

## Call for Papers

### Workshop on High Performance Grid Networks

Co-located with CCGrid 2008

18-22 May 2008, Lyon, France

<http://hpng.intec.ugent.be>

Several Grid projects have deployed or utilized high performance networking technologies to offer end-to-end connectivity in a cost-effective and flexible way. To further increase the performance and scalability of such distributed computing facilities, it is expected that the integration of Grid resources and networking technologies will enable novel and disruptive application paradigms. For example, as a number of key optical component technologies approach maturity, hybrid optical networks are becoming an increasingly attractive and practical architecture for the next-generation Grids. Of particular interest are the scalability and efficiency properties of these Grid networks.

The Workshop on High Performance Grid Networks brings together practitioners and researchers from the high performance computing field and networking experts. The main objective is discussion and work on the emerging aspects related to advanced techniques, platforms, paradigms and models for the design, deployment and usage of high performance Grid networks.

The workshop solicits original papers related to all aspects of high performance networking with respect to the design and deployment of Grid infrastructures. More specifically, the concurrent optimization of networking and Grid resources to offer a scalable, efficient and cost-effective environment is of key interest. Additionally, experiences with novel features and performance behaviour of middleware solutions, possibly with testbed results, are also solicited.

This workshop is partially supported by the IST FP6 Phosphorus project.

Topics of special interest, but not limited to, are the following:

- Next-generation Grid network architectures, paradigms, and functionalities
- Hybrid optical network solutions (circuit, burst and packet switching) for Grids
- Experiences with testbeds, prototypes and proof-of-concept deployments
- Novel Grid applications and middleware solutions with focus on networking aspects (e.g. user-driven reconfigurability)
- High performance control, management and signaling protocols
- Modeling of performance, scalability, and efficiency issues in Grids
- Multi-domain issues in optical Grids
- Novel programming models, supporting workflows and orchestration of resources over high performance networks
- Job routing and scheduling, resource management and optimization algorithms
- Resilient Grid networks
- Layer-2 technologies for high performance Grids
- Trade-offs in service plane vs. control plane: overlay model vs. peer model

Authors are invited to submit original papers of 6 pages maximum. Papers should be double column text and follow the IEEE manuscript guidelines provided by the CCGrid2008 website (on-line submission). Submission implies the willingness of at least one of the authors to register (for both the conference and the workshop) and present the paper.

### Organizing committee

- Marc De Leenheer, Ghent University - IBBT, Belgium  
[marc.deleenheer@intec.ugent.be](mailto:marc.deleenheer@intec.ugent.be)
- Chris Develder, Ghent University - IBBT, Belgium  
[chris.develder@intec.ugent.be](mailto:chris.develder@intec.ugent.be)
- Dimitra Simeonidou, University of Essex, UK  
[dsimeo@essex.ac.uk](mailto:dsimeo@essex.ac.uk)

### Technical program committee (TPC)

- Artur Binczewski, PSNC, Poland
- Franco Callegati, University of Bologna, Italy
- Piero Castoldi, Scuola Superiore Sant'Anna, Italy
- Cees de Laat, University of Amsterdam, The Netherlands
- Filip De Turck, Ghent University - IBBT, Belgium
- Bart Dhoedt, Ghent University - IBBT, Belgium
- Sergi Figuerola, i2CAT, Spain
- Admela Jukan, Technische Universität Braunschweig, Germany
- Gigi Karmous-Edwards, MCNC, USA
- Ken-Ichi Kitayama, Osaka University, Japan
- Joe Mambretti, Northwestern University, USA
- Biswanath Mukherjee, UC Davis, USA
- Reza Nejabati, University of Essex, UK
- Ralph Niederberger, Forschungszentrum Jülich, Germany
- Pascale Vicat-Blanc Primet, INRIA, France
- Chunming Qiao, SUNY Buffalo, USA
- Volker Sander, Fachhochschule Aachen, Germany
- Bill St. Arnaud, CANARIE Inc., Canada
- Anna Tzanakaki, AIT, Greece
- Manos Varvarigos, University of Patras, Greece
- Wolfgang Ziegler, Fraunhofer SCAI, Germany
- Wei Guo, Shanghai Jiao Tong University, China
- Jian Wu, BUPT, China

### Important dates

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| • Submission deadline        | November 28, 2007 (hard deadline) |
| • Notification of acceptance | January 15, 2008                  |
| • Camera ready deadline      | January 30, 2008                  |

