Proceedings of the 5th International Workshop on

Middleware for Grid Computing (MGC’07)

held at the

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Newport Beach, Orange County, California, USA

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Introduction to the 5th International Workshop on Middleware for Grid Computing (MGC)

The first MGC workshop held on June 2003, in conjunction with the Middleware Conference in Rio de Janeiro (Brazil) saw a variety of efforts in Middleware for Grid Computing. There were 16 technical presentations and discussions on several stimulating topics including: Classic Grids, Object Oriented technologies, Service-based Grids, Open Grid Service Architecture, Agent Grid, Interactive Grid, Grid Economy / Scheduling, and Portlets. Extended and thoroughly revised versions of the papers were published in a Special Issue of Concurrency and Computation: Practice and Experience Journal in 2004.

The second workshop in the MGC series, held in Toronto (Canada) brought together researchers addressing topics that emerged from the 2003 event, and some novel ones such as Strategies and Protocols for obtaining Quality of Services, Virtualization, Wireless Grids, Data Grid Middleware, Semantic Grid Middleware, Dependability and Fault Tolerance in Grid Middleware and Information Management. With an unprecedented number of high-quality submissions, fifteen full papers and nine posters were chosen for the workshop proceedings out of the forty-eight papers originally submitted. Presenters highlighted issues and solutions in one or more of the themes identified for the workshop. Extended, thoroughly revised selected papers were published in a Special Issue of Concurrency and Computation: Practice and Experience Journal in 2006.

The third edition of the MGC series, held in Grenoble, France, brought together researches in the field of middleware, addressing large-scale and real world problems in Grid environments, including the most interesting and stimulating topics which emerged from the previous event, along with additional ones such as Strategies and Protocols for obtaining Quality of Services, Virtualization, Wireless Grids, Data Grid Middleware, Semantic Grid Middleware, Dependability and Fault Tolerance in Grid Middleware and Information Management. Sixteen papers were selected out of the thirty-eight originally submitted and 4 posters were invited from the community. Extended, thoroughly revised selected papers were published on a Special Issue of Concurrency and Computation: Practice and Experience Journal in 2007.

The fourth edition of the MGC workshop series held in Melbourne, Australia, brought together researches in the field of middleware, addressing large-scale and real world problems in Grid environments, including Grid and Web Services Architectures and Middleware, Object Metadata and Schemas in Grid Middleware, Programming Models and Tools in Grid Middleware, Resource Management and Scheduling, Strategies and Protocols for QoS in Grid Middleware, Information Services in Grid Middleware, Dependability and Fault Tolerance in Grid Middleware, Performance Evaluation and Modeling in Grid Middleware, Agent-based Approaches in Grid Middleware, Utility computing, Core Grid Infrastructure, Grid Security, Virtualization in Grid Middleware, Wireless Grids Middleware, Data Grid Middleware, Peer to Peer Protocols in Grid Computing, Network Support for Grid Computing, Grid Application Frameworks, Portals and Portlet Containers, Adaptive/Autonomic Middleware, and Messaging in Grid Middleware. Fourteen papers were selected out of the forty-two originally submitted, and 7 posters were accepted. Extended, thoroughly revised selected papers will appear in a Special Issue of Concurrency and Computation: Practice and Experience Journal.


MGC workshop series has been generating substantial interest in the community and it is expected that this interest will continue. Far from exhausting the topics of interest, they have paved the way for a fifth edition of the workshop.

We would like to thank the authors and the participants for presenting their work and contributions on research in middleware for grid computing. Additionally we would like to thank all the reviewers for providing constructive reviews and specially thank all members of the program committee for helping to shape the workshop program.

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