

Inspired

Summer 2010



News from the EGI community

User Community

Applications database is up and running

Looking for grid applications to make the difference?

// page 1

Operations

Central European ROC evolves into NGIs

CE-ROC shut up shop on 31 July, after providing core services in eight European countries for more than six years.

// page 2

Distributed monitoring service is operational

Grid monitoring has become the first fully-distributed operational service to enter production within EGI.

// page 3

Policy

Policy groups have started to meet

Ensuring a sustainable grid infrastructure for European scientists requires collaboration between stakeholders.

// page 4

Events

Upcoming events

// page 4

Technical Forum preview

// page 5

Director's Foreword

Welcome to the first issue of *Inspired*, the EGI-InSPIRE newsletter.

Every quarter over the coming years we will bring you news from our community and report developments as they happen.

We aim to cover all main project areas – policy, technology, user community and operations – in a way that is clear for all partners, not just the experts in the field, but the users who have come to depend on us.

But we need your help! Do let us know of your successes and feel free to send your news tips, ideas and suggestions to the editor.

We would especially like to hear from the scientists who use the infrastructure for their research. Have you recently published results in a journal? Or have you presented findings at a conference? Don't forget to keep us posted.

As always, your feedback is much appreciated.

I look forward to seeing you all in September in Amsterdam at the EGI Technical Forum 2010.



Steven Newhouse

EGI-InSPIRE Project Director
director@egi.eu

Applications Database is up and running

The database has now been updated and is ready for business with new features.

Looking for grid-computing applications to make the difference to your research? Then the EGI Applications Database is the right place to look.

The database, AppDB for short, is a library of resources that stores tailor-made computing tools ready for scientists to use. The scope of the database embraces all scientific fields, from tools to simulate exotic excitation modes in physics, to applications for protein sequence analysis.

The database is “basically a shop where you can go to find ready applications,” says Gergely Sipos, from EGI’s user support team. “There is no need to duplicate time-consuming programming,” he adds. The applications are finished products that require only a fraction of the effort usually needed to write a piece of software from scratch.

“This saves a lot of time,” Sipos says. “And hopefully it will inspire scientists less keen on programming to use the grid.”

AppDB has been online since 1 July and is the natural successor to EGEE’s database, which was developed by Italian and Greek teams during the project’s third and final phase. As part of the transition to the European Grid Infrastructure, the database came

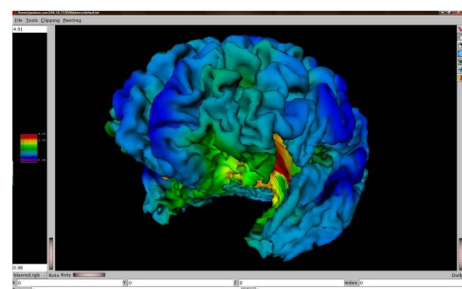
under sole Greek responsibility and it’s now hosted by the Institute of Accelerating Systems and Applications in Athens.

No content was lost during the transition and the database has a new interface with improved filtering and searching abilities, making it easier to find out if a specific tool is right for a research project.

Scientists can browse the applications and read their descriptions, including scientific purpose and details of the creator. The developers will soon be able to have their own personal profiles, separate from the applications they created. This will allow researchers to put a face to the application, but it will also simplify maintenance.

“We’re hoping that developers find it easier now to keep their profile updated, rather than changing contact details in all the applications where they’re listed,” says Sipos.

AppDB is currently in read-only mode, which means that its content is open for public view but developers will have to wait to register new applications in the database. Writing access will be given to all to developers of grid applications later this year. ■



Brainview application screenshot
courtesy of NeuGrid

More Information

Applications Database
<http://appdb.egi.eu/>

Contact
user-support@egi.eu

Central European ROC evolves into NGIs

The operations community is busy completing the transition from EGEE to EGI.

The Central Europe Regional Operation Centre (CE-ROC) shut up shop on 31 July, after providing core services in eight European countries for more than six years.

CE-ROC's closure is part of the transition from European Commission-supported regional operation centres to more sustainable National Grid Infrastructures (NGI). Soon South-East Europe ROC (SEE-ROC), one of the largest EGEE multi-country regions, will follow suit.

CE-ROC came to life during the first phase of the EGEE project to provide core operational services to Poland, Slovenia, Slovakia, Croatia, Czech Republic, Hungary, Belarus, and Austria. Regional Operations Centres were the building blocks that contributed to defining policies, procedures and operational services when Europe's budding infrastructure was getting on its feet.

Over the past six years, the central European grid matured and evolved into a set of independent grid infrastructures under the technical supervision of the Polish operations centre. "Grids need support while they are developing," says Tiziana Ferrari, EGI's Chief Operations Officer. "But

when they grow big enough to become scientifically relevant in their own right, then it's natural to see a transition to independent grid."

