

### Table of contents

|   |     |
|---|-----|
| Editorial   | p.1 |
| CrossGrid Industry & Research Forum hands over to the EGEE Industry Forum | p.2 |
| Technical zoom: the EGEE security activity                                | p.3 |
| Overall project metrics   | p.4 |
| EGAAP: Applications deployment and new recommendations                    | p.5 |
| GILDA: EGEE official dissemination and training tool                      | p.5 |
| Sharing a Common Goal: Enterprise Grid Alliance and Global Grid Forum     | p.6 |
| French Grid Enabling Open Initiative                                      | p.7 |
| Third EGEE conference to come in Athens                                   | p.8 |
| News from the Industry Forum  | p.8 |
| News from members   | p.8 |
| Upcoming GRID events  | p.9 |

### Editorial

This second EGEE Industry Forum Newsletter comes at a time when another important goal of the project has been successfully achieved: the first EU project review.

The review, held at CERN, Geneva, 9-11 February 2005, presented the work of the past nine months to the five EU-appointed reviewers, the EU project officer, Kyriakos Baxevanidis, and the EU administrator, Christophe Kowalski. At the beginning of March, the project received the official report from the EU reviewers, where they expressed satisfaction with the success of both the start up phase of the project and its performance to date. Complimenting the excellent personnel the project relies on, the reviewers acknowledged the very effective managerial and administrative infrastructure that has been put in place. The reviewers emphasized the importance of the human factor in such a large project, which allows the exploitation of synergies across the project and ensures that it can adapt quickly to changing requirements. Some of these come from the wealth of new user communities that became involved during the project ramp-up following extensive efforts in dissemination and training. To maintain the

momentum, the reviewers made several recommendations about application support for gLite, the new EGEE middleware.

Concluding that the project activity continues to be very relevant and important for the EU, the reviewers proposed a focused review at the end of 2005, which will examine only a subsection of deliverables. With this in mind, the next EGEE conference, to be held at the Ledra Marriot Hotel, in Athens, Greece, 18-22 April 2005, is expected to benefit from the positive spirit of the review and carry this momentum forward for the next set of project milestones. Already, the successful first year of the project has inspired confidence among the project team, and expectations are high for the first release of the gLite middleware. Also to mention, the strong involvement of EGEE commercial partners, illustrated by CGG's successful demonstration during the review.

As part of the conference, the EGEE Industry Forum will meet in Athens on Thursday, 21 April to discuss the next steps in the promotion and dissemination of EGEE results to Industry and commercial companies, to raise awareness of EGEE and to encourage them to participate in this successful project.

*Dieter Kranzlmüller / Fabrizio Gagliardi, CERN*

---

## **CrossGrid Industry & Research Forum hands over to the EGEE Industry Forum**

### **Co-operation between CrossGrid and DataGrid: an important step towards a unique European Grid scenario**

Since the beginning of the project in 2002, CrossGrid Dissemination and Exploitation team started to organise an Industry and Research forum aiming at organising meetings, coordinating online discussions, presenting live demonstrations where Grid researcher meet the users and the industry and industrial representatives are able to acquire specific knowledge in terms of Grid technology and applications.

At the same time, the then-flagship European Grid project, DataGrid, had already set up its own Industry and Research Forum, with similar objectives. It was then quite natural to join the efforts between these two projects to foster the creation of a European-wide forum to share the same objectives of divulgation of experience gained from the projects and stimulation of demand and pre-competitive development of DataGrid and CrossGrid enabled products and related services, thus moving the knowledge of DataGrid and CrossGrid from e-science to e-business. Therefore, in mid-2002 the European Grid Industry and Research Forum was point of contact between the research on Grid technologies and the industrial and scientific world, and the first performance of this forum was in January 2003 in the frame of First AcrossGrids conference held in Santiago de Compostela. The collaboration between the two projects lasted until the end of the DataGrid project in March 2004, and it gave life to a few meetings around Europe, hosted by both CrossGrid and DataGrid conferences.

The co-operation between CrossGrid and DataGrid was a very important step toward the creation of a unique European Grid scenario, as the two projects together represented almost all the European Countries and share experiences in managing Grid computing testbeds and a common middleware.

