



GridNets 2006

Third International Workshop on Networks for Grid Applications

Co-Sponsored by IEEE Communications Society and Create-Net

Co-located with IEEE Communications Society/Create-Net Broadnets 2006

San Jose, California, USA, October 1-2, 2006

<http://www.gridnets.org>

STEERING COMMITTEE

Imrich Chlamtac (Create-Net)
Gigi Karmous-Edwards (MCNC)
Michael Welzl (U. of Innsbruck)

WORKSHOP CO-CHAIRS

Pascale Primet (ENS Lyon)
Michael Welzl (U. of Innsbruck)

WORKSHOP VICE-CHAIR

Piero Spinnato (Create-Net)

TECHNICAL PROGRAM COMMITTEE CHAIR

Wayne Clark (Cisco)
Yufeng Xin (MCNC)

PANEL CHAIR

Bela Berde (Alcatel)

PUBLICITY CHAIR

Antoine Pichot (Europe) (Alcatel)
Tomohiro Kudoh (Asia) (AIST)
Brian L. Tierney (USA) (LBL)

PROGRAM COMMITTEE

Bill Allcock (Argonne Nat. Lab.)
Lina Battestilli (MCNC)
Micah Beck (U Tennessee)
Augusto Casaca (INESC)
Piero Castoldi (Sc. Sup. S'Anna)
Cees De Laat (U Amsterdam)
Peter Dinda (Northwestern U)
Jose Fernandes (FCCN)
Tiziana Ferrari (INFN - CNAF)
G Garzoglio (Fermi Nat Acc Lab)
Wolfgang Gentzsch (D-Grid)
Wolfgang Gerteis (SAP Belfast)
Doan Hoang (U of Sydney)
David Hutchison (Lancaster U)
Adriana Iamnitchi (U Sth Florida)
Admela Jukan (U de Quebec)
J Kangasharju (TU Darmstadt)
Gigi Karmous-Edwards (MCNC)
Dieter Kranzlmüller (U of Linz)
Joe Mambretti (Northwestern U)
Max Mühlhäuser (TU Darmstadt)
Nicholas Race (Lancaster U)
M Ripeanu (U British Columbia)
V Sander (U App Sc Aachen)
Dimitra Simeonidou (U of Essex)
Yufeng Xin (MCNC)
Oliver Yu (U Illinois at Chicago)

CONFERENCE COORDINATION AND REGISTRATION

Kitti H. Kovacs (ICST)

Grid developers and practitioners are increasingly realising the importance of an efficient network support. Entire classes of applications would greatly benefit by a network-aware Grid middleware, able to effectively manage the network resource in terms of scheduling, access and use. Conversely, the peculiar requirements of Grid applications provide stimulating drivers for new challenging research towards the development of Grid-aware networks.

Cooperation between Grid middleware and network infrastructure driven by a common control plane is a key factor to effectively empower the global Grid platform for the execution of network-intensive applications, requiring massive data transfers, very fast and low-latency connections, and stable and guaranteed transmission rates. Big e-science projects, as well as industrial and engineering applications for data analysis, image processing, multimedia, or visualisation just to name a few are awaiting an efficient Grid network support. They would be boosted by a global Grid platform enabling end-to-end dynamic bandwidth allocation, broadband and low-latency access, interdomain access control, and other network performance monitoring capabilities.

The Gridnets 2006 workshop will provide a focused and highly interactive forum where researchers and technologists will have the opportunity to present and discuss leading research, developments, and future directions in the Grid networking area.

As an IEEE publication, the proceedings will also be accessible through the IEEE Xplore website and other digital libraries. Best papers will be considered for publication in a special section of Elsevier Future Generation Computer Systems (FGCS) - The International Journal of Grid Computing: Theory, Methods and Application".

SCOPE: The GridNets 2006 workshop will focus on research issues and challenges as well as lessons learned from experience. Topics of interest include and are not limited to:

- New concepts and requirements to shape the design of eScience and Research Networks
- Integration of advanced optical networking technologies and architectures (OPS, OBS) for the Grid environment
- Coordination of network resources with other Grid resources (CPU, Storage)
- Layer interactions: optical layer with higher layer protocols
- Grid advanced resource reservation
- Self-healing Grid networks
- Traffic characteristics and performance analysis
- New architectures and technologies that address Grid requirements
- Experience on production-level optical network infrastructures
- Middleware design and grid layer integration issues for accessing and managing network resources
- Routing and scheduling for dynamic bandwidth control
- Monitoring, provisioning, brokering of network resources
- New multi-service frameworks and models
- End-to-end application level control of network resource
- Peer-to-peer approach for Grid networks
- Network support for wireless Grids
- Novel data transport protocols designed for new application services
- Data replication and multicasting strategies and protocols
- Fault-tolerance, protection, security, and scalability issues related to connecting large number of sites
- Network cost, performance, and incentive issues
- Grid network simulation
- Identification of Grid peculiarities that network mechanisms can build upon

IMPORTANT DATES

| | |
|-------------------------------|---------------------|
| Paper Submission Deadline | May 26 June 7, 2006 |
| Paper Acceptance Notification | June 30, 2006 |
| Final paper submission | July 31, 2006 |

(For submission instructions, refer to <http://www.gridnets.org/2006/submission.html>)