Third Workshop on Grids and Advanced Networks

GAN’05

The rapid rise of the grid computing concept is leading to the development of a wide range of capabilities for managing distributed applications and services. These applications and services, in addition to the grid infrastructure itself, all rely on network communication. Effectively utilizing high-speed networks, however, is not entirely trivial. Network communication will also encompass far more than simple, point-to-point data transfers. Advanced network capabilities will include quality of service, security, filtering, reliable multicast, high performance transport protocols, monitoring, performance measurements and content-based routing, to name a few. In many cases, new network services will offer applications a control plane whereby it can control network behavior in the data plane. Hence, grid applications and middleware that can be more network-aware, and even topology-aware, will be able to achieve higher performance, and responsiveness while lower network demand. Meanwhile, performance and specific requirements of Grid applications will push the evolution of network protocols.

For these reasons, the Workshop on Grids and Advanced Networks (GAN’05) will be convened as part of CCGrid 2005 to bring together researchers in both grids and networks to present the latest work integrating these two fields. The topics of interest include, but are not limited to:

- Grids and High-Performance Networks
- Communication Middleware
- Multicast for Grids
- QoS for Grids
- Grid Network Security
- Grid Network Services, e.g., monitoring, filtering
- Transport protocol for Grids
- Network resource allocation
- Content-based Networking
- Bulk Data Transfer
- Active and Programmable Networks for Grids
Resource Discovery
Topology Construction
Network Protocols Enhancement for Grids
Grid Applications using advanced network capabilities
Optical network solutions supporting Grids

12 papers have been submitted to GAN'05 workshop from various countries: Belgium, France, Ireland, Italy, New Zealand, United Kingdom and USA. Each paper was reviewed by four program committee members. A total of 5 papers were selected for presentation at the GAN’05 workshop as full papers. Workshop co-chairs would like to thank all authors who submitted papers and the program committee members who diligently reviewed the papers.

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