### **Such a successful cooperation also put in place with EGEE**

In fact, in April 2004, EGEE project officially commenced, and again it was natural to merge

European Grid Industry and Research Forum in the newly born EGEE Industry Forum. This was officially announced in the frame of the first EGEE conference held in Cork in April 2004. Introducing to the new EGEE Industry Forum, Guy Wormser, EGEE Industry Forum co-chair, acknowledged the good work jointly done by DataGrid and CrossGrid projects in the previous European Grid Industry & Research Forum, saying that EGEE Industry Forum will follow that path raising Grid awareness amongst industry and to encourage businesses to participate in the forum itself.

This also allows continuity in caring of current European Grid Industry & Research Forum subscribers beyond the end of CrossGrid project lifetime. Therefore, current European Grid Industry & Research Forum subscribers are warmly invited to become members of the EGEE Industry Forum.

### **A first joint CrossGrid-EGEE Industry Forum in Amsterdam**

A joint CrossGrid-EGEE Industry Forum session was held on February 15 during the 2005 European Grid Conference. The main topic was to discuss the various lessons learnt concerning applications already deployed on various Grids and to get the expectations from future users. An important goal was to assess the existence of any obstacles that would prevent large scale deployment of Grid applications in the academic and mainly in the industrial world.

The various presentations made by this impressive set of 8 panelists are available on EGEE Industry Forum website (<http://public.eu-egee.org/industry/>).

Significant successes were reported by the panelists, based on various Grid middleware and infrastructures. An important message is the wide diversity of the fields concerned by these reports, confirming the wide spectrum of potential grid usages.

As could be expected given the present state of development of grid technology, the panelists reported various issues that remain to be settled before any large scale usage can be envisaged : how to deal with legal issues related to medical images analysis and distributions, how to adapt licencing schemes of proprietary software to distribute it on a grid, how to ensure the necessary security measures etc. A strong and hopeful conclusion of this Industry Forum session is that although

it is clear that solving these issues will require time and efforts, none of them are impossible to solve and no show-stoppers can be identified so far to Grid evolution towards a business world.

Concerning future users, exciting prospects lie in front of us. For example, the Almere project aiming at offering grid access to an entire community of 250,000 people will be extremely interesting to follow since it will provide invaluable feedback on the grid added value for the general public.

Last but not least, this session also represented a sort of official handover of CrossGrid Industry & Research Forum to the EGEE Industry Forum, as CrossGrid project successfully passed its final review on February 17, 2005 and it is going to officially end within two months (end of April 2005).

*Stefano Beco (CrossGrid Dissemination & Exploitation Team), Guy Wormser (EGEE IF co-chair)*

---

## **Technical zoom: the EGEE Security activity**

The goal of the Security activity is to enable the deployment of a production-quality grid that includes services, resources and applications that are security-conscious and able to handle sensitive information. More specifically, the work helps to enable a grid infrastructure with: an increased level of security of sites involved; a rapid response to intrusions; sound authentication procedures, accepted by both sites and users; and a solid authorization and accounting system.

Since the beginning of the project, many actions have been led by the Security activity, from which the creation of the middleware security group (MWSG), that it chairs. This is the forum where different activity groups inside EGEE as well as the Joint Security Group, Global Grid Forum (GGF), US colleagues from Open Science Grid (OSG) and other groups come together to solve security issues regarding the middleware security design. It ensures that the security requirements from all parts of the project find their way to this group and get prioritized and handed over to the Security activity for further actions by the

Middleware re-engineering and integration activity.

Together with the Project Office and the Policy and International Cooperation activity, the Security activity was also active in cross-project collaboration, aiming at a shared security infrastructure within Europe and the rest of the world.

What is more, the Security activity (in collaboration with other groups) drove the middleware and operational security work. In Brief, it performed the following:

- Middleware security work concentrated to the guiding documents: *Global Security Architecture* and *OGSA SEC service initial recommendations for reengineering* for security. The Security activity was further part of the middleware design work;
- As part of the “Software maintenance and development”, a large part of the Security activity resources were used to prepare security components for the middleware gLite.
- Operational security work: the guiding document *Security operational procedures and incident handling, definition of a common Grid incident format* was prepared. This document will be used for the policy and security operations work for EGEE;
- As part of the operational and coordination work, the Security activity is working close to the Joint Security Policy Group (JSPG) and OSG in preparing common EGEE/LCG/OSG security operational documents covering incident handling and security policy work;
- At GGF12, the security Architect, Olle Mulmo, was appointed area director of Security together with Dane Skow (Fermilab, OSG). This is of great value for the Security activity’s future standardisation effort.

