CGCC EGEE Related Projects



AssessGrid 01/04/2006 - 31/12/2008 http://www.assessgrid.eu

AssessGrid will address the risk awareness and consideration in SLA negotiation, self-organising fault-tolerant actions, and capacity planning. It will develop and integrate methods for risk assessment and management in all Grid layers. The corner stones are risk management scenarios reflecting the perspective of Grid end-users, brokers, and providers. The results will support all Grid actors by increasing the transparency, reliability, and trustworthiness as well as providing an objective foundation for planning and management of Grid activities. Thus, AssessGrid will supply Next Generation Grids with additional innovative and required components to close the gap between SLAs as concept and accepted tool for commercial Grid uptake.

Relation with EGEE: Since only the concept and structure of Service Level Agreements (SLAs) are defined, AssessGrid and EGEE aim to collaborate in the definition of concrete guarantee terms of SLAs. The required and important guarantee terms should be determined according to Grid user and provider requirements. Furthermore, EGEE supports the AssessGrid development in the analysis of statistical information on the usage of real Grid infrastructures. In particular, EGEE provides information about resource utilization, job distribution, average job duration, as well as monitoring data.



BalticGrid 01/11/2005 - 30/04/2008 http://www.balticgrid.org

The **BalticGrid** project is of high strategic importance to the Baltic States. It aims to i) develop and integrate the research and education computing and communication infrastructure in the Baltic States into the emerging European Grid infrastructure, ii) bring the knowledge in Grid technologies and use of Grids in the Baltic States to a level comparable to that in EU members states with a longer experience in the development, deployment and operation of Grids, iii) further engage the Baltic States in policy and standards setting activities. The integration of the Baltic States into the European Grid infrastructure will primarily focus on extending the EGEE (with which four partners are already engaged) to the Baltic States.

The project will exploit EGEE developments as well as developments in related Grid projects to avoid duplication of effort. The innovations in the BalticGrid project are primarily expected to occur in the Joint Research Activities, which are focused on Security, Accounting and support for Service Level Agreements, and tools for uniform access to Grids and performance engineering of Grid applications.

Relation with EGEE: Regional extension to the Baltic Region. JRA1 contribution on Accounting and Service Level Agreement.



BELIEF 01/11/2005 - 31/10/2007 http://www.beliefproject.org/

BELIEF, funded by the EU's Sixth Framework Programme, is an international project to facilitate knowledge-exchange on eInfrastructures, and a one-stop home for public eInfrastructure documentation. This information will be readily accessible to BELIEF Community Members though the BELIEF Digital Library especially developed to provide a central repository for eInfrastructure Information. BELIEF brings together not just individual experts and potential users but also other eInfrastructure 'communities' and initiatives, from both research and industry worldwide. As a home for all research infrastructure communities and initiatives, BELIEF will help you expand visions of future eInfrastructure landscapes and provide a knowledge platform to realise them.

Relation with EGEE: EGEE signed a LoI with BELIEF to collaborate with the BELIEF partners in the setup of a digital library integrating EGEE documentation together with other relevant initiatives and present it in a way which meets users' needs. The collaboration led to include in the BELIEF DL EGEE metadata and documents from INDICO, EDMS and Training Library.



BioinfoGRID 01/01/2006 - 31/12/2007 http://www.bioinfogrid.eu/

The **BioinfoGRID** project aims to promote Bioinformatics Grid applications for Life Science, in order to carry out Bioinformatics research based on Grid networking technology. More specifically the BioinfoGRID project will evaluate applications in the fields of Genomics, Proteomics, Transcriptomics and Molecular Dynamics, reducing data calculation times by distributing the calculation on thousands of computers using the European Grid infrastructure network.

Relation with EGEE: The BioinfoGRID Specific Support Action will combine Bioinformatics services and applications for molecular biology users with the Grid Infrastructure created by the EGEE Project.



