



IV WCGA Grid Computing and Applications

Welcome

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2 May 06

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2



background

- *WCGA*
 - since 2003 at LNCC
 - in collaboration with NCSA and RNP since 2004
- Involvement in Research Projects on Cyberenvironments (Grids) and Applications since 2002
- National Lab on Scientific Computing
 - Graduate program on Computational Modeling
- ACM/IFIP/USINIX Workshop on Middleware for Grid Computing - *MGC*
 - since 2003,
 - proceedings with ACM digital library, since 2004
- Special Issues on Concurrency and Computation, since 2003 on selected papers from *MGC*
- Involvement in multiple related Grid projects in the context of RNP Gigabit experimental network
- CTWatch, International Cyberinfrastructure: Activities Around the Globe, Vol. 2(1), Feb. 2006

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3



Engagements in Cyberenvironments

- Security Issues
- Global Infrastructure
- Grid Middleware and Services
- Portals to Specific Applications
- Targeting Universities and Research Centers

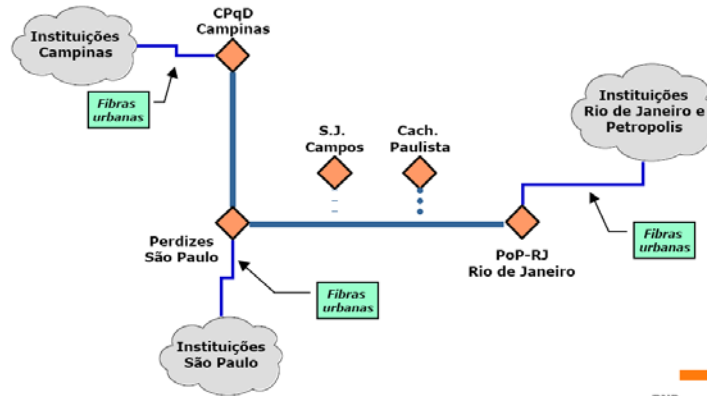
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4



GIGA Network



So. WRNP2 - Projeto IP da Rede GIGA

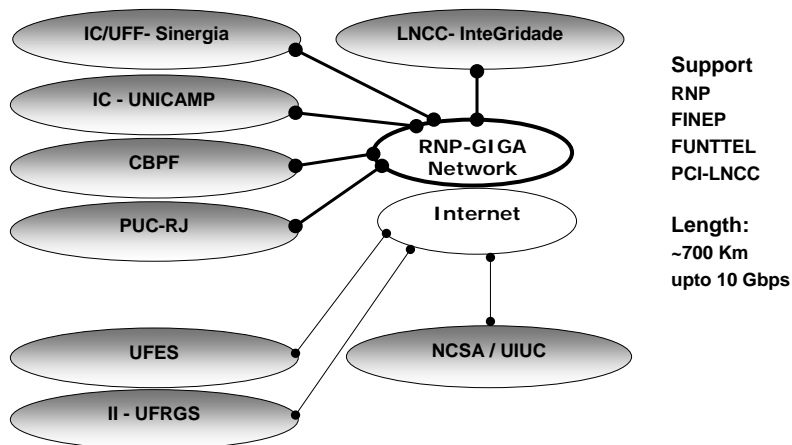
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5



InteGridade + Sinergia

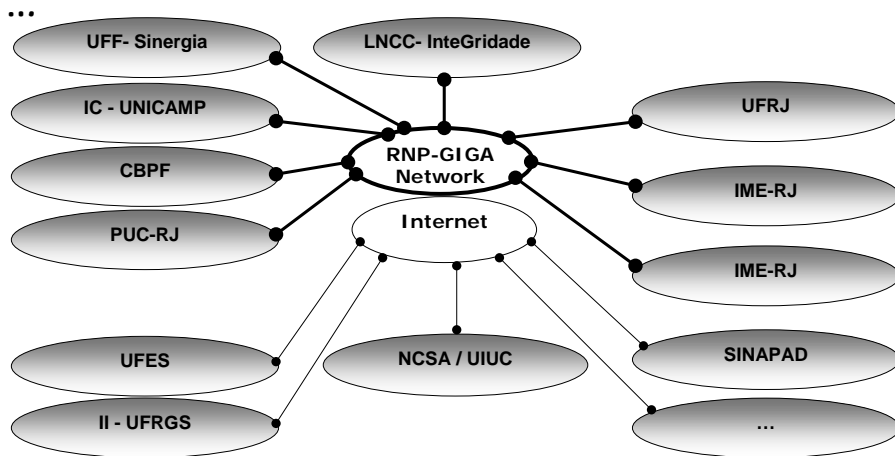


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6

InteGridade + Sinergia + LPS + ACIMA +



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7



SINAPAD

- National System aimed at providing computation on demand to education and scientific purposes

