

Future Generation Computer Systems: **The International Journal of Grid Computing: Theory, Methods and Applications**

Special Section: Real-time attributes in Grids

Description-Motivation

Grid computing has recently migrated from traditional high performance and distributed computing to pervasive and utility computing based on the advanced capabilities of the networks (including the wireless) and the lightweight, thin devices. This is potentially enabling Grid technologies to be widely deployed by a large set of commercial applications and to deliver services with advanced attributes to a vast users' base.

However, current Grid implementations are not incorporating technologies that would allow them to sufficiently address interactive real-time requirements, thus limiting them to support relevant applications which comprise a significant part of the ICT market. This limitation comes from a set of pertinent issues including the fact that the Grid services are not commonly integrated with the network ones and the management framework of Grid services is not sufficient to provide real-time control of the service execution.

The aforementioned limitation comprises a significant motivation to thoroughly investigate and research relevant key technologies that will target at the same time multidisciplinary scientific and technology sectors of the Grids and Real-time systems worlds, having a direct impact in business, industry, education, leisure and the everyday life of the citizen in general.

The aim and scope of this special section is to cover topics such as:

- Real-time interactivity in Service Oriented Architectures and Grids
- Dynamic management of services and Service Level Agreements
- Design and implementation of services with real-time attributes
- Quality of Service, resilience and fault tolerance
- Intelligent networking; network aware services
- Data streaming management
- Workflow and Web Service semantics
- Cross Layer control for network and services
- Business models
- Dynamic security and trust
- Programming paradigms for real-time applications
- Real-time application adaptation; best practices and lessons learned
- Scientific, industrial and social implications of real-time attributes

Submissions

Authors are encouraged to submit papers describing original, previously unpublished, complete research, not currently under review by another conference or journal. This special section will accept only papers by electronic submission through the FGCS Elsevier Editorial System (EES). The prospective authors are requested to follow the

guidelines that refer to the preparation of the manuscript, and limit their paper to 10 pages. For a full and complete Guide for Authors, please refer to: <http://www.elsevier.com/fgcs>. Each paper will be peer-reviewed by at least 2 independent experts.

The papers should clearly state how they relate to the special section, what particular problem and corresponding solution they address, and why it is expected to be relevant both to the special section and to the scientific community.

Important Dates

Title available in Electronic submission system : 15 February 2008

Paper submission: 30 April 2008

Notification of acceptance: 30 June 2008

Camera ready papers: 1st September 2008

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