RISC: A network for Supporting the Coordination of Supercomputing Research Between Europe and Latin America

Description

The RISC project aimed to deepen strategic R&D cooperation between Europe (EU) and Latin America (LA) in the field of High Performance Computing (HPC) by building a multinational and multi-stakeholder community that involved a significant representation of the relevant HPC R&D EU and LA actors (researchers, policy makers, users). RISC identified common needs, research issues and opportunities for cooperative R&D on HPC between EU and LA in the transition to multi-core architectures across the computing spectrum and relevant programming paradigms, algorithms and modelling approaches, thus setting the basis for the formulation of a global strategy for future research.

The project achieved its overall aim via a range of activities:

1. Assessing the ICT collaboration potential in the High Performance Computing and Computational Science area for the two regions; producing a Green Paper on High Performance Computing Drivers and Needs in Latin America; mapping the LA HPC actors and trends; identifying the opportunities for LA ICT actors in the EU and for EU HPC actors in LA; aligning EU and LA HPC policies and strategies
2. Sharing and disseminating information and results in the focus area of EU HPC to a number of research, policy and practice actors dealing with technology applications in the LA region; making available existing Latin American HPC research to EU research, policy and practice actors
3. Organising awareness-raising events about the EC's ICT R&D programmes, in particular those ones relevant to HPC and exascale computing for LA HPC actors. Organising Summer Schools and Advanced Workshops between EU and LA ICT actors to inform and initiate research collaborations between them. Networking, capacity building and training components of these events will enhance the impact
4. Actively engaging the relevant industry by focusing on industrial problems and problems with impact for the society. Providing advanced support services to a selected number of competent Latin American ICT actors to build long-term relationships with key EU counterparts. The target areas are: Innovation and HPC and its impact, Mathematical Models enhancing HPC and key areas such as Life Sciences, Climate Change, Financial Modelling etc with the corresponding research clusters concentrated around these areas
5. Extending HPC with links and relationships with complementary technology and tools in the areas of virtualization, data visualization, data analysis and simulation, aligned with industrial-driven application fields, creating a value chain for final users and practitioners.
6. Enhancing HPC R&D policy dialogue between policy makers and stakeholders from EU and Latin American HPC communities; develop a Road Map towards a Joint Strategy in HPC R&D. At the end of the project we expect a fully functioning network focusing on activities to support and to promote coordination of the HPC and Computational Science research between EU and LA.

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