The Security activity also contributed to the work of integrating the Globus Dynamic Account System, and of coordinating and collaborating with the security elements of the Middleware re-engineering and integration tasks and of LCG.

The Security activity worked on the analysis of web services vulnerabilities and threats; on reviewing the joint JSPG/OSG document on Security Incident Handling; and it ensures continuous work on Grid security threats analysis.

The security activity is also giving support to LCG for legacy components LCAS and LCMAPS and the grid-ftp server. In the early

beginning of the EGEE project, it completed the set-up of the Policy Management Authority (PMA) for European Certification Authorities. Since then a recurring task for the Security activity is to chair the EUGridPMA and to expand the number of members.

*Bob Jones, CERN (Bob.Jones@cern.ch) and  
Frederic Hemmer, CERN  
(Frederic.Hemmer@cern.ch)*

## Overall project metrics

EGEE aims to provide a production-quality infrastructure integrating a large number of software components provided by different, geographically distributed organizations. It is therefore appropriate to evaluate EGEE's success in terms of metrics that test progress towards that goal. The project has devised a set of activity metrics to monitor the progress of activities. These are grouped into themes, namely:

- **Project management:** Project progress, effort, and cost ; On-time delivery of deliverables and milestones
- **Utilisation:** Numbers of VOs; Users; Disciplines; Applications; Countries
- **Services provided:** Provision of production service; Organisation scale; Reliability; Job success and throughput; User support, ...
- **Middleware:** Software size, Default trends, ...
- **Training and induction:** Numbers of events; Average attendance; Course length, ...
- **Dissemination and outreach:** Number of press cutting; TV and radio interviews; Website visits; Language other than English for dissemination material, ...
- **International recognition:** Collaboration and participation with standardisation bodies; Number of MoUs (Memorandum of Understanding) concerning work towards interoperability, etc.

These metrics are reported quarterly in the project's quarterly report and kept up to date on the following link: <http://egee-jra2.web.cern.ch/EGEE-JRA2/QoS/QoS.htm>

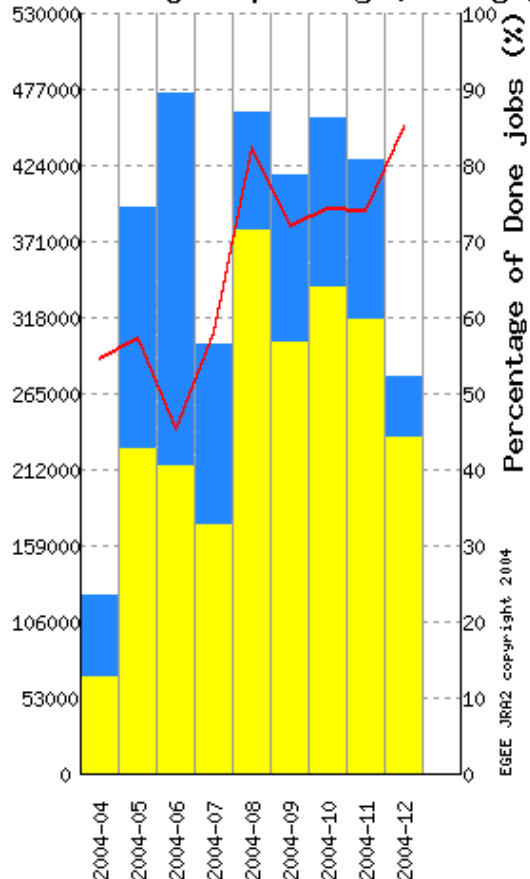
The project has already met many of the targets set for the first 2 year phase. Current metrics are defined by the simplest means of

measurement – these will evolve as we understand better the true effect of EGEE.

Here is an extract of some main metrics presented at the 1<sup>st</sup> EU review:

- Number of users: ~ 500 - Number of user certificates in VOs (excludes DTeam VO, GILDA testbed, portal users and super users). Wider definition to include scientists who benefit from results of EGEE infrastructure should be analysed.
- Number of sites: >110
- Number of countries: 30
- Number of CPU: > 10 000
- Number of disciplines: 6 - Physics, BioMed, Chemistry, Astronomy, Earth Sciences, Geo-Physics.
- Job success and throughput

8321 Done jobs per day (average)



### Months

The main project metrics described in the EGEE Measurement plan will be continuously refined. It is likely that the number of users, applications and scale of production service will grow at a slower rate.

