at the Network Intelligence Lab at Akamai Technologies Cambridge USA (Summer 2004) and a Research Collaborator at the Department of Computer Science at the University of Cyprus (Summer 2002).