CYCLOPS 01/06/2006 - 31/05/2008 http://www.cyclops-project.eu

CYCLOPS aims to bridge the gap between Grid and GMES (Global Monitoring for Environment and Security) communities, making Civil Protection people aware of the services provided by Grid infrastructures, and, at the same time, letting Grid researchers know about Civil Protection's specific requirements and service enhancement needs.

Relation with EGEE: CYCLOPS will bring together European Civil Protection (CP) and GRID Communities; it will create a fruitful interaction between CP agencies, geospatial information experts and the Grid (EGEE) experts. This effective synergy will guide the development of future Grid research infrastructures and study the feasibility of getting them to run on the European Grid Infrastructure. CYCLOPS will provide a support action to the EGEE-II I3 projects in order to utilize its platform in the Civil Protection community. More specifically, the project objectives are:

- To disseminate EGEE results to the CP Community, assessing EGEE infrastructure for CP applications. A variety of activities will focus on dissemination and outreach, training, workshops, possibly in close relation with EGEE events and on promoting a close collaboration between the two communities.
- To provide the EGEE Community with knowledge of the requirements that characterise the CP services. These requirements will also be used to assess the possibility for the development of an advanced Grid platform enabling Real Time and near-Real Time services and implementing a security infrastructure very close to the defence systems standards.
- To evaluate the possibility of utilising the present EGEE services for CP applications.
- To develop the research strategies to enhance the EGEE platform, considering Earth sciences resources and GMES/CP requirements.



DEGREE 01/06/2006 - 30/05/2008 http://www.eu-degree.eu

Objectives of the **DEGREE** project are: bridge the Earth Science and Grid communities throughout Europe; ensure that Earth Science requirements are satisfied in next Grid technology; disseminate and promote uptake of Grid in wider Earth Science community.

Relation with EGEE: Earth Science has been part of DataGrid, CrossGrid, EGEE and EGEEII projects. DEGREE will provide more specific Earth Science requirements to EGEEII and ensure they are satisfied in next Grid generation with integration of emerging technologies for managing Earth Science knowledge.

CGCC EGEE Related Projects



DILIGENT 01/09/2004 - 31/11/2007

http://www.diligentproject.org/

The **DILIGENT** project is creating an advanced test-bed that will allow virtual e-Science communities to share knowledge and collaborate in a secure, coordinated, dynamic and cost-effective way.

Relation with EGEE: Study and experimentation of EGEE infrastructure and gLite middleware. Feedback gathering on activities performed bridging Grid and Digital Libraries domains via EGEE NA4, TCG, workgroups, UIG, joint meetings and technical discussions, training and dissemination events.



Edutain@Grid 01/09/2006 - 31/08/2009 http://www.edutaingrid.eu

Online gaming is characterized by the high rate of interaction between the users, requiring very fast updates of information being passed from one computer to another. The faster the updates, the more immersive the game becomes and consequently adds significantly to the whole gaming experience. At present, online games run in static way that is dependant upon tight coupling of computer resources that are not flexible to strong fluctuations in the number of players. Users are very sensitive to interrupted game play, affecting their decision to play and ultimately their decision to purchase. **Edutain@Grid** seeks to meet these challenges through development of a Grid-based framework allowing responsive and interactive applications to exploit technology that has previously been applied to "big science".

Relation with EGEE: e-IRG, Middleware Security Group, Resource Allocation and Management.



EasyGrid 12/06/2004-01/09/2007 http://www.hep.man.ac.uk/u/jamwer/

EasyGrid automates high-energy distributed analysis job submission to EGEE grid farms. EasyGrid is an intermediate layer between grid middleware and user software that provides functionality to perform data and functional parallelism. Users without grid skills were able to use grid. The case studies were hadronic tau decays distributed analysis and neutral pion discrimination using genetic programming algorithms.

