

Special Issue Proposal

Title: "Special Issue: Advances in Intelligent Grid and Cloud Computing" on Information Systems Frontiers

Guest editors:

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Motivation and Target Audience

Grid and cloud computing have been among the most popular research topics in recent years. These technologies are very important since various resources are geographically distributed and heterogeneous. Users can transparently access the resources/services without taking care about how many services the platform has and where the services will be located. Cloud computing can be seen as a natural next step from the grid-utility model. Some advanced technologies and issues are necessary to be investigated, such as platform, hybrid cloud architecture, service discovery and intelligent management, workflow, QoS issues, green issues, cost-models, and so on, to provide transparent, secure, and efficient service access behind the platform. In addition, a well-defined model and effective economics are useful for coordinating services/resources scattered world-wide. A variety of valuable achievements and implementation experiences will drive sustained development and success in this area.

This special issue aims to foster state-of-the-art research in the areas of grid and cloud computing and is expected to focus on all aspects of cloud technologies and to present novel results and solutions to solve the various problems and challenges in grid and cloud platforms. The target audience of this special issue includes academics, researchers, engineers, professionals working on the relevant topics in design profession, manufacturing engineering, industrial engineering, computer science, information systems, and the graduate students who wish to learn and spot potential research opportunities. Related special issues of ISF include topics on Collaborative business processes (Vol.11, No. 3), Enterprise Information Systems (Vol. 10, No. 5), Enterprise Distributed Computing (Vol. 9, No. 4), Enterprise Services Computing (Vol. 9, No. 2/3), Web Services to Services Computing (Vol. 9, No. 1), Enterprise

Architectures (Vol. 8, No. 2) and a few more (see <http://www.som.buffalo.edu/isinterface/ISFrontiers/>)

Subject Coverage

We encourage the submission of innovative and mature results in designing, analyzing, and developing advanced technology, services, and applications of grid and cloud computing. Areas of interest include, but are not limited to, the following topics:

- Middleware and tools of Grid/Cloud computing
- Programming and components models of Grid/Cloud Computing
- Platform and Applications of Grid/Cloud Computing
- Intelligent Management of Grid/Cloud
- Hybrid Cloud Architecture
- Workflow of Hybrid Cloud
- Green issues of Grid/Cloud Computing
- Mobile and Pervasive computing
- Cost-Models and Economics of Grid/Cloud Computing
- QoS Issues on Grid/Cloud Computing
- Security Issues on Grid/Cloud Computing
- Information/knowledge Cloud

Important Dates

- Submission of full papers: 15 Jan. 2011
- First round review completed and notification: 15 March 2011
- Submission of revised papers: 15 April 2011
- Second round review completed and notification: 15 May 2011
- Submission of final version of the paper: 30 May 2011
- Final decision notification: 15 June 2011
- Estimated publication date: Early 2012

Best Papers Selected from Conference

Besides normal submissions, the revised version of the best papers selected from the 2010 International Workshop on Intelligent Grid and Cloud Computing (IGCC2010) co-located with EUC 2010 (<http://www.euc2010.org/>) will be invited to this special issue. The revised version must have at least 40% difference from the conference paper.

Review Process

Papers will be evaluated on their merits, relevance to industry, contribution to the grid/cloud computing field, suitability to the special issue, and overall quality. All papers will be rigorously refereed by 3 reviewers from the following reviewer board. Submission of a manuscript to this special issue implies that no similar paper is already accepted or will be submitted to any other conference or journal.