

EELA News Bulletin Nº5 – Year 2 June 2007

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EDITORIAL

Ramón Gavela

EELA Project Coordinator

Dear friends,

What could a person who is not only a newcomer to the EELA project, but also its coordinator say that has not probably been said yet? This is exactly what I was wondering when preparing the present editorial.

After due consideration, I have reached the conclusion that the best of EELA is beyond question its people. Special mention is deserved to the members of the TEB, the Work Packages contributors and the groups of the participating countries, together with the PO. You have all managed to create unbreakable bonds of friendship and efficient work. You have also succeeded in guaranteeing that future collaborations between LA and Europe will continue on a steady rise.

The objective of reinforcing the bonds among the participants, which was part of our initial goals, has been fulfilled thoroughly. This objective is still carried out day by day, in time to the sun, which acts as the Pole star guiding us in our friendship.

As reflected by the European Commission (EC) review, the majority of our technical and scientific objectives have been carried out and all thanks to a great team. A grid infrastructure fully operative has been created. Besides, it has been tested with meaningful applications in the fields of biomedicine, high energy physics, climate, etc. The objectives of dissemination and formation, so important for the EELA project, have also been fulfilled.

Nonetheless, in the half year remaining, we must strengthen the built architecture and reinforce the applications, since they are the real proof for the usefulness of the new distributed computing Grid technologies. We hope that in the future they cause a revolution so important to that caused by the Internet. This is a hope that should encourage us to carry on, knowing that it will benefit our countries and, why not, other countries living more isolated from these technologies.

We mustn't forget the recommendations made by the EC. We must try to manage that what it is a reality for us, the EELA project partners, starts to be a reality for the authorities of our countries, because their support it is very important and it will be more important in the future in order to ensure the sustainability of the system. Everything we do in this direction will be very valuable.

In front of us is EELA 2, which has to ensure the sustainability of our construction, promoting not only the initiatives of Grid in all the LA countries, but also the cooperation among them to make the dream of the positive globalisation, to which Grid technologies contributes unifying countries and continents, come true.





Contract no. 026409





Connecting the knowledge of today for the value of tomorrow

Special Report:

BELIEF-EELA CONFERENCE ON E-INFRASTRUCTURES, 25-28 JUNE 2007, RIO DE JANEIRO, BRAZIL

Strengthening e-Infrastructure collaboration on an international scale and across diverse sectors is the primary objective of the 1st BELIEF-EELA International Conference, that is going to be held during next week in the Hotel Glória in the city of Rio de Janeiro, Brazil.

This Conference will bring together players from science, R&D, developers of new applications, as well enterprises, both early adopters and potential users, who can learn about how more powerful e-Infrastructures have the potential to bring about a sea-change and offer the possibility of reaching out to communities spread over long distances, bringing enormous benefits for learning, healthcare, government services and ultimately for business development. The Conference will facilitate the aggregation of research institutions across Latin America, and demonstrate to decision-makers the need for policies fostering e-Infrastructure deployment to accelerate innovation and development

Sustainability, Interoperability, Biomedical Informatics / e-Health, Mobile and e-Infrastructures Convergence, e-Infrastructures Enabling Earth Science, Scientific Repositories / Future Knowledge, High Energy Physics, Quality Assurance: current solutions and future challenges, Distance and e-Learning, Culture - Arts and Humanities Applications, Security & Certification, e-Infrastructures for Development, are the main topics that will be addressed during the Conference. And talking about topics, in the following two articles written by Stephanie Parker - BELIEF-EELA EU Press Contact - you will discover the key importance of some of them.

María José López Pourailly

First Belief-EELA joint Conference 25th to 28th of June Hotel Glória, Rio de Janiero, Brazil http://www.belief-eela.org/



Belief

e-Infrastructures Conference

Connecting the knowledge of today for the value of tomorrow

Conference Overview

Day 1 -Leading Voices Welcome Participants to Rio!

The conference opens with a Welcome Address by Dr Paulo Lopes from the EC Delegation to Brazil. Dr Lopes highlights areas of mutual interest and the importance of international co-operation for e-Infrastructures. Leading figures from the world of e-Infrastructures deliver keynote speeches, elucidating key issues and visions that will set the scene for further discussions during the parallel sessions. Keynotes are made by Fabio Nascimbeni from the WINDS-LA project; Ramon Gavela, director of the EELA project; Ognjen Prnjat, GRNET (Greece), Wolfgang Gentzsch, D-Grid. Bob Jones, director of the EGEE-II project joins the conference through a live link to present some of the key achievements of the project and the year ahead.