*Gabriel Zaquine, CSSI  
(gabriel.zaquine@cern.ch)*

---

## EGAAP: Applications deployment and new recommendations

One of the most important success criterion for EGEE is the number of applications from as many fields as possible deployed on its infrastructure. The EGEE Generic Applications Advisory Panel (EGAAP) plays an important role in this process since it is charged with the evaluation of all proposals from external groups, to make prioritized recommendations to the NA4 (Application identification and support activity) and to the EGEE management.

Since the start of the project, EGAAP met twice (on the 14<sup>th</sup> June and 25<sup>th</sup> November 2004).

During the first meeting, three new communities were identified and invited to deploy their applications on GILDA and then on the production Grid service: Earth Sciences, Computational Chemistry and Astro-particle physics. The EGEODE application from Earth Science, the GEMS application from Computational Chemistry, and the MAGIC application from Astro-particle Physics have successfully been deployed on GILDA and demonstrated at the Second EGEE Conference in The Hague using the GENIUS portal.

Six applications were formally submitted for consideration to the second EGAAP meeting, out of which four were warmly recommended for acceptance by EGAAP, namely Cosmology (PLANCK), Earth Sciences (Solid Earth Physics and Hydrology), Drug Discovery and search engine (GRACE project).

The coming months will see new scientific areas deploying applications recommended by EGAAP on the EGEE production infrastructure. The feedback from the first generic applications as well as discussions with other projects keen to use EGEE infrastructure and middleware has initiated a discussion involving several activities within the project about the best strategy to address the needs of new user communities in the future.

Guy Wormser, *In2p3* ([wormser@lal.in2p3.fr](mailto:wormser@lal.in2p3.fr))

---

## GILDA: EGEE official dissemination and training tool

Since its beginning, the EGEE Project has adopted the Grid INFN Laboratory for

Dissemination Activities (GILDA, <https://gilda.ct.infn.it>) as its official dissemination and training tool. For this purpose, GILDA provides a wide range of Grid products, like a series of sites and services spread all over Europe and Latin America which constitute a real **Grid Testbed**, where the last version of the INFN Grid middle-ware (fully compatible with EGEE middle-ware) is installed. A **Virtual Organization** and a **Certification Authority** have been created in order to promote Grid concepts to everybody wanting to experience grid computing on GILDA Testbed. Furthermore, a set of dissemination tools have been already deployed like the **Grid Demonstrator**, a customized version of the GENIUS web portal where everyone can submit jobs for a pre-defined set of applications to the GILDA Testbed, the **Video Tutorials**, a full set of videos tutorials meant for remote self-teaching on the use of the grid, the **Gilda Live User Interface CD**, a live Linux distribution based on Knoppix that turns every PC into a machine from where everybody can send jobs to the GILDA Testbed, the **Gilda User Interface Plug and Play** (simple and DAG versions), a tarball that contains all the necessary software to seamlessly turn a PC into a machine from where you can access and use the dissemination grid.

However, GILDA is not only meant as a dissemination tool. It is also the Grid Test-bed where applications of new communities wanting to join EGEE can be interfaced and tested with the EGEE middle-ware before to be more widely deployed on the vaste EGEE infrastructure. Put in evidence among them, Geocluster, the leading industry Seismic Processing Solution, is the first industrial application successfully running on the EGEE Grid Production Service, within the Expanding GEOsciences on DEMand (EGEODE) Virtual Organization. Geocluster software is used in production in Compagnie Generale de Geophysique (CGG) and client's sites and includes several tools for signal processing, simulation and inversion (model optimisation). It enables researchers to process seismic data and to explore the composition of the Earth's layers. If, using GILDA, you think the Grid could be a solution for your computational and data problems, please subscribe to [gilda@infn.it](mailto:gilda@infn.it).

