2nd International Workshop on Scientific Workflows and Business Workflow Standards in *e-Science* in conjunction with

International e-Science 2007 (deadline extended to 08/08/2007)

(<u>e-Science 2007</u>)

Dec 10-13, 2007 Bangalore, India

(CFP_{PDF} | 2006 |)

Aims and scope

In e-Science environments, Scientific Workflow Management Systems (SWMS) hide the integration details at different layers of middleware such as for managing Grid resources, computing tasks, data and information, and automate the management of experiment routines. Recently development in Grid technology have shown a convergence between business workflow standards such as BPEL4WS and scientific workflows and scientific workflow management systems: design, implementation, applications in all fields of computational science, interoperability among workflows and the e-Science infrastructure, e.g., knowledge framework, for workflow management. Concerted research is carried out in several projects along the complete e-Science technology chain, ranging from applications to networking, focusing on new methodologies and re-usable components. The workshop focuses on practical aspects of utilising workflow techniques to fill the gap between the e-Science applications on one hand and the middleware (Grid) and the low level infrastructure on the other hand. The workshop aims to provide a forum for researchers and developers in the field of e-Science to exchange the latest experience and research ideas on scientific workflow management and e-Science. Live demos of workflow systems and workflow application are welcome.

The 1st International Workshop on Scientific Workflows and Business workflow standards in e-Science was successfully held in the context of IEEE Int'l Conf e- Science and Grid computing in Amsterdam in Dec. 2006. The workshop invited 6 well known researchers representing both academia and industry. The workshop consists of two oral sessions and one panel session. This year we will widen the participation to SWBES workshop by inviting submission of original work.

Topics

Authors are invited to submit original manuscripts that demonstrate current research in all areas of scientific workflow management in e-Science. The workshop solicits novel papers on using business workflow standards to tackle scientific workflow issues, including but not limited to:

- Workflow infrastructure and e-Science middleware
- Workflow API and graphical user interface
- Workflow modelling techniques
- Workflow specification language
- Workflow execution engine
- Dynamic workflow control
- Workflow verification and validation
- Workflow system performance analysis
- Support tools for managing workflows
- AI techniques in workflow management, e.g., planning, runtime control and user support;
- Security control in managing workflow
- Real-world applications of scientific workflow
- Different levels of interoperability among workflow systems;
- Automatic composition of scientific workflow;
- Scientific Workflow Management Systems in e-science framework
- Different domains of e-Science Applications
- Workflow system performance analysis
- Knowledge infrastructure in workflow management;
- Applying workflow techniques for e-science: dynamic control, verification and validation, planning, runtime control and user support;
- Automatic composition of scientific workflow;
- Knowledge infrastructure for e-Science workflow management

Paper submission and publication

Authors should submit electronically a full (8-page) paper directly to the workshop organizers (adam@science.uva.nl or zhiming@science.uva.nl). The papers will be carefully evaluated based on originality, significance, technical soundness, and clarity of expression. Accepted papers should be presented at the workshop. All accepted papers will be published by the IEEE Computer Society Press, USA and will be made available online through the IEEE Digital Library.

Important Dates

- Papers Due: July 15, 2007 (Extended to August 8, 2007)
- **Notification of Acceptance:** August 30, 2007
- Camera Ready Papers Due: September 14, 2007

Programme committee

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