Getting Focused!

The programme for Day 1 addresses three key issues themes: Distance and e-Learning, Interoperability and Sustainability. The Snapshot on Sustainability hightlighs some to the challenges ahead and brings a perspective also from Europe. Fotis Karayannis, GRNET; Wolfgang Gentzsch, D-Grid and Florencio Utreras from CLARA are the experts presenting in the Sustainability session. Interoperability experts include two representatives from the University of Computer Science, Cuba Longendri Aguilera Mendoza and Noel Moreno Lemus, in addition to Jesus Cruz Guzman, University of Mexico. During the e-Learning Session, attendants hear from Marco Túllio Carvalho de Andrade, EPUSP, Brazil; Graça Bressan, also from EPUSP; Maikel Dominguez Garcia, from Cubaenergia and Nelson Maculan, Secretary of Education of the Rio de Janeiro State.

Day 2 - Powering the Humanities, Medicine and Research

The second day of the conference features an interesting mix of themes, ranging from Earth Sciences to the emerging e-Humanities. The article on Enabling Earth Sciences in this issue takes an in-depth look at this session. Kim Veltman explores the fascinating theme of a networked culture, an idea that has its roots in the visions of a Global Brain Gehirn der Welt, 1906). This talk presents a brief review of technological developments and milestones in memory institutions, focusing on seven application areas that have evolved in parallel over

the past decades, namely, Tourism, Architecture, History, Entertainment, Education, and Gaming. Several waves of convergence are further changing the landscape, such as bringing an integration of these efforts and leading to new interplay between four hitherto separate themes, i.e. mapping, reconstructing, recognition, and embedding (sensors). This brings enormous potential for education, the entertainment industries and knowledge organisation generally and is poised to transform our visions of future needs for e-infrastructures.

The session dedicated to Biomedical Informatics is led by Yannis Ioannides, Athens University, Greece; Marco Antonio Gutierrez, Instituto do Coração HC/FMUSP, Brazil; Rodrigo Weber dos Santos, Universidade Federal de Juiz de For a, Brazil; and Guilherme Oliveira, FIOCRUZ-MG, Brazil.

The Security Session brings on board experts like Adrianno Rippa, Engineering, Italy; Vinod Rebello, Universidade Federal Fluminense - Depto. de Ciência da Computação, Brazil; and Carlos Fuentes, RedIRIS/Red.es, Spain. More information on Scientific Repositories can be found in the dedicated snapshot.

Day 3 - Users, Applications and future Development

The programme offers a range of challenging themes and innovative approaches to attendants, with sessions focusing on Certification, High Energy Physics, e-Infrastructures for development, mobile and infrastructure convergence, and quality assurance. Current solutions and future challenges in the domain of quality assurance are discussed and evaluated by Guillermo Diez-Andino Sancho, CERN, Switzerland; Jorgen Boegh, Delta, Denmark; Jose Carlo Maldonado, University of São Paulo; and Guilherme Horta Travassos, COPPE/UFRJ, Brazil. Denis Gabos, Escola Politécnica, Brazil, sheds light on the future of networking in the mobile and e-Infrastructure convergence session. More on the HEP and e-Infrastructures for development can be found in the special snapshots.

Thursday 28 June brings together a number of dedicated teams put on their 'Thinking Caps' to 'brainstorm' ideas on the future developments of e-Infrastructures in both Europe and Latin America.

Check out the snapshots in this issue for more!





Connecting the knowledge of today for the value of tomorrow

Towards a more sustainable Infrastructure: A two-sided Coin

Top priorities to ensure the further development of e-Infrastructures woven between Europe and Latin America are widely viewed to be sustainability, the creation of certification authorities, and the involvement of policy makers. During the keynote speeches and the Sustainability Session (Monday 25 June) experts offer insight into national and European initiatives designed to ensure the long-term benefits of e-Infrastructures for both scientific and business communities. Conference attendants can learn about the main strategic steps towards a sustainable infrastructure, the current status and the next steps to make it a reality.