The migration of services from CE-ROC to national infrastructures started on 31 March, with the creation of PL-Grid, the Polish Infrastructure for Information Science Support in the European Research. Slovenia, Croatia, the Czech Republic and Slovakia followed in June, and in late July Belarus and Hungary achieved the final steps before take-off. Austria is now part of NDGF, the Nordic Data Grid Facility operations unit. The closure was completed on 31 July.

Dismantling regional operations centres adds the voice of many new partners to the EGI technical and advisory discussion boards.

Ferrari welcomes the change: "New NGIs mean innovation – they will bring their own ideas, requirements and expertise," she says. "This will make the European grid better as a whole."

South-East Europe

ROCs were one of the main features of EGEE operations structure. With the transition to EGI, the trend towards

"New NGIs mean innovation; they will bring their own ideas, requirements and expertise."

Tiziana Ferrari

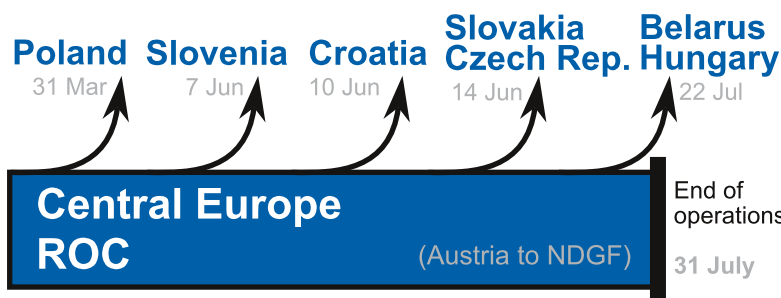
decentralised and sustainable NGIs is sweeping across Europe.

The South-East Europe ROC is another operations unit currently evolving to independent units.

NGIs in the south east region have been quite active in their preparations to become autonomous, even before the start of EGI-InSPIRE, reports Kostas Koumantaros, Operations Manager of Hellasgrid, which took over operations for Greece on 22 April.

AEGIS became responsible for services in Serbia on 16 June and the Turkish sites are now in the final stages of transition to Turkey's NGI. Bulgaria, Armenia and Israel have started the migration procedures and are scheduled to take charge of their own operations by 1 September.

Koumantaros expects to see the remaining NGIs in SEE-ROC independent in the next 6 months. ■



Distributed monitoring service is operational

The centralised Service Availability Monitoring system is switching off.

Grid monitoring checks the overall functionality of the infrastructure. Now it has become the first fully-distributed operational service to enter production within EGI. This success marks the end of a continuous effort that kicked off at the beginning of EGEE-III.

The transition to a regionalised monitoring system was one of the operational priorities during EGEE-III. "A grid is, in its nature, a distributed system and therefore system monitoring grid services should reflect such topology," says Emir Imamagic, coordinator of operational tool deployment in EGI-InSPIRE.

CERN oversaw the long, decentralising process and its many stages: software development and customisation, testing and validation of the overall monitoring framework, and the gradual uptake by operations centres.

The new system is based on Nagios, an open-source software adapted to grid monitoring purposes. The transition to the new monitoring engine started with the distribution of administration responsibilities to regional operations centres, and continued in EGI-InSPIRE with the deployment of the service in new National Grid Infrastructures.

Since this Spring the new monitoring system has been gradually phasing out the previous Service Availability Monitoring central service of EGEE (SAM), which was developed and deployed during the early stages of the EGEE project series.

The Nagios-based monitoring infrastructure has many advantages.

"From the operational perspective NGIs have more control and responsibility over the whole monitoring process," says Imamagic, who designed the monitoring system for the Croatian NGI in 2005. "If something goes wrong it can be quickly solved locally without asking a central party to perform actions." On the technical side, the monitoring infrastructure is now scalable, which means that it will be able to grow with increasing number of grid sites without impairing the service.

The deployment of a reliable and interoperable monitoring system is now one of the requirements to become a fully operational NGI. As part of the transition plan from regional operations centres to NGIs, former EGEE-ROCs have been playing a key role in supporting the respective NGIs to set-up and validate the service before entering production. ■



How does it work?

The EGI Monitoring system checks if a site's three key grid services, computing, storage and grid information, are running properly, about once every hour.

If one of the three checks fails, the system reports a failure. If the test goes smoothly on all, the site is signalled with a green light.

The test results are then centrally stored and used to compute the availability and reliability of the site.

We need you!

Is there anything you think we should cover?

