Clouds predicted in Barcelona for annual grid conference

PRESS RELEASE

Barcelona, Wednesday, 23 September 2009

Today at the annual conference of Enabling Grids for E-sciencE (EGEE) – the world's largest grid computing infrastructure for research – two sessions will showcase the latest developments aligning grid and cloud technology.

'Grids' and 'clouds' are two paths open to researchers who want to use distributed computing. While industry has mostly concentrated on exploring so-called cloud resources, academia has primarily invested in grids. This has resulted in some differences in emphasis between the two, driven by the needs of these distinct but related user communities. From these differences – and from the similarities – lessons can be learnt by both communities.

The two sessions at the conference will focus on how cloud computing can potentially offer benefits for the scientific community, including feedback from innovative projects deploying clouds within the grid paradigm. These include the Dutch National Institute for Subatomic Physics, Nikhef, who are using virtual machines at their major grid computing centre, European Organisation for Nuclear Research, CERN, who have created a virtual batch system and the National Institute of Nuclear Physics, INFN, in Italy who are helping to improve job submission to the cloud for EGEE users.

The second half of the session concentrates on the BalticCloud, a pan-national infrastructure experimenting with several distributed computing solutions. Based primarily in Estonia, Lithuania, Latvia and Belarus, BalticCloud works with grid users who already employ multiple computing systems (including various types of grids) for their work. The recently launched Northern European Cloud project will also be presented – this project aims to build competence in using cloud computing technologies for scientific applications, looking at software, end-user interfaces and the added value for today's grid and HPC interfaces. After these case studies, the floor will be opened for a debate about grids and clouds, covering the current trends and opportunities for the future of grids in Europe.

"Grids and clouds are complementary technologies: both aim to make life easier for users and provide service," says David O'Callaghan of Trinity College Dublin. "Clouds can bring another level of flexibility to grids, making it simpler to manage infrastructure and allowing grids to expand on demand. For researchers, there is the potential to scale up applications and analysis seamlessly. Clouds will be a hot topic for many European Grid Initiative participants."

Later in the afternoon the RESERVOIR project will present its early findings on grid and cloud integration. EGEE has worked with RESERVOIR, Resources and Services Virtualization without Barriers, since May of this year, using clouds to support EGEE sites. Clouds help to build-in flexibility, to meet the changing needs of the users – from scaling up services to meet peak loads and improving redundancy, to changing the resources provided to run particular applications. The RESERVOIR cloud infrastructure solution builds on OpenNebula, the widely-used open source toolkit for cloud computing, developed by the Distributed Systems Architecture Research Group at Universidad Complutense de Madrid.

A short video demonstrating RESERVOIR technology can be seen at http://gridtalk-project.blogspot.com/2009/03/open-nebula-for-virtualization-project.html.

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Notes for Editors

EGEE'09 runs from the 21st to the 25th of September 2009, in the Barcelo Sants hotel, Barcelona, Spain. If you are interested in attending or covering the conference please contact EGEE's press and events manager, Neasan O'Neill n.oneill@qmul.ac.uk.

For more information on the project, visit the conference media room at: http://egee09.eu-egee.org/?id=631

If you can't make it to the conference we have many online ways of keeping up-to-date with the proceedings:

EGEE09 Blog - http://gridtalk-project.blogspot.com
EGEE is teaming up with the GridTalk project to bring you live news from the conference on the GridCast blog.

Conference Pictures – http://www.flickr.com
Just search flickr for images tagged egee09 once the conference has begun.

Twitter – http://www.twitter.com/enablinggrids
Others at the conference will be using the #egee hashtag.

About EGEE:

The Enabling Grids for E-sciencE (EGEE) project is co-funded by the European Commission. The project aims to provide researchers, in both academia and industry, with access to major computing resources, independent of their geographic locations.

EGEE's main aims are:

1. To build a secure, reliable and robust grid infrastructure
2. To supply a computing service for many scientific disciplines
3. To attract, engage and support a wide range of users from science and industry, and provide them with extensive technical and training support.

http://www.egee-eu.org

Other Links

1. Dutch National Institute for Nuclear Physics and High Energy Physics http://www.nikhef.nl
2. European Organisation for Nuclear Research http://www.cern.ch
3. National Institute of Nuclear Physics http://www.infn.it
4. BalticCloud http://cloud.balticgrid.eu
5. European Grid Initiative http://web.eu-egi.eu
6. RESERVOIR http://www.reservoir-fp7.eu
7. OpenNebula http://www.opennebula.org