The added value was a user's transparent framework for reliable data gridification (support execution and results' recovery of many copies of the same binary code running independently and at same time in many computers with different data files) and functional gridification (one binary code running distributed in many grid computers at same time). Data gridification can be used to run Monte Carlo Events generation, raw data analysis, any Root application, or any other generic software. Functional parallelism is done through a library with several functions to run conventional software on the grid with minor changes in the source code. It provides an efficient and secure communication mechanism to allow data transfer between jobs in different worker nodes. If any node goes down, the master program re-submits the task to another worker node. In case some job fails, the necessary information will be recovered automatically and stored in a file for further analysis.

Relation with EGEE: EasyGrid is an intermediate level between EGEE and user's application. Users are able to use grid without knowing what grid is.



EELA 01/01/2006 - 31/12/2007 http://www.eu-eela.org/

Presented in May to the 6th Framework Programme for Research, Technological Development and Demonstration, of the European Commission (EC), "E-Infrastructure shared between Europe and Latin America" -**EELA**- further more than a project that speaks about a powerful and useful technological infrastructure (Grids, E-Infrastructure, Grid Applications, Training, etc.), is an enormous challenge of collaboration that, because of its approval, will be traduced in the union of two continents and 21 institutions by means of a powerful human network.

Using pilot resources available in some centers of Europe (Spain, Portugal and Italy, already integrated within the framework of the European project EGEE) and Latin America (Argentina, Brazil, Chile, Cuba, Mexico, Peru and Venezuela), EELA will create a human network dedicated to work in Grids, e-Science and e-Infrastructure.

EELA's primary goal is: Through specific support actions, to position the Latin American countries at the same level of the European developments in terms of E-Infrastructure.

Relation with EGEE: Extension and adoption of the EGEE middleware in Latin America.



EGRID 01/01/2004 - 30/04/2007 http://www.egrid.it/

The **EGRID** project is responsible for setting up an Italian Grid infrastructure for finance and economic research. *Relation with EGEE*: EGRID was accepted as "pilot application" in

Relation with EGEE: EGRID was accepted as "pilot application" in April 2005 and is now a Virtual Organization within the EGEE infrastructure.



ETICS 01/01/2006 - 31/12/2007 http://www.eu-etics.org/

ETICS stands for "eInfrastructure for Testing, Integration and Configuration of Software". It provides a service to help software developers, managers and users to better manage complexity and improve the quality of their software. Using cutting edge Grid software and best practices, our service allows you to fully automate the way your software is built and tested. In other words, ETICS provide software professionals with an "out-of-the-box" build and test system, powered with a build and test product repositorv.

ETICS is multi-platform and open source. The client is designed to be simple to install. Results from daily, nightly and continuous builds and tests can be monitored via the web. Users can also browse and edit project data via a secured web application.

The project is funded by the European Commission. The ETICS consortium consists of CERN (coordinator), INFN, Engineering Ingegneria Informatica S.p.A, 4D Soft Ltd. and the University of Wisconsin/Madison.

Relation with EGEE: Many development and certification tasks within the JRA1 and SA3 activities of the EGEE project uses services provided by ETICS to build, test and validate the gLite software components.

GGCC EGEE Related Projects



EUChinaGRID 01/01/2006 - 31/03/2008 http://www.euchinagrid.eu/

EUChinaGRID will provide specific support actions to foster the integration and interoperability of the Grid infrastructures in Europe (EGEE) and China (CNGrid) for the benefit of eScience applications and worldwide Grid initiatives, in line with the support of the intercontinental extension of the European Research Area (ERA).

The project will study and support the extension of a pilot intercontinental infrastructure using the GRID EGEE-enabled applications and will promote the migration of new applications on the Grid infrastructures in Europe and China by training new user communities and supporting the adoption of grid tools and services for scientific applications.

Relation with EGEE: Interoperability and interoperation between EGEE and CNGRID (European and Chinese Infrastructures), at the middleware level and the network level (interoperability and IPv6 compliance of the two softwares).



