IV WCGA
Grid Computing and Applications

Welcome

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background

- WCGA
  - since 2003 at LNCC
  - in colaboration 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 projets in the context of RNP Gigabit experimental network
- CTWatch, International Cyberinfrastructure: Activities Around the Globe, Vol. 2(1), Feb. 2006

Engagements in Cyberenvironments

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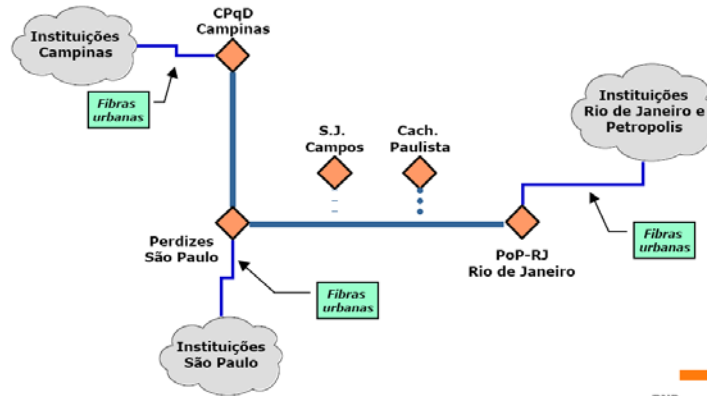- **Targeting Universities and Research Centers**

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GIGA Network

5o. WRNP2 - Projeto IP da Rede GIGA

InteGridade + Sinergia

Support
RNP
FINEP
FUNTTEL
PCI-LNCC

Length:
~700 Km
upto 10 Gbps

IC/UFF- Sinergia

LNCC- InteGridade

IC - UNICAMP

CBPF

PUC-RJ

RNP-GIGA Network

Internet

UFES

NCSA / UIUC

II - UFRGS

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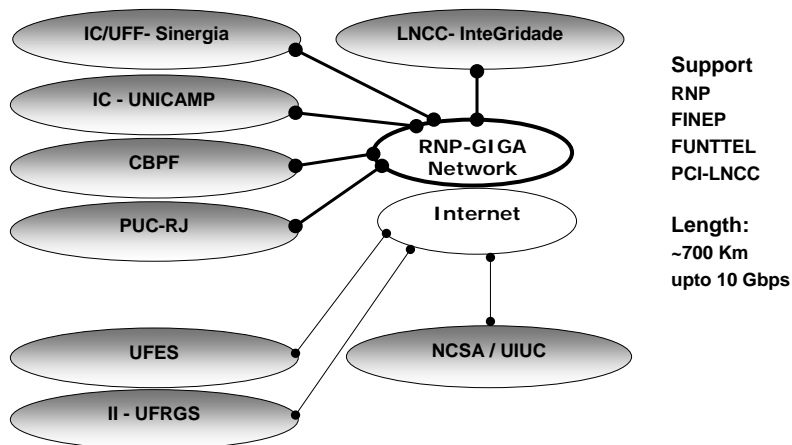
InteGridade + Sinergia + LPS + ACIMA + ...

Diagram showing institutions connected to RNP-GIGA Network and Internet:

- UFF- Sinergia
- LNCC- InteGridade
- IC - UNICAMP
- UFRJ
- CBPF
- **RNP-GIGA Network**
- IME-RJ
- PUC-RJ
- **Internet**
- IME-RJ
- UFES
- NCSA / UIUC
- SINAPAD
- II - UFRGS
- ...
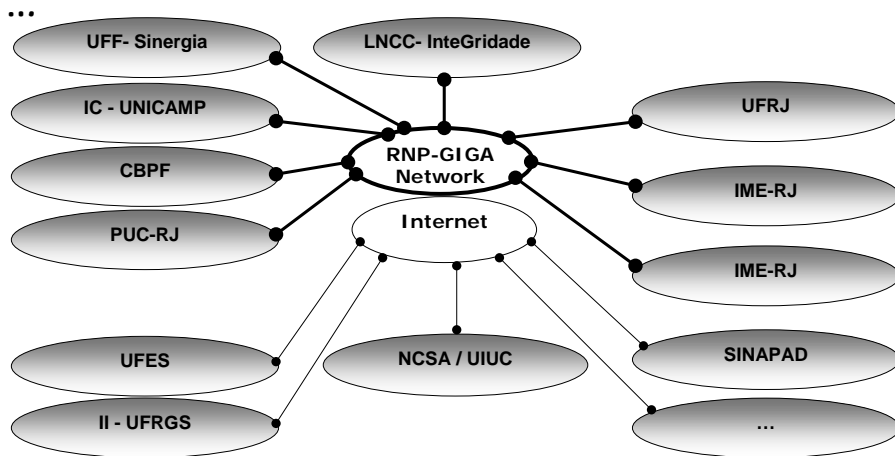
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SINAPAD

- National System aimed at providing computation on demand to education and scientific purposes
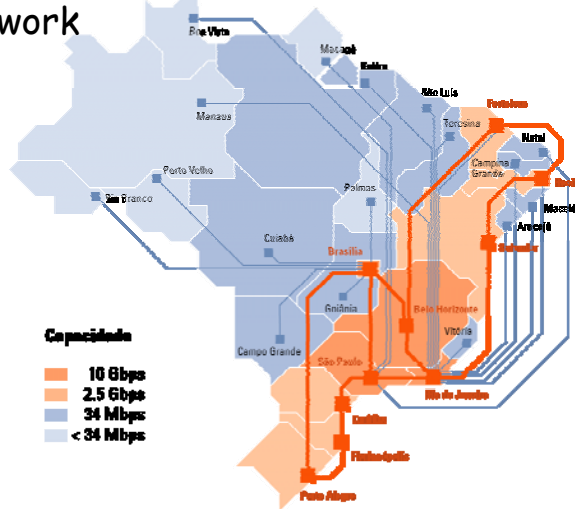
1	LACAD-UFC
2	CENAPAD-MG/CO
3	CENAPAD-RJ
4	NACAD-UFRJ
5	CPTEC
6	CENAPAD-SP
7	CESUP-UFRGS

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IPÊ Network

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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Laboratório Nacional de Computação Científica

Ciência e Tecnologia — Ministério da Ciência e Tecnologia

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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Ciência e Tecnologia — Ministério da Ciência e Tecnologia

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

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

Submission Deadline: 14 August 06

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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 2008
Lyon, France

CCGrid 2004
Chicago, USA

CCGrid 2009
Shanghai, China

CCGrid 2006
Singapore

CCGrid 2001
Brisbane, Australia

CCGrid 2007
Rio, Brazil

CCGrid 2010
Melbourne?

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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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- **Request new password**

Navigation

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7th IEEE International Symposium on
Cluster Computing and the Grid
14-17, May 2007, Rio de Janeiro - Brazil

CCGrid 07

*IV Workshop on Grid Computing
and Applications -WCGA 2006*

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 unprecedent 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.

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

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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

Thanks!

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