Stephanie Parker, BELIEF EELA EU Press Contact

The next-generation European Grid infrastructure for research will comprise National Grid Initiatives (NGIs) responsible for operating the multi-disciplinary national Grid infrastructures, which are co-ordinated by a central body currently referred to as the European Grid Initiative (EGI). NGIs will carry out a range of activities, such as co-ordinating, promoting and organising Grid-related activities at a national level. NGIs may also be active in Grid deployment, operations, applications support, research on Grid technologies and dissemination. Driven by the needs and requirements of the research community, EGIs and NGIs are expected to enable the next leap in electronic research infrastructures, thereby supporting collaborative scientific discoveries and leveraging innovative business solutions. EGI, which will link existing NGIs, already supports the set-up of new NGIs. It is paramount that the process of establishing EGI links incorporates links to non-European partners around the globe. This session serves as an incentive to discuss the incorporation of Latin American NGIs into a global sustainable grid infrastructure.

Prof. Dr. Wolfgang Gentzsch, co-ordinator of the German D-Grid Initiative and co-chair of the e-Infrastructure Reflection Group (e-IRG), focuses on one the key objectives of the D-Grid initiative, which is to build a sustainable infrastructure for e-Science and their industrial partners. D-Grid has developed a number of strategies to achieve this goal. These strategies concern areas like designing and building the Grid architecture, managing a large Grid and application community, enabling and supporting the transition from research to professional Grid services to industry.



A Latin American perspective is offered by Florencio Utreras - CLARA, Uruguay. Evidence clearly shows that the Information Society is advancing at different rates in different parts of the world. The difference between the North and the South in many areas is commonly referred to as the Digital Divide and is linked to a possible increase in the differences between wealthy and developing nations. In a presentation entitled 'RedCLARA – an Opportunity for Science and Technology in Latin America', Florencio Utreras – CLARA, Uruguay – discusses Scientific and Technological domains and access to Research & Education Networks. This talk highlights how Europe is supporting concerted efforts to close that gap, through projects like ALICE, and how sustainability of the project is inextricably bound up with continuing support form both Europe and Latin America.





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Connecting new Knowledge to Enable Earth Sciences

Global environmental challenges call for concerted responses on the part of the international community and in recent decades scientists have increasingly focused attention on far-reaching environmental threats that transcend national boundaries. The conference addresses a range of top-level challenges, bringing new knowledge that is essential if we are to tackle climate problems that have such devastating effects on human and the environment.

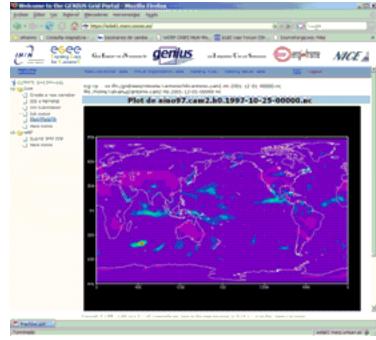
Stephanie Parker, BELIEF EELA EU Press Contact

Evidence suggests that El Niño, a disruption of the ocean-atmosphere system in the Tropical Pacific with important consequences for weather and climate around the globe, is becoming more frequent as a result of global warming and that it could exacerbate health problems in many parts of the world. This phenomenon is associated with excessive flooding, the prime cause of cholera and other water-borne and food-borne infections, to which children are particularly susceptible. EELA is developing a new integrated application on Climate in the Grid Environment to predict the impact of El Niño in Latin America. Simulations running on this application, which has no counterpart in EU-funded initiatives on Earth Science and Climate, are expected to have a huge impact on addressing the social and economic effects of El Niño in the region. Rafael Mayo García -CIEMAT (Spain)-, Manager of the

EELA Work Package 3 - Identification and Support of Grid Enhanced Applications, has highlighted the benefits of using the Grid for this application, such as sharing computing resources, heterogeneous data and know-how in a user-friendly environment. A sequence of jobs demand middleware solutions for preparing and submitting dependent jobs/data sharing (workflow); re-starting interrupted experiments; and managing metadata for data sets and application status. This is because three different climate tools are run in sequence and the output of the first one serves as input for the next one. With this technology the right resources are available at the right time, helping to generate knowledge more efficiently.