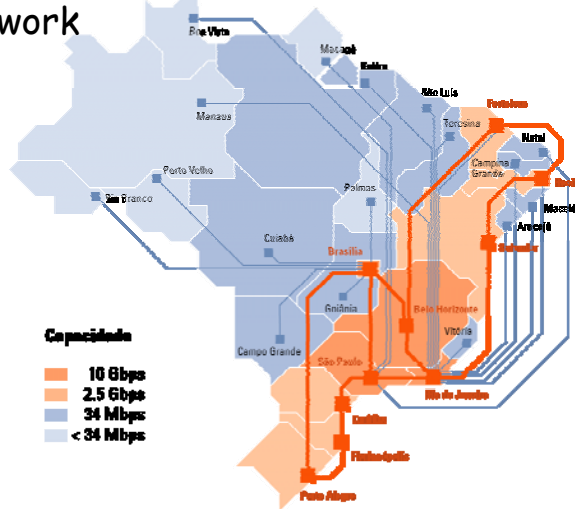
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8



IPÊ Network



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9



Some Application Areas and Projects

- Strong bioinformatics team in the country
- Medical Simulation integrating modeling, grids, haptic devices and training
- Data assimilation, physical oceanography, weather predictability and climate studies
- Dynamics of water in hydrologic basins
- Molecular dynamics (Physics)
- Data Management
- ...

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10



Vol. 2(1), Feb. 2006

- www.ctwatch.org/quarterly/archives/february-2006



Vol. 2(1), Feb. 2006

- www.ctwatch.org/quarterly/archives/february-2006

Vol.16 N.5 2004

- www3.interscience.wiley.com/cgi-bin/jissue/107637997

Vol. 18(6) 2006

- www3.interscience.wiley.com/cgi-bin/jissue/112561663

2006/2007 on selected papers MGC 2005

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11

MGC2006 - 4th Workshop on Middleware for Grid Computing - MGC 2006

In conjunction with ACM/IEEE 7th International Middleware Conference 2006
Melbourne, Australia - November 27 - December 1, 2006

The first MGC workshop held on June 2003, in conjunction with the Middleware Conference, in Rio de Janeiro, Brazil. MGC 2003, 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. Following the workshop, extended and thoroughly revised versions of the papers were invited to a Special Issue of Concurrency and Computation: Practice and Experience Journal (CPE) published in 2004.

The second workshop in the MGC series brought together researchers in the field of middleware for grid computing, addressing topics that emerged from 2003, and some novel ones such as, Strategies and Protocols for obtaining Quality of Services, Visualization, Wireless Grids, Data Grid Middleware, Semantic Grid Middleware, Dependability and Fault Tolerance in Grid Middleware and Managing Information. The second workshop received an unprecedented number of quality submissions. Fifteen full papers and nine posters were chosen for the workshop proceedings out of the forty eight papers originally submitted. The presenters highlighted issues and solutions in one or more of the themes identified for the workshop. Following the second workshop, thoroughly revised selected papers were invited to a Special Issue of CPE Journal - Vol. 18(6), 2006. MGC 2004 was held in October, in Toronto, Canada.

The goal of the third edition of the MGC workshop was to bring together researchers in the field of middleware, addressing large-scale and real world problems in grid environments, including the most interesting and stimulating topics emerged previous year, and some novel ones 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 Managing Information. The third workshop received a good number of high-quality submissions and sixteen papers were selected for these proceedings out of the thirty-eight originally submitted, and four have been invited for posters. The presenters highlight issues and solutions in one or more of the themes identified for the workshop. A set of selected papers had authors invited to submit an extended version to be considered for another Special Issue of CPE Journal, and are currently being MGC 2004.5 held in November, in Grenoble, France.

MGC 2003, 2004, and 2005, generated substantial interest in the community and it is anticipated that this interest will continue. Far from exhausting the topics of interest, they have paved the way for a third edition of the workshop in the series.

In MGC 2006 workshop researchers from the various GRID middleware communities are encouraged to submit and present original work to be considered for publication.

Submission Deadline: 14 August 06

2 May 06

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12

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CCGrid Symposium Roadmap: Past, planned and proposed events

CCGrid 2005 Cardiff, UK
CCGrid 2002 Berlin, Germany
CCGrid 2003 Tokyo, Japan
CCGrid 2004 Chicago, USA
CCGrid 2008 Lyon, France
CCGrid 2009 Shanghai, China
CCGrid 2006 Singapore
CCGrid 2007 Rio, Brazil
CCGrid 2001 Brisbane, Australia
CCGrid 2010 Melbourne?