EU-IndiaGrid 01/10/2006 - 30/09/2008 http://www.euindiagrid.eu/

EU-IndiaGrid is funded by the European Commission, Research Infrastructure Unit, and is the first European and Indian Gridfocused project. EU-IndiaGrid supports interconnectivity between the European Grid infrastructure, EGEE, and the Indian Grid infrastructures, Garuda India Grid and Department of Atomic Energy Grid, to build a common infrastructure to support data processing for e-Science application areas, with a particular focus on Biology, High Energy & Condensed Matter Physics and Earth and Atmospheric Sciences.

Relation with EGEE: EU-IndiaGrid supports interconnectivity between the European Grid infrastructure, EGEE, and the Indian Grid infrastructures, Garuda India Grid and Department of Atomic Energy Grid.



EUMEDGRID 01/01/2006 - 31/12/2007 http://www.eumedgrid.eu/

The objective of the **EUMEDGRID** project is to, through Specific Support Actions, bring the less-experienced and less-resourced countries of the Mediterranean region to the level of European developments in terms of the elnfrastructures.

With the networking infrastructure reaching stability through the EUMEDCONNECT project, the focus of the EUMEDGRID will be on Grid infrastructure and related eScience applications. A broad range of activities will focus on dissemination and outreach, hands-on workshops and close collaboration with related projects such as EUMEDCONNECT / GEANT, EGEE and SEE-GRID.

Relation with EGEE: The project will extend the European Grid Infrastructure to the Mediterranean Area.



GRIDCC 01/09/2004 - 31/08/2007 http://www.gridcc.org

Recent developments in Grid technologies have concentrated on providing batch access to distributed computational and storage resources. **GRIDCC** will extend this to include access to and control of distributed instrumentation. One of the main GRIDCC tasks is to incorporate the new middleware into a few significant applications that will allow software to be validated, both in terms of functionality and quality of service aspects. The final goal of the GRIDCC project is to build a widely distributed system that is able to remotely control and monitoring complex instrumentation.

Relation with EGEE: GRIDCC both develops new software for architectural components (e.g., the Instrument Element or the Virtual Instrument Grid Service) and adopts architectural elements and related middleware that are being developed within the EGEE framework. This is the case with StoRM, CREAM, and others. Moreover, GRIDCC enables the gLite middleware to interface and control instrumentation.



g-Eclipse 01/07/2006 - 30/06/2008 http://www.geclipse.eu

The **g-Eclipse** project aims to build an integrated workbench framework to access the power of existing Grid infrastructures. The framework will be built on top of the reliable eco-system of the Eclipse community to enable a sustainable development. The framework will provide tools to customize Grid users' applications, to manage Grid resources and to support the development cycle of new Grid applications.

Relation with EGEE: The g-Eclipse project concentrates on the development of tools for Grid users, Grid operators and Grid developers. Therefore the project does not run its own Grid resources, but will use the Grid resources available from other projects. The general middleware independent framework from the g-Eclipse project will be proved in the first year with the gLite middleware using the EGEE infrastructure.



Health-e-Child 01/01/2006 - 31/12/2009 http://www.health-e-child.org/

The **Health-e-Child** project aims at developing an integrated healthcare platform for European paediatrics, providing seamless integration of traditional and emerging sources of biomedical information.

Relation with EGEE: Health-e-Child will be deploying a medical infrastructure that will connect its participating hospitals. It will use gLite as the grid middleware stack, on top of which high level medical services will be developed to serve the end-user clinicians and other medical applications.

CGCC EGEE Related Projects



ICEAGE 01/03/2006 - 29/02/2008 http://www.iceage-eu.org/

The ERA is investing heavily in e-Infrastructure (e-I) to stimulate industry, improve the lives of citizens, accelerate research and gain international competitive advantage. For Europe to realise this expectation, there needs to be a diverse, knowledgeable, creative community, skillfully exploiting e-Infrastructure. ICEAGE will catalyse the necessary infrastructure and skills by establishing a world-wide initiative to inspire innovative and effective Grid Education (GE). By Grid Education we mean not only education in the use of the Grid, but also the use of the Grid in education. We use the term "Grid" in a broad sense to include computing and communications technology, working practices and policies that underpin e-Infrastructure.