But El Niño is not the only challenge facing the region. The environmental impact of oil and gas activities is another key issue. The environmental risks associated with these activities in the Amazon State is a good case in point. Atech, a Brazilian organisation that has been working to address these challenges is presenting its vision for e-Infrastructures enabling the Earth Sciences. Atech has been paying special attention to natural resources and the potential impact of human activities on the environment, developing the necessary









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skills through its participation in dedicated projects like the Amazon Surveillance System – SIVAM, and PIATAM – Potential Impacts and Environmental Risks of Oil and Gas Industry in Amazon State, as well as SNIRH – National Information System of Hydro Resources, Weather Information Management Systems.

Additionally, the Enabling Earth Science session of the Belief-EELA Conference features a presentation on applications for Earth and Environmental Sciences by Professor Wolfango Plastino, INFN (Italy). Part of the presentation focuses on Atmospheric and Oceanic Fluid Dynamics and Climate Change. The Benthic Boundary Layer (BBL) is the dynamic interface between lithosphere (seafloor) and ocean (seawater) where many physical, geo-chemical and biological processes occur playing an important role in environmental global changes. Lithospheric processes at the BBL impact the marine environment at different temporal and spatial scales. Earthquakes produce short-term effects (landslides and tsunamis) that threaten the lives and economy of coastal communities, while the out-gassing of greenhouse gases and mineral-rich fluids impact long-term global climates and the formation of economically important mineral resources. The presentation looks at BBL dynamics, which are not fully understood. For example, further research could shed light on how BBL is perturbed by energy and mass release from the seabed (seismicity, heat flow, gas diffusion, biological productivity, diagenetic reactions), what distances the particles and waves can be transported, as well as the evolution and fate of bottom currents and storms. Professor Plastino also evaluates challenges and solutions and challenges regarding Solid Earth Physics and Satellite Remote Sensing.

The AugerAccess Project is also under the spotlight in Rio. One of the project goals is to improve the communication link between the Auger Observatory (Malargüe, province of Mendoza, Argentina) and the CLARA network in Argentina and subsequently to international networks. At the start of the project, the transmission capacity could not cope with the huge amount of data generated each year with scientists having to hand-carry some of the data stored on disk to Mendoza, about 400 km to the north, hampering monitoring at the observatory. Professor Giorgio Matthaie, Rome University (Italy) will be showcasing some of the achievements to date and outlining the challenges ahead. Milestones for the project include a feasibility study for upgrading the communication infrastructure of the Auger Observatory, defining the tender procedure for the fibre optics link, and implementing a new dynamic database storing all the data on the calibration of the detectors and properties of the atmosphere on the Observatory site. Of special interest to Earth and Atmospheric scientists is the data collected at the Observatory, chiefly by a LIDAR (Light Detection and Ranging) system.

Mark 25-28 June 2007 in your Diary and Join BELIEF-EELA at the e-Infrastructure Conference in Rio de Janeiro, Brazil

With a mix rich of sessions, the BELIEF-EELA conference promises to be a key event for the scientific and business communities in Europe and Latin America. The conference offers attendants valuable insights into the trends and visions of the evolving e-Infrastructures ecosystem in Latin America and Europe by providing a co-operation platform to promote knowledge sharing between actors from business, research, government, and academia. This issue brings a series of snapshots and special reports on the conference sessions and media partner, CORDIS.

To connect the knowledge of today for the value of tomorrow, register now at http://www.belief-eela.org/

The BELIEF-EELA conference team look forward to welcoming you in Rio!





Connecting the knowledge of today for the value of tomorrow

Connecting Global Knowledge through Scientific Repositories

The session dedicated to Scientific Repositories (Tuesday 26 June) explores different kinds of content repositories serving as infrastructures for scientific activities across the world. Presentations address the harnessing of e-Infrastructures for a reliable digital content-provision service on a large scale, as global Knowledge Infrastructures and as easily accessible as just plugging into an electricity Grid.

Stephanie Parker, BELIEF EELA EU Press Contact

Professor Fabricio Silva – Santos Catholic University – presents the IntegraEPI grid, which is an OGSA-compliant Grid infrastructure for epidemic surveillance. IntegraEPI integrates data and computing resources from several research and government institutions in the state of Sao Paulo. Services comprise access to several public health data repositories. The final part of the presentation looks at the future interoperability between IntegraEPI and EELA.

