

PRACE: Results of the 7th Regular Call

The Partnership for Advanced Computing in Europe (PRACE) is continuously offering supercomputing resources on the highest level (tier-0) to European researchers.

The Gauss Centre for Supercomputing (GCS) is currently dedicating shares of its IBM iDataPlex system SuperMUC in Garching, of its Cray XE6 system Hermit in Stuttgart, and of its IBM Blue Gene/Q system JUQUEEN in Jülich. France, Italy, and Spain are dedicating shares on their systems CURIE, hosted by GENCI at CEA-TGCC in Bruyères-Le-Châtel, FERMI, hosted by CINECA in Casalecchio di Reno, and MareNostrum, hosted by BSC in Barcelona.

The 7th call for proposals for computing time for the allocation time period September 3, 2013 to September 2, 2014 on the above systems closed March 26, 2013. Five research projects have been awarded a total of about 178 million compute core hours on

SuperMUC and six have been awarded a total of about 120 million compute core hours on Hermit. On JUQUEEN, three proposals have been awarded a total of about 52 million compute core hours, while 48 million compute core hours were given to already approved long-term projects from previous calls.

Four of the newly awarded research projects are from France, two are from Germany, Italy, and Switzerland, each, and one is from Finland, Ireland, the Netherlands, and the United Kingdom, each. The research projects awarded computing time cover again many scientific areas, from Astrophysics to Medicine and Life Sciences. More details, also on the projects granted access to the machines in France, Italy, and Spain, can be found via the PRACE web page www.prace-ri.eu/PRACE-7th-Regular-Call.

The 8th call for proposals for the allocation time period from March 4, 2014 to March 3, 2015 closed on October 15, 2013 and evaluation is still under way, as of this writing. The 9th call for proposals will open in February 2014.

Details on calls can be found on www.prace-ri.eu/Call-Announcements.

• Walter Nadler

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PRACE Projects meet in Varna

Over 100 researchers from the three PRACE Implementation Phase projects convened for their annual all-hands meeting in Varna, Bulgaria, from 3 to 5 June 2013. These meetings are a unique opportunity to inform the participants in the projects about the current status and achievements of PRACE, coordinate and synchronize the work between the work packages, and plan the steps for the coming year.

Starting in 2010 the European Commission supported the implementation of the PRACE Research Infrastructure with a total of 57 million Euro. The grants were awarded to three individual, partly overlapping projects. Although the

overall objective for all three is supporting the accelerated implementation of the pan-European high-end computing Research Infrastructure created and operated by PRACE, each of them has a specific focus.

Careful planning coordination is essential to avoid duplication of work in the 29 work packages and among the nearly 400 collaborators from 25 countries especially if the descriptions sound similar like dissemination, training, operations, or application support. Each of the three projects has to cover these areas and does so addressing complementary aspects or taking over after completion of a predecessor project.



Participants of the PRACE All-hands meeting in Varna, Bulgaria.

A key element to achieve this is the fact that Jülich Supercomputing Centre is the coordinator of all three PRACE projects.

On Monday, June 3, highlights of PRACE-1IP were presented. This provided a comprehensive overview of the results achieved in the first project's years setting the stage for the follow-on projects PRACE-2IP and PRACE-3IP. The majority of the work was completed in 2012 and approved by the European Commission. Until the end of 2013 the evaluation of prototypes for multi-petascale technology and the porting of applications to the emerging Intel MIC technology will complete the work.

Prof. Thomas Lippert, coordinator of the project, stressed that the project has been an indispensable step for the implementation of the PRACE Research Infrastructure. Among its many achievements, he highlighted in particular the initiation and support for the update of the Scientific Case for HPC in Europe that supports the efforts of PRACE Research Infrastructure to maintain HPC as a high-priority item on the political agenda in Europe.

The remaining two days were dedicated to in-depth discussions of the future work of the PRACE-2IP and PRACE-3IP projects within the individual work package and between related work packages. The largest part of the work of PRACE-2IP will end in August; therefore, an important topic was the hand-over to PRACE-3IP of ongoing activities such as application enabling support, operation of the six PRACE Advanced Training Centres (PATC), operation of the distributed HPC infrastructure, and the Distributed European Computing

Initiative (DECI) calls, which provide access to national HPC resources (Tier-1). The final arrangements for ISC'13 in Leipzig were made. This included the PRACE booth at the exhibition, the 'Dare to think the Impossible' outreach campaign to be launched at ISC'13 and the PRACE Scientific Conference 2013. Another major element of PRACE-3IP is a joint pre-commercial procurement (PCP) pilot, focusing on whole system design for energy-efficient HPC. The PCP tender will be published in October, and the meeting provided a good opportunity to continue preparing the documents for the related focused EC review.

The PRACE projects are especially grateful to Prof. Stoyan Markov and his team from our Bulgarian partner NCSA, the National Centre for Supercomputing Applications, for organizing this very productive meeting in a secluded hotel on the Black Sea near Varna. The excellent conference facilities provided a satisfying working environment that contributed greatly to the success of this all-hands meeting.

Interview with Prof. Dr.-Ing. Dr. h.c. Dr. h.c. Michael M. Resch

Prof. Resch, you have been elected Chairman of the Board of the Gauss Centre for Supercomputing in March. How do you see the role for the Chairman of GCS?

First of all I feel honoured to be elected Chairman of the Board of GCS which is – we should not forget – the most powerful HPC organization in all of Europe. I follow Prof. Bachem and Prof. Hegering as Chairmen. Both are strong leaders with an outstanding scientific record and career and have given GCS stability and a reputation that is outstanding worldwide. The centres of GCS have been working together successfully for 6 years now and I see it as my duty to build on these achievements.

Basically the role of the Chairman of GCS is twofold. First, the Chairman has to coordinate and communicate internally. GCS is a collaboration of three centres but also has grown its own organization with a strong CEO. As a Chairman it is vital to make sure that the communication between the three centres and the CEO is open and well co-ordinated. We have established an excellent communication over the last years and I see it as my role to guarantee that openness.

Second, the Chairman has to communicate externally. This includes both the communication with German funding agencies and European initiatives like PRACE. On the other hand it is also

important for the Chairman to make sure that GCS is communicating well with its user community. Having established a GCS steering committee – which represents our users – I will work closely with the Chairman of that committee to make sure GCS meets the needs of its users as well as possible.

You mentioned the long term collaboration of GCS – which is now in its seventh year. What are the key success stories of GCS from your point of view?

First and foremost it is a big success that we were able to bring together the three national centres into a single organization. This allows us to communicate both with funding agencies and users in a coherent way. Prior to the foundation of GCS, the three centres were only loosely coordinated, but GCS very much put this into a joint organizational and political framework.

To give an example: In the time before GCS the coordination of procurements and installations had established a certain architectural diversity and some kind of investment and installation timing which was not really coordinated. But with GCS we were able to set up an installation schedule and an architectural variety which now perfectly fits the needs of our user communities. We see further improvements in user project evaluation, user access, training, security, and public relation activities like inside.

- Florian Berberich
- Dietmar Erwin

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