Roberto Barbera ([roberto.barbera@ct.infn.it](mailto:roberto.barbera@ct.infn.it))

---

## Sharing a Common Goal Enterprise Grid Alliance and Global Grid Forum

The Enterprise Grid Alliance, EGA, is a consortium of leading vendors and customers focused on developing Enterprise Grid solutions and promoting widespread Grid adoption. It is an open, independent and vendor-neutral community formed in April 2004. Its technical scope is limited to Enterprise Grids and does not extend to desktop Grids nor to scientific computing and academic research Grids involving dynamically defined virtual organisations.

The commercial data centre differs significantly from those in scientific and academic research institutes. It is typically characterised by a stable technical environment in which proven industrial strength solutions run under strong centralised management and where policies are strictly enforced to meet the highest qualities of service demands. During normal working hours a data centre supports a mixed and often unpredictable workload generated by a large concurrent user population using OLTP mission critical applications. Outside this period the workload remains high but is more predictable, being based on periodic, time critical background processing.

EGA is adopting a phased approach in tackling the obstacles organisations face in deploying Enterprise Grids for commercial and technical applications using proven standard components. For the initial phase it is addressing the near term capabilities required for commercial applications in a single Enterprise Grid. The second phase will extend these capabilities to include technical applications and will address Grids spanning multiple enterprises. The third phase will focus on evolving the utility computing model. For the first phase EGA has created five working groups. A reference architecture group is defining a framework in which the others can address the issues associated with component and data provisioning, security and utility accounting.

In common with the Global Grid forum, GGF, EGA shares a common vision of widespread Grid adoption. However, GGF has a much

wider technical scope and additionally includes the development of standards for the Grid. One of its stated goals is “to facilitate and support the creation and development of regional and global computational grids that will provide to the scientific community, industry, government and the public at large dependable, consistent, pervasive and inexpensive access to high-end computational capabilities”. This reflects one of the original motivations for the Grid, to address the needs of scientific researchers wanting to harness disparate resources for file-based compute intensive problem solving. It also represents the most challenging distributed computing problem, the large scale pooling and sharing of heterogeneous resources in a global environment spanning multiple administrative domains.

To achieve its goal GGF is defining a Grid model based on the Open Grid Services Architecture, OGSA. The model exploits service oriented architecture techniques and Web Services technologies to address the issue of discovering and negotiating access to resources in a distributed environment in which there is no centralised management. Currently it has been defined at the conceptual architecture level and describes the functional components required to meet a set of requirements primarily drawn from scientific and academic research use cases.

In summary, GGF is addressing the most general Grid use case involving dynamic virtual organisations whereas EGA has adopted a phased approach and is initially focusing on a limited technical scope. However, this does not mean that their activities cannot complement each other, and in fact the two organisations are in dialogue to agree how this can be best achieved. In my view, the greatest success will be achieved through them sharing their knowledge and experience. EGA can add value to the OGSA model by reviewing it in the context of its own reference model and against the known requirements and constraints of enterprise data centres. It can also provide rich commercial use cases and scenarios against which the OGSA model can be validated. At the same time the OGSA model and its use cases provide a basis for reviewing and validating the EGA reference model in terms of its extensibility to address the needs of inter-Enterprise Grids.

Both organisations will be better placed to achieve their short and long term goals by adopting a collaborative approach. However, ultimately the greatest beneficiaries will be Grid implementers because this approach is most likely to minimise the risk of the worst case scenario in which they are faced with the choice of two conflicting implementation options.

*Dave Pearson, Oracle Corporation*  
([Dave.pearson@oracle.com](mailto:Dave.pearson@oracle.com))

## French Grid Enabling Open Initiative



January 2005 by french industrial and commercial participants of the EGEE industry forum and an existing "Grid user's Group" inside the french consortium Aristote.

### The context

Real grid applications are still confined to a limited numbers of actors: academic research, R&D teams within large industrial or commercial companies. But new work practices emerge as industrial projects and service organizations now always exhibit some "grid dimension". This implies some sharing or mutual exploitation of a wide range of resources: not only hardware and software but also information, instruments, sensors, people, etc. This grid dimension is also driven by the technology trend of global interconnection between electronic devices.