Franco Zoppi – CNR, Italy – showcases the Digital Library (DL) developed for the BELIEF project. The DL offers a unique access point to learn about and use elnfrastructure technologies, and disseminate new knowledge. The DL has been designed to simplify access, search and preserve research Infrastructure documents; enable knowledge-sharing between the providers of documentation; and serve the needs of e-Infrastructure projects. The DL provides a broad spectrum of documents like interactive training, videos, reports, case studies, presentations, articles, deliverables, and more. Collections can be created on-line, both virtually and physically, to cater for specific needs. The DVD, *Creative Connections*, is an upcoming feature on the DL and presents four EC-funded flagship projects: DEISA, EGEE-II, GÉANT2and OMII-Europe.

Dr. Luis A. Núñez – Centro Nacional de Cálculo Científico, ULA (Universidad de Los Andes), Venezuela – shares his visions for the future e-Infrastructure evolution in the field of Institutional Repositories as a new way to disseminate academic knowledge. The core mission of universities and higher education institutions is to produce and disseminate knowledge and to preserve this knowledge. Current efforts in Latin America and Venezuela in particular, are limited but provide some valuable insights that will pave the way for this new facility. The institutional repository at ULA is a good example of how technology can help store, manage and disseminate digital material generated by the institution. Experience has showed that the main challenge is cultural rather than technical, so concerted efforts are needed to develop processes and strategies to promote this new form of research.

Dr Kai Kumpf – Fraunhofer SCAI, Germany - Semantic Grid: Promises and Opportunities. The Grid has presented us the vision of a virtual desktop where the user can access virtualised resources according to domain-adapted requirements. The particular settings and approaches adopted by the EC-funded project, SIMDAT. The talk makes comparisons between the ideal semantic Grid and existing engineering-minded solutions.





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Getting Down to Business:

e-Infrastructures for Enabling Businesses

The session dedicated to Scientific Repositories (Tuesday 26 June) explores different kinds of content repositories serving as infrastructures for scientific activities across the world. Presentations address the harnessing of e-Infrastructures for a reliable digital content-provision service on a large scale, as global Knowledge Infrastructures and as easily accessible as just plugging into an electricity Grid.

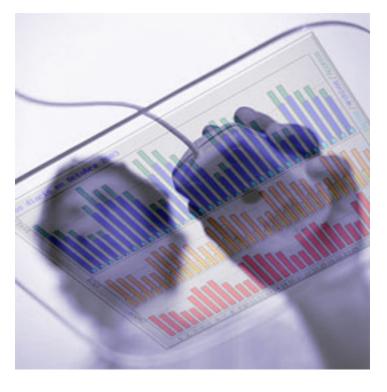
Stephanie Parker, BELIEF EELA EU Press Contact

The Business Track (Tuesday, 26 June 2007) looks at the challenges and solution for further adoption, major trends in Latin America, and the emerging business models for framing such collaborations. Pioneering case studies are showcased and future visions of research-industry collaboration discussed.

Giovanni Giovanazzo – Engitech, Ireland – explains how e-Infrastructures can help shape business opportunities. This talk takes a look at sectors that are already benefiting from adoption, such as the media industry, including telecommunications, broadcasting and entertainment. Bio-informatics and Biomedicine, where research and diagnosis are brought together by technological convergence, are

also reaping the rewards. Pharmaceuticals are carrying out more computational work and 'research and development in silicon', as a means to lower costs. By distributing virtual product development, engineering companies are improving product quality, bringing products to market faster and reducing costs and risks. However, a number of barriers stand in the way of broader adoption. This presentation discusses key barriers, like the need to clarify the rules governing academic and commercial infrastructures, to define models of collaboration between academia and business, and to produce evidence-based marketing to help drive forward business adoption.

The financial services sector is often at the forefront of new technology in the search for an edge in the marketplace. The industry is poised for more pervasive adoption, not only by top investment banks but



also by smaller banks and hedge funds. The Grid, with specialist hardware and the integration of HPC resources likely to happen in the near future, is used to calculate risks, price derivatives and as a complex instrument to search for money fraud patterns and shorten reporting times. Mario Eduardo Magallhäes – Unibanco, Brazil – brings a Latin American perspective on adoption by this sector.

