

PARTNERSHIP
FOR ADVANCED COMPUTING
IN EUROPE



PRACE SERVICES and ACCESS to RESOURCES

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PRACE SERVICES

- ❖ **Preparatory Access** – scalability testing and code development and optimisation
- ❖ **Petascale production systems** – production runs of high impact scientific projects in petascale high performance computers of different architectures hosted at various PRACE partner sites

Types of Access

- ❖ **Preparatory access** – application all year round, technical review;
 - code scalability testing and optimisation, maximum allocation 2 months;
 - code development and optimisation by the applicant using their own resources (no PRACE support), maximum allocation 6 months;
 - code development and optimisation with support from PRACE-1IP experts, maximum allocation 6 months
- ❖ **Project access** – 2 calls per year, 1 year allocation, technical and scientific review
- ❖ **Programme access** – large projects of a research group, 2 years allocation, technical and scientific review

Remark: Final report mandatory for all types of proposals

PRACE HPC access – Petascale systems

Supported by a single European peer review process

Peer review principles

- ❖ Transparency
- ❖ Expert assessment
- ❖ Confidentiality
- ❖ Right to reply (reviewers comments and final decision appeal)
- ❖ Prioritisation
- ❖ Managing interests
- ❖ No parallel assessment
- ❖ Ensure fairness to the science proposed

Application

- ❖ Fully on-line application form
- ❖ Applicants can build up their application on-line before final submission. Possibility of un-submitting and submitting again - only submitted proposals are put forward to peer review.

Assessment

- ❖ Technical and scientific assessment by experts
- ❖ Applicants have the right to reply to the experts' reports
- ❖ Prioritisation of proposals by Prioritisation Panel

Allocation

- ❖ Allocation according to Prioritisation list
- ❖ Quality cut-off in prioritisation list
- ❖ Publication of abstracts of supported projects at PRACE website, except in case of justified confidential issues
- ❖ Applicants must submit a report at the end of the project (mandatory)

<http://www.prace-ri.eu/hpc-access> including guidelines for applicants

PRACE Early Access Call

- ❖ Opening date : 10th May 2010
- ❖ Closing date : 10th June 2010
- ❖ Start date : 1st August or 1st December 2010
- ❖ Allocation period : 4 months
- ❖ Type of access: Project (1 proposal) or Preparatory + Project (combined - 2 linked proposals)
- ❖ Machine(s) available: JUGENE BlueGene/P (Jülich, Germany)
- ❖ Information: <http://www.prace-project.eu/hpc-access>

PRACE Early Access Call – supported projects

- ❖ 10 projects – project leaders from Germany – 5, Italy – 1, Portugal – 1, The Netherlands – 1, UK – 2
- ❖ Research fields: Astrophysics (2), Chemistry & Materials, Earth Sciences & Environment, Engineering & Energy (2), Fundamental Physics (2), Mathematics & Computer Science, Medicine & Life Sciences
- ❖ 31 research organisations from 12 countries
- ❖ 324 million core-hours awarded
- ❖ 2 billion core-hours requested
- ❖ Information: <http://www.prace-project.eu/hpc-access>

1st PRACE Regular Call

- ❖ Opening date : 15th June 2010
- ❖ Closing date : 15th August 2010
- ❖ Start date : 1st November 2010
- ❖ Allocation period : 1 year
- ❖ Type of access: Project
- ❖ Machine(s) available: JUGENE BlueGene/P (Jülich, Germany)
- ❖ Information: <http://www.prace-project.eu/hpc-access>

PRACE 1st Regular Call – supported projects

- ❖ 9 projects – project leaders from France – 1, Germany – 2, Hungary – 1, Portugal – 1, Spain – 2, The Netherlands – 1, UK – 1
- ❖ Research fields: Chemistry & Materials, Engineering & Energy (4), Fundamental Physics (3), Medicine & Life Sciences
- ❖ 16 research organisations from 8 countries
- ❖ 362 million core-hours awarded
- ❖ 2.9 billion core-hours requested
- ❖ Information: <http://www.prace-project.eu/hpc-access>

2nd PRACE Regular Call

- ❖ Opening date : 1st November 2010
- ❖ Closing date : 11th January 2011
- ❖ Start date : 1st May 2011
- ❖ Allocation period : 1 year
- ❖ Type of access: Project
- ❖ Machine(s) available: JUGENE BlueGene/P (Germany) and CURIE Bull Bullx Cluster (France)
- ❖ Information: <http://www.prace-project.eu/hpc-access>

Preparatory Access Call

- ❖ Opening date : 8th November 2010
- ❖ Closing date : all year round
- ❖ Start date : 15 December?
- ❖ Allocation period : scalability testing – max 2 months, code development – max 6 months
- ❖ Machine(s) available: JUGENE BlueGene/P (Germany) and CURIE Bull Bullx Cluster (France) after 1st January 2011

Machines available

❖ **JUGENE IBM BlueGene/P**
GSC at FZJ, Jülich, Germany
since July 2010



❖ **CURIE Bull Bullx Cluster**
GENCI at CEA,
Bruyères-le-Châtel, France
available on 1st January 2011



Summary

- ❖ PRACE HPC access – preparatory access and petascale access
- ❖ Overview of PRACE calls and supported projects
- ❖ Overview of open PRACE calls
- ❖ PRACE systems available