Most available grid related tools come from computer science research, they focus on specific points e.g. aggregation of resources (Virtual Computing Center), or scalability (Very Large Scale System). For operational use they often lack functionality or do not offer enough flexibility. Installing or running grid middleware relies on many prerequisites which are not found in an industrial environment. Here grids are not "build" for a specific computing or data processing application but "are grown" as new participants contribute to them. The fact is that

there is no support or infrastructure for these "community grids" to develop themselves within an environment that should be somewhat like an "enhanced internet". Many companies and especially SMEs cannot invest money and manpower in evaluation or tuning of environments that do not address their concerns. On the other hand they cannot miss the benefits of grid emerging technologies. Furthermore testing and investigating new uses of grids can only be performed in a "realistic framework".

### Several goals

- **Creation of working groups** in order to compare, select and help to deploy operational solutions for every specific aspect of the grid: security (certificates, etc.), software environment upgrade and standardization, network environment (VPN, etc.), resource discovery, economical model, etc.;
- **Creation of "the big picture"**: fr-grid nodes which are "ready for the grid". Participants can create a new virtual organization on an industrial or business basis, install specific tools (which obviously include the middleware) and concentrate on their core activity;
- **Creation of "the platform"**: a special virtual organization, where resources are made available to create a nationwide platform with state of the art operational IT, network and grid environments.

Another goal of the consortium is to participate to wider projects interconnecting similar platforms in Europe. **fr-grid** is a national initiative because some of the main actors operate at the country level e.g. network providers, certification authorities, etc. but it should be part of a wider initiative as the targeted users communities are trans-national: industrials, industrials and subcontractors, consortiums of SMEs. Many grid related initiatives already exist in other European countries. They all have very different scopes but they all address in some sense the problem of building an operational platform.

**A two days meeting** co-organized by fr-grid and EGEE will take place in Lyon, France.

The first day will be dedicated to the Grid use in bioinformatics. The second day will concern EGEE.

Dates: June, 16-17th 2005

Find more information on <http://www.fr-grid.org>

Philippe d'Anfray, CEA ([philippe.anfray@cea.fr](mailto:philippe.anfray@cea.fr))

---

## Third EGEE Conference to come in Athens

18-22 April 2005, Athens, Greece

The Third EGEE conference is one of the core EGEE events that is taking place over the lifespan of the project. It marks the halfway point in the 2 year project, since its initialisation in April 2004.

As such, it comes at a crucial time for all members of the project. It will be a chance for the Project Team to take stock of their significant achievements to date, not least the recent success at the EU review, and a great opportunity to look forward to the next phase of the project.

The conference will be a workshop based event, where many members from various EC Research Infrastructure Grid projects will participate to discuss key issues and work together to overcome known problems, to relay solutions and to discuss the potential problem areas within the Project.

Registration is now open. Visit <http://public.eu-egee.org/conferences> to register, view the programme and find out more about Athens.

---

## News from the Industry Forum

### Industry Forum meeting in The Hague

The third EGEE Industry Forum meeting took place on Tuesday 23<sup>rd</sup> November 2004 in The Hague, Netherlands, during the second EGEE conference.

#### Programme:

- Key lecture by Philippe d'Anfray, CEA (30mn) : Grid...users and usages
- Round table users oriented (1h30)

Participants: M.Hofmann - SCAI / D.Thomas – Compagnie Générale de Géophysique / R.Grim – Dutchspace / S.Beco – Datamat / D.Garcia – Pôle Européen de Plasturgie

Chair : Christian Saguez, Ecole Centrale Paris

The presentations of the participants are accessible on

<http://agenda.cern.ch/fullAgenda.php?ida=a044722>

### Next Industry Forum Meeting

The next Industry Forum meeting will take place during the EGEE Conference, on April 21<sup>st</sup>, from 9:00 until 11:00.

A round table is planned, during which some industrials will share with us their own experience and their expectations about Grid. The content of the meeting will be accessible on the following webpage:

<http://agenda.cern.ch>

For more information, contact [brun@mas.ecp.fr](mailto:brun@mas.ecp.fr)

---

## News from members

### EDS, a new member

EDS believes that grid computing may provide a general platform for sharing and leveraging computing and information resources, in selected areas today, and more broadly in the future. The intrinsic sharing, load balancing, and redundancy of grid technology matches the needs of commercial businesses and EDS services alike. EDS promotes the use of new and innovative technologies and solutions to enhance the performance and competitive advantages of governments, commercial firms and academic institutions, worldwide.