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http://www.ieeetcsc.org/conferences.html

Technical Committee on Scalable Computing

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TCSC-Sponsored Conferences

- **CCGrid 2006:** 6th IEEE International Symposium on Cluster Computing and the Grid May 16-19, 2006, Singapore
- **HPDC 2006:** 15th IEEE International Symposium on High Performance Distributed Computing, June 19-23, 2006, Paris, France
- **Cluster 2006:** 8th IEEE International Conference on Cluster Computing September 25-27, 2006, Barcelona, Spain
- **Grid 2006:** 7th IEEE International Conference on Grid Computing September 28-29, 2006, Barcelona, Spain
- **SC 2006:** IEEE/ACM Supercomputing Conference November 12-18, 2006, Tampa, Florida, USA
- **e-Science 2006:** 2nd IEEE International Conference on e-Science and Grid Computing Dec. 4-6, 2006, Amsterdam, Netherlands

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2 May 06 14

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7th IEEE International Symposium on Cluster Computing and the Grid

14-17, May 2007, Rio de Janeiro - Brazil



CCGrid 07









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CCGrid 2007 - Rio de Janeiro - Brasil - Mozilla Firefox

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http://ccgrid07.incc.br/

Getting Started Latest Headlines

Dr. Rajkumar Buyya's Internet Home! The Telegraph - Calcutta : Careergraph CCGrid 2007 - Rio de Janeiro - Brasil



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Rio de Janeiro - Brazil / May 14-17, 2007

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CCGrid 2007 Home

CCGrid 2007 is the seventh in a series of successful international symposia and for the first time will take place in South America – in Rio de Janeiro, Brazil. Grid Computing started as a generalization of Cluster Computing, promising to deliver unprecedented levels of parallelism to high-performance applications by crossing administrative boundaries. Subsequently, this vision evolved to support on-demand access and composition of any computational service, provided by multiple independent sources. Under this new vision, clusters gained renewed importance as the “super-servers” of the emerging Grid infrastructure. Meanwhile, the use of computational and data resources in high-performance applications, undertaken over Grid infrastructure, have started to now become a reality. Today we face the huge challenge of making on-demand access to any computational service, the “computing as service” vision, a wide-spread reality. The CCGrid Symposium has been part of this journey, bringing together researchers and practitioners and enabling them to share their insight, results, and experience in the multi-faceted areas of Grid and Cluster computing. The areas of interest include, but are not limited to, the following:

2 May 06

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16



CCGrid07: Scope

- *CCGrid 2007 will be the seventh in a series of successful international symposia and for the first time will take place in South America - in Rio de Janeiro, Brazil. Grid Computing started as a generalization of Cluster Computing, promising to deliver unprecedented levels of parallelism to high-performance applications by crossing administrative boundaries. Subsequently, this vision evolved to support on-demand access and composition of any computational service, provided by multiple independent sources. Under this new vision, Clusters gained renewed importance as the "super-servers" of the emerging Grid infrastructure. Meanwhile, the use of computational and data resources in high-performance applications, undertaken over Grid infrastructure, have started to now become a reality. Today we face the huge challenge of making on-demand access to any computational service, the "computing as service" vision, a wide-spread reality. The CCGrid Symposia has been part of this journey, bringing together researchers and practitioners and enabling them to share their insight, results, and experience in the multi-faceted areas of Grid and Cluster computing.*

2 May 06

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17



CCGrid07: Some Topics

- Grid Architectures and Systems
- Middleware for Clusters and Grids
- Resource Management
- Peer-to-Peer Systems
- Grid-based Problem Solving Environments
- Grid Trust and Security
- Community networks
- Scheduling and Load Balancing
- Parallel and Wide-Area File Systems
- Grid Economies and Service Architectures
- Programming Models, Tools, and Environments
- Performance Evaluation and Modeling
- Utility Computing Models for Clusters and Grids
- Service Composition and Orchestration
- Community and collaborative computing networks
- Scientific, Engineering, and Commercial Applications
- Support for Self-Managing/Self-Configuring Grid Infrastructure

2 May 06

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18



CCGrid07: Preliminary Deadlines

- Papers Deadlines
 - Submission : Nov. 15th, 2006
 - Acceptance notification: Jan. 15th, 2007
 - Camera-ready: Jan. 29th, 2007
- Tutorials
 - Submission : Nov. 15th, 2006
 - Acceptance notification: Dec. 15th, 2007
- Workshops
 - New proposals: TBD
 - Papers submission : Dec. 1st, 2006
 - Acceptance notification: Jan. 15th, 2007
 - Camera-ready: Jan. 29th, 2007

2 May 06

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19



Thanks!

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