

JSCNews

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PRACE: Ready for Implementation

PRACE, the Partnership for Advanced Computing in Europe, has reached several important milestones towards the implementation of the permanent HPC Research Infrastructure, consisting of several world-class top-tier centres managed as a single European entity. The project has prepared signature-ready statutes and other documents required to create a legal entity. In the next few months, this legal entity will be established as a Portuguese association with its seat in Lisbon. Germany, France, Italy, and Spain have each committed to providing PRACE with supercomputing resources worth at least € 100 million over the next 5 years. The Netherlands and the UK are expected to follow suit. Access to PRACE resources will be governed by a single European peer review system.

In October 2009 PRACE demonstrated its major achievements to a panel of external experts and the European Commission. The panel certified that the project had made "satisfactory progress in all areas" and "that PRACE has the potential to have real impact on the future of European HPC, and the quality and outcome of European research that depends on HPC services". As a result, the PRACE project met the eligibility criteria to apply for a grant of € 20 million for the implementation phase of the PRACE Research Infrastructure in November 2009. Germany will be represented by the Gauss Centre for Su-

percomputing both in the legal entity and the project. The project partners also requested Forschungszentrum Jülich to coordinate the Implementation Phase project and to continue the very successful management provided by JSC's project management office.

(Contact: Dr. Thomas Eickermann, ext. 6596).

Blue Gene/P Scaling Workshop 2010

Encouraged by the very successful workshop last October, JSC has announced the fourth "Blue Gene/P Extreme Scaling Workshop", which will take place at JSC from 22 to 24 March 2010. The purpose of the workshop is to give application teams an opportunity to scale their code across the full Blue Gene/P system JUGENE, which consists of 72 racks with a total of 294,912 cores – the highest number of cores worldwide. Appropriate hardware, software and support personnel will be provided to assist participants.

Workshop participants will be selected on the basis of written proposals, which must be submitted before 30 January 2010. Participation is limited to eight application teams. Selection criteria are: a high level of confidence that the code will scale across 294,912 cores (or at least a large portion of them); the JUGENE infrastructure (OS, compilers, libraries) supports user requirements; and the scientific impact that the code could produce.

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To apply for the workshop, send a short proposal (about two pages including scaling plot/table) by email to sc@fz-juelich.de. The proposal should contain a description of the application to be scaled, scaling plots, showing a good scaling of at least up to 64k tasks, code requirements (e.g. special libraries, compiler versions, I/O needs, and other requirements beyond a "standard" BlueGene/IBM setup), contact data and references. If accepted, we expect that at least one team member will register and attend the workshop. More information can be found at:

<http://www.fz-juelich.de/jsc/bg-ws10>

(Contact: SC support, ext. 2828)

NIC Symposium 2010

The 5th NIC Symposium will be held at Forschungszentrum Jülich from 24 - 25 February 2010. The talks will inform a broad audience of scientists and interested members of the public about the activities and results obtained in the last two years by research groups supported through the John von Neumann Institute for Computing (NIC). Fifteen invited talks and a poster session will cover topics in the fields of astrophysics, biophysics, chemistry, elementary particle physics, condensed matter, materials science, soft matter science, environmental research, hydrodynamics and turbulence, plasma physics, and computer science.

To accompany the conference, a comprehensive proceedings volume will also be published and copies made available to the participants. It will cover an even wider range of projects that have used the supercomputers JUMP, JUROPA, and JUGENE in Jülich, and the APE topical computer at DESY in Zeuthen than discussed in the talks.

The detailed programme and the registration form are available at: <http://www.fz-juelich.de/nic/symposium>.

(Contact: Dr. Walter Nadler, ext. 2324)

DEISA Extreme Computing Initiative – Call for Proposals 2010

The DEISA Extreme Computing Initiative (DECI) offers European researchers the opportunity to obtain access to the most powerful national computing resources in Europe, regardless of their country of origin or work. The new DECI-6 call is now open and proposals can be submitted until 16 February 2010. Proposed projects should deal with complex, demanding and innovative simulations that would not be possible without the DEISA infrastructure and which will benefit from the exceptional resources of the consortium. The following applications profiles are particularly suited to DECI:

- Large, highly scalable parallel applications requiring exceptional computational resources

- Data-intensive applications requiring access to distributed data repositories
- Workflow simulations managing simulation chains that access more than one computing platform
- Distributed applications that need to run on more than one platform (excluding metacomputing)

DEISA offers projects supported by DECI applications-enabling assistance from experts at the leading European HPC centres to port and run the applications on the appropriate platforms of the DEISA consortium. Projects selected under this call will be given access to the DEISA infrastructure for applications enabling from 1 July 2010 and for production runs from 1 October 2010 to 30 April 2011. For more information, please see

www.deisa.eu/science/decideci-call-for-proposals2010.

(Contact: Dr. Florian Janetzko, deisa-support@fz-juelich.de, ext. 1446).

New Sections in IAS

In 2008, the Institute for Advanced Simulation (IAS) was founded at Forschungszentrum Jülich with JSC as its first section. With effect from 1 January 2010, four additional sections were officially integrated into IAS. They are:

- IAS-1: Quantum Theory of Materials, acting head Prof. Blügel
- IAS-2: Theoretical Soft Matter and Biophysics, acting head Prof. Gompper
- IAS-3: Theory of Structure Formation, acting head Prof. Müller-Krumbhaar
- IAS-4: Theory of Strong Interactions, acting head Prof. Meißner

Thus, IAS unites simulation sciences and supercomputing under one roof and combines disciplinary, methodological and technological competences to meet the future challenges. The first joint activities started last year with several IAS seminars and the new publication series "IAS Series". JSC welcomes the new colleagues and looks forward to close collaboration.

Events

NIC Symposium 2010

Date: 24 - 25 February 2010

Venue: Auditorium, Forschungszentrum Jülich

Info: <http://www.fz-juelich.de/nic/symposium/>

Jülich Blue Gene/P Extreme Scaling Workshop

Date: 22 - 24 March 2010

Venue: Ausbildungsraum3, JSC

Registration: <http://www.fz-juelich.de/jsc/bg-ws10/>

If you would like to receive regular information on our events, please send an e-mail to jsc-events-join@fz-juelich.de.

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