The Business Track also features a presentation by Milon Gupta – Eurescom, who focuses on the Pan-European Laboratory. Funded by the EC, PanLab is based on the concept of a federation of distributed test laboratories and test-beds that are interconnected and provide access to required platforms,

networks and services for broad interoperability testing. The goal is to enable the trial and evaluation of service concepts, technologies, system solutions and business models to the point where the risks associated with launching them as commercial products will be minimised. The outcome will assist many different European collaborative projects, is an important step towards the establishment of a truly pan-European collaboration.



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Next Generation HEP Experiments

The Worldwide Large Hadron Collider (LHC) Computing Grid will deliver the infrastructure for the data processing of next generation experiments in the domain of High Energy Physics (HEP). The session on High Energy Physics is dedicated to recent outcomes of HEP experiments with particular reference to work the LHC, a powerful particle accelerator currently under construction at CERN near Geneva, Switzerland. The collider is due for start-up in 2007 and will produce an estimated 15 petabytes per year. That's the equivalent of a stack of CDs more than 20km high!

Stephanie Parker, BELIEF EELA EU Press Contact

The focus of Research and Development lies in virtualisation and Service Oriented Architectures (SOA), working on management concepts and high availability solutions for virtual infrastructures. Dr Marcel Kunze - Forschungszentrum Karlsruhe, Germany - discusses Grid applications in Particle Physics, offering valuable insight into problems solved and the challenges ahead. A worldwide Grid service has been established, building on two key production infrastructures: those of the Open Science Grid (OSG) in the Americas, and the Enabling Grids for E-sciencE (EGEE) Grid in Europe, as well as further participating partners all over the world. Of special interest are services for the management of data and services for the management of virtual organisations. This talk summarises lessons learnt and highlights the needs for future e-Infrastructures to support general sciences. Interoperability is a key issue and virtualisation techniques might play an important role in the path towards ubiquitous and platform independent Grid services.

Dr Sergio Lietti – IFT/UNESP, Brazil – evaluates several Academic Grid Initiatives in the state of São Paulo, taking a detailed look at the operations of the São Paulo Regional Analysis Center (SPRACE) facility, which is part of the Open Science Grid and participates in the data processing and simulation for DZero and CMS Collaborations. Additionally, this talk gives an overview of the GridUNESP project, the first Campus Grid initiative in Latin America, which will provide high performance computing resources for several research groups at the University, including High Energy Physics, Genomics & Cancer Studies, Geological & Hydrographic Modelling.

Reaching out to a Wider Community

Empowering the most vulnerable members of society is undoubtedly the biggest challenge of all. The policy of extending e-Infrastructure connectivity is an important step towards further development and a valuable tool for reducing the digital divide. The session on e-Infrastructures for Development evaluates the realities of this objective, obstacles that need overcoming and key success factors. Case studies from different regions of the world, such as India and Cuba, will provide the backdrop to explore experiences and needs from a truly global perspective.

Stephanie Parker, BELIEF EELA EU Press Contact

Grids are recognised as a key enabler for promoting research, innovation and global science. Grids can provide access to vast scientific and computing resources by making a relatively small investment in a local infrastructure. Potential benefits to developing countries are considerable, enabling scientists wishing to join international collaborative initiatives and make their own contribution to foster advancements in specific areas. This is just of the benefits that deserve to be investigated seriously. An excellent case study is offered by the presentation on the EC-funded project, EU-IndiaGrid - Joining Europe and Indian Grids for e-science network community, which promotes access to Grid infrastructures. Dr Alberto Masoni project director - discusses the main objectives of EU-IndiaGrid, sharing experiences and visions with a wider community. One important achievement of the project is building a community of 300+ members from 200 individual institutions from academia, research and industry. Additionally, Dr Masoni explains how the objectives of EU-IndiaGrid are closely connected with a key recommendation of the Organisation for Economic Co-operation and Development Global Science Forum.

Daniel López Aldama, from Cubaenergia, presents a particularly interesting case study from Cuba. Within the framework of the Cuban Science Network and the EELA Project, an e-science infrastructure was deployed at the Centro de Gestión de la Información y Desarrollo de la Energía (CUBAENERGIA). To overcome connectivity problems and limitations, a stand-alone deployment model was adopted. This e-infrastructure is based on EGEE's gLite-3.0/gilda middleware and is fully compatible with the EELA-infrastructure. EGEE'S Grid





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middleware, gLite, is distributed under a business friendly open source licence, and integrates components from a number of middleware projects as well as specifically developed components. gLite features improved security and interfaces for data management and job submission, in addition to a re-factored information system and other improvements that make gLite both easy to use and effective.

