FIRST CALL FOR PAPERS

IEEE International Conference on Cluster Computing

CLUSTER 2004

IEEE

http://grail.sdsc.edu/cluster2004/

SAN DIEGO, CALIFORNIA, U.S.A. 20-23 SEPTEMBER 2004

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In less than a decade, commodity clusters have become mainstream and cost-effective computing platforms for executing a wide range of computation-, data-, and transaction-oriented parallel applications. In spite of countless deployed platforms and resounding application successes, many research and development challenges remain for achieving higher performance, scalability, and usability. The IEEE TFCC Cluster2004 conference, to be held in beautiful San Diego, provides an open forum for researchers, practitioners, and users to present and discuss issues, directions, and results that will shape the future of cluster computing.

Cluster2004 welcomes paper and poster submissions from engineers and scientists in academia and industry describing original research work in all areas of cluster computing. In addition, Cluster2004 will welcome proposals for tutorials and workshops to be held concurrently with the conference. Topics of interest include, but are not limited to:

Cluster Middleware
- Single-System Image Services
- Software Environments and Tools
- Standard Software for Clusters
- I/O Libraries, File Systems, and Distributed RAID

Applications
- Scientific and E-Commerce Applications
- Data Distribution and Load Balancing
- Scheduling and Parallel Algorithms
- Innovative Cluster Applications
- Tools and Environments

Cluster Networking
- High-Speed System Interconnects
- Lightweight Communication Protocols
- Fast Message Passing Libraries

Performance Analysis and Evaluation
- Benchmarking and Profiling Tools
- Performance Prediction and Modeling
- Analysis and Visualization

Cluster Management and Maintenance
- Cluster Security and Reliability
- Tools for Managing Clusters
- Cluster Job and Resource Management
- High-Availability Cluster Solutions

Grid Computing and Clusters
- Grid / Clusters Integration
- Network-Based Distributed Computing
- Mobile Agents and Java for Clusters/Grids

PAPER SUBMISSION

Paper Format: Not to exceed 25 double-spaced, numbered pages (including title, author affiliations, abstract, keywords, figures, tables and bibliographical references) using 12 point font on 8.5x11-inch pages with 1-inch margins all around.

Submission: An on-line submission page will be activated on the conference web site two weeks before the submission deadline. Authors should submit a PostScript (level 2) or PDF file. Hard copy submissions will not be accepted.

JOURNAL SPECIAL ISSUE

Authors of the best papers from the conference will be invited to submit an expanded version of their papers for possible publication in a special issue of the International Journal of High Performance Computing and Networking (IJHPCN), which will appear in 2005.

IMPORTANT DATES

Workshop Proposals Due:	March 6, 2004
Paper Submissions Due:	April 16, 2004
Tutorial Proposals Due:	May 14, 2004
Paper Acceptance Notification:	June 1, 2004
Exhibition Proposal Due:	June 18, 2004
Final Paper Manuscripts Due:	July 2, 2004