Send your comments, feedback and suggestions to:
press@egi.eu

Or contact the EGI Dissemination Team:

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Policy groups have started to meet

EGI takes first steps to establish an effective framework for collaboration.

Ensuring a sustainable grid infrastructure for European scientists is not only a technical and operational challenge – it requires collaboration between the project's stakeholders. EGI has now taken the first steps to establish an effective framework for cooperation by creating policy groups in five key areas: technology, user community, administration, operations and security.

The groups will bring stakeholders to the table to define the way the organisation will run. Each policy group will discuss areas of the EGI activities, from user community requirements to software vulnerability issues. Their common goal is to produce strategic and operational policies to guide the project's development.

"Good policy is not just a bureaucratic exercise – it's a roadmap to smooth the way towards a sustainable grid infrastructure," says Damir Marinović of the EGI's policy development team. "Policy guidelines provide the foundation to the organisation and the guidelines for its day-to-day operations," he adds.

The policy groups will operate upon

principles of transparency, accountability, openness and participation. This means that EGI policy will be developed through a bottom-up approach and consensus-based decision making.

"We are keen to involve all relevant stakeholders in the policy development process," stresses Marinović. "We want to make sure that all parties, especially those affected by specific policies, will have an opportunity to provide input to the policy-making process."

About a third of EGI's policy group are already active and meeting regularly, such as the Operations Management Board as well as most of the security groups. The User Community Board and the Technology Coordination Board are currently being set up and they should start work soon.

The policy team is also working hard to establish Memorandums of Understanding with other European and international projects and other organisations. These will build strong relationships and create synergies to maximise the benefits of collaboration. ■

"Policy is not just a bureaucratic exercise, it's a roadmap to smooth the way towards a sustainable grid infrastructure."

Damir Marinović

More Information

EGI Policy pages
<http://www.egi.eu/about/policy/>

Contact Policy team
policy@egi.eu

Upcoming Events

8th International GridKa School

6-10 September

Karlsruhe Institute of Technology,
Germany

<http://www.kit.edu/gridka-school>

ICT 2010

27-29 September

Brussels, Belgium

<http://ec.europa.eu/>

International Workshop on Science Gateways

20-22 September

Catania, Italy

<http://agenda.ct.infn.it/conferenceDisplay.py?confId=34>

International Conference on Research Infrastructure

30 September

Rome, Italy

<http://www.euroris-net.eu/home/index.dot>

EGI Technical Forum 2010

14-17 September

Amsterdam, The Netherlands

<http://www.egi.eu/EGITF2010>

Open Grid Forum 30

25-29 October

Brussels, Belgium

<http://www.ogf.org>

Do you want to advertise an event?

Send details to

events@egi.eu



EGI Technical Forum 2010: Preview

Towards a sustainable grid infrastructure

The EGI Technical Forum 2010 will be the first major event within the EGI community and will bring together European distributed computing projects and their collaborators in academia and businesses, from around Europe and around the world.

The venue

The Beurs van Berlage was built in the late 19th century and opened its doors as Amsterdam's third Stock Exchange (Beurs) in 1903. The building was designed by Dutch architect Hendrik Petrus Berlage and stirred controversy at the time for its break with tradition towards a plain and functional style. Nowadays, the Beurs van Berlage is hailed as the beginning of modern Dutch architecture.

Keynote speakers

Kostas Glinos is the Head of GÉANT & e-Infrastructure unit (DG INFSO) in the European Commission. The unit funds EGI-InSPIRE and many of our partners and the EGEE series of projects.

Alex Hardisty works at the Cardiff School of Computer Science and Informatics in the UK. He will talk about how EGI could be used by LifeWatch, an ESFRI project for biodiversity data and ecosystem research.

Paul Strong has been active in the Open Grid Forum, exploring how to standardise the management of large virtualised distributed computing systems.



Beurs van Berlage: the Great Hall
Plenty of space for posters and booths!

Session Highlights

EEF Requirements and the ESFRI projects

All week, Yakult Room

This session will look at the e-Infrastructure requirements of several scientific communities and discuss what they need for their research in the long-term.

User Training - Getting started in EGI

14 Sept 14:00-15:30 Keurzaal

Starting from scratch with a basic introduction to the concepts of Grid Computing, and to the architecture, components and user support services of EGI. The session includes a lecture and a practical demonstration.

Services for the EGI Heavy User Communities

16 Sept 14:00 Berlage Room

A session for anyone seeking an update on the tools, services and capabilities required by different heavy user communities, including High Energy Physics, Earth and Life Sciences and Astronomy and Astrophysics.

Telling your story - Tips for good communication

15 Sept 16:00-17:30 Graanbeurszaal

Dissemination support and advice offered by EGI to its user communities and partners on how to get your research heard.

