

JSCNews

Jülich
Supercomputing
Centre

JUGENE Officially Unveiled

On 22 February 2008, the supercomputer IBM Blue Gene/P JUGENE was officially unveiled at Research Centre Jülich. More than 250 guests attended the inauguration ceremony which found its highlight in the go-ahead given by Prime Minister Dr. Jürgen Rüttgers together with State Secretary Thomas Rachel.

Prof. Bachem, Chairman of the Board of Directors of Research Centre Jülich, gave the welcoming address. "Science and industry need computing power of the highest quality", said Bachem. "With JUGENE, we have now set another milestone in Jülich for cutting-edge research. Supercomputer simulations have become a key technology. They function as virtual microscopes and telescopes and enhance our understanding in the subatomic region and in the universe, respectively."

North-Rhine Westphalia's Prime Minister Rüttgers could not conceal his pride. "Jülich not only operates the fastest civil supercomputer", he said approvingly, "but it also offers a network of education opportunities and top research in the simulation sciences. There is a vigorous, multifaceted research and technology landscape in this area that makes North-Rhine Westphalia the number one in innovation."

Thomas Rachel, State Secretary of the Federal Ministry of Education and Research, explained the significance of the new supercomputer for Germany: "With JUGENE, the German position within Europe has been strengthened. The German Gauss Centre for Supercomputing will take

on a leading role in establishing a European supercomputing centre".

Prof. Thomas Lippert, Director of the Jülich Supercomputing Centre, pointed out how supercomputer users can benefit from the dedicated topic-specific support in Jülich. "JSC's staff do not just ensure that JUGENE is ready for use; they also provide expertise on all aspects of the simulation sciences. In simulation laboratories, for example, scientific simulation know-how is provided for the topics of plasma physics, biology, earth system science and the nanosciences."

In a short discussion, representatives of IBM, Intel and EADS took a look at the importance of supercomputing from industry's point of view. Video clips on hardware, applications, users, and project partners in science and industry livened up the discussions and interviews. These presentations, photos, and a video recording of the event can be viewed at:

<http://www.fz-juelich.de/pm-jugene>.

CeBIT Activities

For the second time since 2006, the Jülich Supercomputing Centre participated in the CeBIT trade fair. Research Centre Jülich was invited to demonstrate the importance of high-end scientific computations at IBM's exhibition booth. Using presentations and simulation clips on large-sized monitors, colleagues from JSC, NIC and Corporate Communications showed politicians, journalists and visitors from the general public the contribution made by the simulation sciences to current and future research.

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CeBIT provided a unique opportunity to familiarize a specialized public with the opportunities and importance of high-performance computing. During Chancellor Angela Merkel's visit to the booth, CEO of IBM Germany Martin Jetter informed her of the significance of JUGENE for Germany.

CECAM Tutorial 2008

Twenty scientists from several European and non-European countries attended this year's CECAM tutorial entitled "Programming Parallel Computers" at the Jülich Supercomputing Centre. This was the third tutorial of its kind held in Jülich and is part of the educational programme offered by the Centre Européen de Calcul Atomique et Moléculaire (CECAM). From 11 to 15 February 2008, the participants learned about aspects of parallel programming with MPI and OpenMP. JSC experts were responsible for the mixed programme of lectures and hands-on exercises, which continued the success of the preceding tutorials in 2006 and 2007 and established the tutorial in CECAM's educational programme.

Blue Gene/P Porting, Tuning and Scaling Workshop

The Jülich Supercomputing Centre, IBM, and the Blue Gene Consortium would like to invite interested users to participate in the 2008 Jülich Blue Gene/P Porting, Tuning, and Scaling Workshop which will take place from 22 to 24 April 2008. IBM technical staff and JSC experts will provide first-hand knowledge on how to port applications to the Blue Gene/P system and how to scale existing Blue Gene/L codes to the new full 16-rack system. Participation is free, but registration is required. For more details see: <http://www.fz-juelich.de/jsc/bg-ws08/>.

Guest Student Programme 2008

During summer 2008, JSC/NIC will offer its traditional guest student programme once more. Within this programme students from the natural sciences, engineering, computer science and mathematics are offered the opportunity to familiarize themselves with various aspects of scientific computing and computational science. Supervised by JSC/NIC scientists, the participants will work on current research activities. Depending on the participants' previous knowledge and their interests, the assignments will be chosen from a range of disciplines including mathematics, physics, chemistry, software development tools, visualization, operating systems and communication systems. Special emphasis will be placed on the use of highly parallel supercomputers.

Candidates are expected to have prior knowledge of and experience in the computer-oriented branches of their subjects. Preference will be given to students who have either

passed their "Vordiplom" or those who have a bachelor degree, but have not yet been awarded their diploma or master degree. In addition, a letter of recommendation from a university lecturer or professor is required. The programme lasts ten weeks, from 4 August to 10 October 2008. Students should apply for the programme in writing. The closing date for applications is 30 April 2008. Further information can be found online at:

<http://www.fz-juelich.de/jsc/gaststudenten/>.
(Contact: Matthias Bolten, ext. 8715)

DEISA Symposium 2008

The DEISA Symposium, the annual conference for partners in the DEISA project, will take place in Edinburgh from 28 to 29 April 2008. Its purpose is to provide a forum where scientists from around the world can discuss HPC e-Infrastructures and where DEISA users can share their experiences and results.

The first day of the symposium will feature talks from key players in the field of HPC e-Infrastructures including DEISA and PRACE. The second day will include talks from major DEISA users reporting on their experience with the DEISA infrastructure and on their scientific results. Please visit <http://www.deisa.eu/symposium> for more details. Registration is free and closes on Monday 21 April.

Accounting on JUGENE

The billing units for the new supercomputer JUGENE have been established. From 1 February, one CPU-hour will be considered equivalent to 0.023 billing units. Detailed information on cost calculation can be found in the short technical information TKI-0015.
(Contact: Stefanie Meier, ext. 1502)

New Publications

NIC Series No. 39: NIC Symposium 2008 - Proceedings

Publications are available online at:
<http://www.fz-juelich.de/jsc/docs/>.

Events

BlueGene/P Porting, Tuning, and Scaling Workshop

Date: 22 - 24 April 2008

Venue: Jülich Supercomputing Centre

Registration: <http://www.fz-juelich.de/jsc/bg-ws08/>

DEISA Symposium

Date: 28 - 29 April 2008

Venue: Our Dynamic Earth, Edinburgh

Programme: <http://www.deisa.org/symposium/>

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