Good education in rapidly advancing scientific domains is particularly labour intensive. It must draw on the expertise of a small community of pioneers. A major objective of ICEAGE is to provide an effective mechanism for distilling their knowledge and rapidly propagating it across Europe. ICEAGE will create a forum to bring together experts world-wide to expand and advance Grid Education. Building on EGEE, ICEAGE will enable students and educators to obtain and develop Grid Education via sustained, large-scale, multi-purpose e-Infrastructures. ICEAGE will demonstrate the wide potential of Grids, revealing new creative and business opportunities which will lead to the inclusion of social, ethical and economic issues in educational programmes. ICEAGE will show clearly how education can benefit from e-Infrastructure.

ICEAGE will deliver a programme of educational events. Its outcome will be the adoption by European Universities of courses in many disciplines to support the deployment and exploitation of e-Infrastructure. ICEAGE will ensure that citizens are well prepared to use e-Infrastructure in their private and professional lives. It will stimulate European educators by closely coupling the ICEAGE forum with a pioneering educational system, based on e-Infrastructure, involving a dynamic programme of events, shared strategies, information and material. The actions on Education and Training in ICEAGE are to be understood as actions on dissemination of knowledge (in the broader sense).

Relation with EGEE: ICEAGE is developing the educational aspects of the training program that were generated by the first phase of the EGEE project, in particular ICEAGE has taken over the support for the International Summer School in Grid Computing series which provides an international showcase for grid software and infrastructure such as that created by EGEE.



Interactive European Grid 01/05/2006 - 30/04/2008 http://www.interactive-grid.eu

The goal of the **int.eu.grid** project is to deploy and operate an interoperable production-level e-Infrastructure for demanding interactive applications that will impact the daily work of researchers. The main features of this scientific initiative are:

- Distributed Parallel (MPI) Interactive Computing and Storage at the Tera level
- User Friendly Access through a Grid Interactive Desktop with powerful visualization
- Supporting Virtual Organizations at all levels: setup, collaborative environment, grid enhancement of applications, execution and monitoring tools, discussion of results.

Relation with EGEE: The relation of the project with EGEE starts at the operational level, where we guarantee interoperability with the EGEE infrastructure. The software from int.eu.grid to support interactive and MPI parallel jobs will then be a downloadable set for those sites interested in these features. We plan to work hand to hand with the MPI working group of EGEE in order to deploy a consistent middleware for parallel computing on the Grid.



ISSeG 01/02/2006 - 31/03/2008 http://www.isseg.eu/

Integrated Site Security for Grids (**ISSeG**) aims to contribute to the consolidation of the European Grid infrastructure in the field of computer security, by creating and disseminating practical expertise on the deployment of Integrated Site Security (ISS), as a complementary action to EGEE Grid Security. ISS advocates developing technical, administrative and educational security solutions in a consistent and coordinated way. This integration ensures policies, rules, awareness and training all evolve in step with technological developments.

ISSeG is a 26 month project co-funded by the EU FP6 Programme. The consortium comprises three large scientific centres: the European Organization for Particle Physics (CERN) in Switzerland, Forschungszentrum Karlsruhe (FZK) in Germany, and the Council for the Central Laboratory of the Research Councils (CCLRC) based in the United Kingdom.

Relation with EGEE: The project will disseminate generalised recommendations for Integrated Site Security to Grid communities. In order to maximize synergies with other EU-funded initiatives, ISSeG will exploit the structure put in place by EGEE in particular through designated liaisons and the Operational Security Coordination team.



KnowARC 01/06/2006 - 31/05/2009 http://www.knowarc.eu/

The **KnowARC** project aspires to improve and extend the existing state-of-the-art technology found in the Advanced Resource Connector (ARC) middleware, which provides a set of reliable, robust, non-intrusive, well-tested core services. KnowARC aims to significantly increase awareness and usage of such next generation ARC middleware. The resulting high performance and popular Grid solution will increase productivity in many areas of human activities through efficient resource and expert know-how sharing. ARC focuses on intensive computational tasks and associated security and data handling issues, and since it is powerful and efficient, yet simple to deploy, maintain and use, the KnowARC solution is expected to become widely accepted.

