

Workshop in conjunction with  
INTERNATIONAL SUPERCOMPUTING CONFERENCE



## CoreGRID Workshop on Grid Middleware Dresden, June 25<sup>th</sup>-26<sup>th</sup>, 2007

### Workshop Chairs:

- Norbert Meyer, Poznań Supercomputing and Networking Center (Poland)
- Domenico Talia, University of Calabria (Italy)
- Ramin Yahyapour, University of Dortmund (Germany)

### Programme Committee:

- Artur Andrzejak, ZIB, Germany
- Alvaro Arenas, CCLRC-RAL
- Angelos Bilas, FORTH
- Maciej Brzezniak, PSNC
- Marco Danelutto, University of Pisa, Italy
- Bruno Le Dantec, ERCIM, France
- Marios Dikaiakos, UCY
- Ewa Deelman, Information Sciences Institute, Marina Del Rey, USA
- Vivi Fragopoulou, Foundation for Research and Technology – Hellas, Greece
- Vladimir Getov, University of Westminster, UK
- Antonia Ghiselli, INFN Bologna, Italy
- Sergei Gorlatch, University of Muenster, Germany
- Anastasios Gounaris, UoM, UK
- Pierre Guisset, CETIC, Belgium
- Domenico Laforenza, ISTI/CNR, Italy
- Philippe Massonet, CETIC
- Salvatore Orlando, CNR-ISTI, Italy
- Thierry Priol, INRIA, France
- Yves Robert, CNRS, France
- Paolo Trunfio, UNICAL
- Rizos Sakellariou, UoM, UK
- Frederic Vivien, CNRS, France
- Paul Watson, UNCL
- Roman Wyrzykowski, Technical University of Czestochowa, Poland
- Wolfgang Ziegler, Fraunhofer-Institute for Algorithms and Scientific Computing, Germany

Monday, June 25th, 2007

## Session 1

9.00 – 10.30

### **Grid Scheduling with ATOP-Grid under Time Sharing**

Xijie Zeng, Jiaying Shi, Xiaorong Cao, Angela C. Sodan

### **Benchmarking Grid Applications for Performance and Scalability Predictions**

Farrukh Nadeem, Radu Prodan, Thomas Fahringer, Alexandru Iosup

### **Cache-Enabled Super-Peer Overlays for Multiple Job Submission on Grids**

Pasquale Cozza, Ian Kelley, Carlo Mastroianni, Domenico Talia, and Ian Taylor

*coffee break*

## Session 2

11.00 – 12.30

### **Data Model for Describing Grid Resource Broker Capabilities<sup>1</sup>**

Attila Kertész, Ivan Rodero and Francesc Guim

### **The Grid Backfilling: a Multi-Site Scheduling Architecture with Data Mining Prediction Techniques**

F. Guim and I. Rodero and A. Goyeneche and J. Corbalan

### **Managing Scheduling and Replication in the LHC Grid**

Thomas Ferrandiz, Vania Marangozova

### **Towards Collaboration between EGEE and CoreGRID (Invited Talk)**

Cecile Germain

*Lunch break*

## Session 3

14.00 – 15.30

### **An Analysis of Security Services in Grid Storage Systems**

Jesus Luna, Michail Flouris, Manolis Marazakis, Angelos Bilas, Federico Stagni, Alberto Forti, Antonia Ghiselli, Luca Magnoni, Riccardo Zappi

### **An Analysis of GRID Storage Element Architectures: High-end Fiber-Channelvs. Emerging Cluster-based Networked Storage**

Maciej Brzezniak, Norbert Meyer, and Michail Flouris, Renaud Lachaiz, and Angelos Bilas

### **Network Monitoring Session Description**



Augusto Ciuffoletti, Antonis Papadogiannakis, Michalis Polychronakis

**Sub-contracts: Delegating Contracts for Resource Discovery**

Javier Bustos-Jimenez, Cristian Varas, and Jose Piquer

*coffee break*

**Session 4**

**16.00 – 17.30**

**Taxonomies of the Multi-criteria Grid Workflow Scheduling Problem**

Marek Wieczorek, Andreas Hoheisel, Radu Prodan

**Real-World Workflow Support in the ASKALON Grid Environment**

Radu Prodan, Thomas Fahringer, Farrukh Nadeem, Marek Wieczorek

**A Practical Approach for a Workflow Management System**

Simone Pellegrini, Francesco Giacomini, Antonia Ghiselli

Tuesday, June 26th, 2007

## Session 5

8.30 - 10.00

### **Looking for an Evolution of Grid Scheduling: Meta-brokering**

I. Rodero, F. Guim, J. Corbalan, L.L. Fong, Y.G. Liu, S.M. Sadjadi

### **Preemption and Share Control in Parallel Grid Job Scheduling**

Bryan Esbaugh and Angela C. Sodan

### **Meta-Broker for Future Generation Grids: A new approach for a high-level interoperable resource management\***

Attila Kertész and Péter Kacsuk

### **Towards Uniform and Transparent Access to the Grid Information using the Palantir**

Francesc Guim, Ivan Rodero and Julita Corbalan

*coffee break*

## Session 6

10.30 – 12.00

### **Secure and Fault Tolerant Distributed Framework with Mobility Support**

Lukas Hejtmanek

### **Improvement on fault-tolerance and migration facilities within the GRID computing environment - integration with the low-level checkpointing packages**

Gracjan Jankowski, Radosław Januszewski, Rafał Mikolajczak, and Jozsef Kovacs

### **Towards automated diagnosis of application faults using wrapper services and machine learning**

Juergen Hofer, Thomas Fahringer

### **Peer-To-Peer Metadata Management for Knowledge Discovery Applications in Grids**

Gabriel Antoniu, Antonio Congiusta, Sebastien Monnet, Domenico Talia, Paolo Trunfio

Lunch