PRACE

PRACE is a pan-European supercomputing infrastructure, providing access to computing and data management resources and services for large-scale scientific and engineering applications at the highest performance level.

Summary

PRACE Mission

The mission of PRACE (Partnership for Advanced Computing in Europe) is to enable high impact scientific discovery and engineering research and development across all disciplines to enhance European competitiveness for the benefit of society. PRACE seeks to realize this mission by offering world class computing and data management resources and services through a peer review process.

PRACE also seeks to strengthen the European users of HPC in industry through various initiatives. PRACE has a strong interest in improving energy efficiency of computing systems and reducing their environmental impact.

PRACE Research Infrastructure (RI)

PRACE is established as an international not-for-profit association (aisbl) with seat in Brussels. It has 25 member countries (October 2012, see here) whose representative organizations create a pan-European

supercomputing infrastructure, providing access to computing and data management resources and services for large-scale scientific and engineering applications at the highest performance level. To find out more about the PRACE organisation go here

The computer systems and their operations accessible through PRACE are provided by 4 PRACE members (BSC representing Spain, CINECA representing Italy, GCS representing Germany and GENCI representing France) who committed a total funding of €400 million for the initial PRACE systems and operations. In pace with the needs of the scientific communities and technical developments, systems deployed by PRACE are continuously updated and upgraded to be at the apex of HPC technology. To find out more about these systems, go here

The PRACE project partners receive EC funding under the PRACE Preparatory and Implementation Phase Projects (PRACE-1IP, 2010-2012, RI-261557, PRACE-2IP, 2011-2013, RI-283493, PRACE-3IP, 2012-2014, RI-312763, PRACE-4IP, 2015-2017, 653838) for a total of €82 million complemented by the consortium budget of over €60 million. All information about the PRACE projects is publishedhere

PRACE HPC Access

PRACE systems are available to scientists and researchers from academia and industry from around the world through 2 forms of access:

- **Preparatory Access** is intended for short-term access to resources, for code-enabling and porting, required to prepare proposals for Project Access and to demonstrate the scalability of codes. Applications for Preparatory Access are accepted at any time, with a cut-off date every 3 months.

- **Project Access** is intended for individual researchers and research groups including multi-national research groups and can be used for 1-year production runs, as well as for 2-year or 3-year (**Multi-Year Access**) production runs.
  Programmatic Access is a Project Access pilot in 2014 (10th Call). It is intended to ensure a stable and reliable minimum access to the necessary computational resources for large-scale, long term projects of very high scientific quality and with a broad European scope, importance and relevance.

Project Access is subject to the PRACE Peer Review Process, which includes technical and scientific review. Technical experts and leading scientists evaluate the proposals submitted in response to the bi-annual calls. Applications for Preparatory Access undergo technical review only.

For more information on how to apply for access to PRACE resources, go here

PRACE Education & Training

PRACE has an extensive education and training effort for effective use of the RI through seasonal schools, workshops and scientific and industrial seminars throughout Europe. Seasonal Schools target broad HPC audiences, whereas workshops are focused on particular technologies, tools or disciplines or research areas. Education and training material and documents related to the RI are available on the PRACE website: wwww.training.prace-ri.eu

Objectives

The mission of PRACE (Partnership for Advanced Computing in Europe) is to enable high impact scientific discovery and engineering research and development across all disciplines to enhance European competitiveness for the benefit of society. PRACE seeks to realize this mission by offering world class computing and data management resources and services through a peer review process.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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