### About EDS

EDS provides a broad portfolio of business and technology solutions to help its clients worldwide improve their business performance. EDS' core portfolio comprises information-technology, applications and business process services, as well as information-technology transformation services. EDS' A.T. Kearney subsidiary is one of the world's leading high-value management consultancies. With more than \$20 billion in annual revenue, EDS is ranked 87th on the *Fortune 500*. The company's stock is traded on the New York (NYSE: EDS) and London stock exchanges. Learn more at [www.eds.com](http://www.eds.com).

February, 1<sup>st</sup>, 2005 - Rolf Kubli, EDS



---

## Upcoming GRID events

### HealthGrid

**Location:** Oxford, United Kingdom

**Date:** 7-9 Apr 2005

The aims of this conference are to reinforce and promote awareness of the potential of the deployment of GRID technologies in health. In this context "Health" does not involve only clinical practice but covers the whole range of information from the molecular level (genetic and proteomic information) through cells and tissues, to the individual and finally the population level (social healthcare).

For more information please visit:  
<http://oxford2005.healthgrid.org/>

### Third EGEE Conference

**Location:** Athens, Greece

**Date:** 18-22 Apr 2005

The third EGEE conference will take place in Athens between 18 - 22 April 2005. This event marks the halfway point in the project and will be an exciting opportunity to look back over the achievements to date, and look forward to what might lay ahead. The Event is being held in the luxurious five star Ledra Marriot Hotel in Athens, for which excellent discounts have been negotiated for the conference week

### 5th Annual Access Grid Retreat

**Location:** Berkeley, United States

**Date:** 25-29 Apr 2005

The AG Retreats provide an interactive forum for the Access Grid community including developers, node operators, and users to share recent experiences and research findings, to present ideas for future AG technical directions and to train and educate AG newcomers.

For more information please visit:  
<http://www-unix.mcs.anl.gov/fl/flevents/ag/agr05/>

### International Symposium on Grid Computing (ISGC) 2005

**Location:** Taipei, Taiwan

**Date:** 25-29 Apr 2005

The International Symposium on Grid Computing 2005 will be held in conjunction with Service Challenge Meeting at Academia Sinica,

Taipei, Taiwan.

The ISGC offers excellent opportunities to allow the communities in Asia Pacific a better understanding of the vision and progress of the Grid technology. It is designed to provide a forum for scientists, potential developers, as well as users in Asia Pacific to meet and to learn from each other. By exchanging their experiences on how to develop Grid technology and application, the Symposium also provides the Grid community with invaluable insights for future collaboration.

The main focus of 2005 program is to introduce the operation of world-wide Grid projects and interoperation among those projects. It covers a local tutorial and a variety of presentations ranging from applications on HEP, Bio/Medical, Earth Sciences, Data Grid to the Grid infrastructure, operation, management and services. In addition, a Service Challenge Meeting is also scheduled.

For more information please visit:  
<http://www.twgrid.org/event/isgc2005>

### CCGrid 2005 - May 2005

**Location:** Cardiff, Wales, United Kingdom

**Date:** 1 May 2005

CCGrid 2005 is designed to bring together international leaders who are pioneering researchers, developers and users of clusters, networks and Grid architectures and applications. The symposium will also serve as a forum to present the latest work, and highlight related activities from around the world.

For more information please visit:  
<http://www.cs.cf.ac.uk/ccgrid2005/>

### International Supercomputer Conference

**Location:** Heidelberg, Germany

**Date:** 21-24 Jun 2005

The International Supercomputer Conference will celebrate its 20th year in 2005 as venue for gaining an international perspective in the field of HPC. Combining a strong lineup of technical experts with exhibits from leading supercomputing centres, as well as hardware and software vendors, ISC presents state-of-the-art applications, architectures and trends in super-computing.

For more information please visit:  
<http://www.supercomp.de/>

#### GGF 14

**Location:** Chicago, United States

**Date:** 26-29 Jun 2005

GGF 14 is scheduled to be "group-only" event, which focuses on workshops and working group and research group sessions.

*Anyone interested in joining the EGEE Industry Forum should contact either Christian Saguez ([christian.saguez@ecp.fr](mailto:christian.saguez@ecp.fr)), or Guy Wormser ([wormser@lal.in2p3.fr](mailto:wormser@lal.in2p3.fr)) or Myriam Brun ([brun@mas.ecp.fr](mailto:brun@mas.ecp.fr))*