The vision of KnowARC is of an application expert sharing procedural knowledge with other members of the extended team by the creation of a specific software tool and associated data. The expert then uses Grid technology to create a know-how sharing environment, provides a characterisation of the field of application, specifies who is allowed to use it, and what kinds of data are available. The efficient clients will facilitate access to such environments. On a larger scale, the KnowARC Grid solution will foster the sharing of know-how between virtual organisations of providers and users.

The result of the project will be extension of ARC to be standardscompliant, interoperable Grid software, offering foundations for know-how sharing services for business and society. KnowARC will transform ARC into coherent, functional next-generation Grid software of industrial quality, ready for deployment on a variety of computing platforms and included into various operating systems distributions.

Relation with EGEE: Interoperability between gLite and ARC (Advanced Resource Connector) middleware.

GGCC EGEE Related Projects



OMII-Europe 01/05/2006 - 30/04/2008 http://www.omii-europe.org/

OMII-Europe is an Open Systems project that endorses both the use of open standards and open source. OMII-Europe has chosen particular open standards for the Grid that it believes are essential to interoperability across global resources. The OMII-Europe vision is:

- to harvest open-source, Web-Services-based, Grid software components from across Europe and
- to supply these Grid services in a form that will enable them to interoperate across the platforms: gLite, UNICORE and Globus.

The emphasis is on the re-engineering of software components rather than on the development of new technology. OMII-Europe will develop a repository of quality-assured Grid services running on these existing major Grid infrastructures. The drivers for OMII-Europe are interoperability, quality-assurance and establishing itself as an impartial broker, giving advice on heterogeneous Grid solutions.

Relation with EGEE: Working with the gLite middleware and ETICS.



OMII-UK 01/01/2004 - 31/12/2009 http://www.omii.ac.uk/

OMII-UK aims to provide software and support to enable a sustained future for the UK e-Science community and its international collaborators. Through our website we provide mechanisms for you to share information about the software you have found useful to support your e-Science work, and share the software that you have produced during your e-Science activities. We support open-source software development by investing in community developers to produce the functionality required by our user community. We draw upon this and other software to provide an easy to install and use open-source software distribution that provides a secure web service hosting environment, web services and the necessary tools and environments to access these services. This software is

supported through comprehensive documentation and training. *Relation with EGEE*: Working with EGEE through OMII-Europe and ETICS.



SEE-GRID-2 01/05/2006 - 30/04/2008 http://www.see-grid.eu/

SEE-GRID-2 (South Eastern European GRid-enabled elnfrastructure Development 2) aims to further advance and integrate the existing SEE Grid infrastructure and services, capitalize on the existing SEE-GRID human network to further strengthen scientific collaboration and cooperation among participating SEE communities, and ultimately achieve sustainability for regional and national elnfrastructures that will endure beyond the project's lifetime.

endure beyond the project's lifetime. Relation with EGEE: SEE-GRID established and maintained close ties with other key elnfrastructure projects, such as EGEE that has the pivotal role in creating and deploying Grid technologies for the widespread uptake of eScience applications throughout the European Research Area. SEE-GRID-2 will pursue an already successfully tested and matured approach of, on the one hand, building on and migrating technology achievements, middleware components, and applications from other international Grid projects (in particular EGEE/EGEE-II), and on the other hand, maintaining an independent test bed environment. This strategy offers to the SEE region a balance of ensuring interoperability and avoiding duplicating effort, while simultaneously guaranteeing sufficient flexibility in the region to allow for innovation and prospering of new endeavours - which eventually helps feed back to other regions and grid projects novel ideas and results.

If your project is related to EGEE, i.e. it *exploits EGEE solutions* or *works together with EGEE on expanding the infrastructure and user base* or *provides specific solutions* but does not appear in the list above, please submit your details via:

http://cern.ch/egee-technical/related-projects/rp.htm

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