The e-infrastructure developed in Cuba is available for local users. It provides both a viable solution for national networks with bandwidth limitations and an example of how problems can be solved through dedicated efforts.

CORDIS: A Belief - EELA Conference Media Partner

CORDIS is the official service for information on participation in the EU research programmes. The online service offers free information, partner opportunities and interactive features to help people and organisations participate in, and fully benefit from, the EU research funding and support schemes. CORDIS is the official service of the Publications Office.

The RTD-News Service provides a broad spectrum of accurate, up-to-date news relating to all aspects of EU R&D activities. The various magazines are essential reading for current and potential participants in European-funded research programmes as well as decision-makers and business players interested in the latest EU technological developments.

CORDIS focus Newsletter - brings selected articles from the CORDIS News Service. Each monthly edition reviews the most recent and important developments in European research & innovation, including policy discussions, EU-funded projects & research results, calls for proposals and tenders and upcoming events.

CORDIS focus RTD Results Supplement – provides a snapshot of the most representative exploitable research results and technology offers available on the Technology Marketplace Service. Published 10 times/year, this magazine focuses on biology and medicine, energy, environment, IT, telecommunications and industrial processes.

European Innovation – offers insight into the latest 'hot topics' of innovation policy and case studies of innovation practice from across Europe. Published six times/year, each issue gives in-depth coverage of topics of interest based on interviews with practitioners, policy-makers and Commission officials.

RTD info – brings information updates about EU Community research programmes, such as proposals, events, conferences,

publications, as well as news coverage of research project results. RTD info is aimed at current and potential participants in Community research programmes and a wider audience comprising manufacturers and decision-makers interested in learning more about the latest developments in EU research. TRD info is published 3 times/year.

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Publications in Spanish include CORDIS focus Newsletter (paper version), European Innovation, and RTD info.



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EELA HAD A TRULY FERTILE 6th WORKSHOP IN CUBA

The 6th EELA Workshop was held in Varadero, Cuba, on May 28th, but two days before the meeting, the EELA mission in Cuba already indicated to be very fruitful.

On May 26^{th} , the TEB members present in Cuba were invited to a local Grid demonstration session at CITMATEL - the Cuban NREN - headquarters in La Havana, where the progresses made by the Cuban partners since their participation in the 1^{St} EELA School (EGRIS-1) were showed. The demonstrated accomplishments were so well received, that during this meeting arose the idea of organizing a 3^{rd} EELA School in Cuba, on November, with the EGRIS-1 exstudents now acting as tutors. Besides, two researchers from CUBAENERGIA – the Cuban EELA partner - where invited to share their experience presenting a talk at the Belief-EELA Conference that is going to be held during next week in Rio de Janeiro, Brazil (June 25-28).

The discussions continued two days later, in the Hotel Meliá Varadero, where the public workshop took place. With a very high-quality audience, formed by a selected group of vice-ministers and researchers from new communities interested in joining EELA, as well as EELA current members, the EELA mission continued being fruitful: three researchers were invited to present their case study at the Conference in Brazil and four groups were strongly encouraged to register at the EGRIS-2, which is going to be held in Mérida, Venezuela.

Concerning the current connectivity limitations faced by Cuba, the TEB heard by the Cuban partners that the construction of a submarine cable connecting Cuba to Venezuela is currently in execution phase. "We expect Cuba can change their status from 'stand-alone site' to a 'production site' within two years, what would be very valuable for a future EELA-2 project", complemented Leandro Ciuffo, one of the TEB members present at the Workshop.

Concluding, the 6th EELA Workshop wasn't the best in number of attendees, with just 25 participants, but for sure was one of the best in quality and results, as well as in hospitality, provided by the Cuban friends.











Vinod Rebello:

MANAGER OF THE UFF LACGRID CA, WAS ELECTED CHAIR OF TAGPMA

The Americas Grid Policy Management Authority (TAGPMA) is now lead by Vinod Rebello, representative of the Computing Institute of the University Federal Fluminense (Brazil) in the Work Package 2 - Pilot Testbed Operation and Support - of the EELA Project, and Manager of the recently approved UFF LACGrid Certification Authority.

María José López Pourailly and María Paz Mirosevic Albornoz

A few months ago UFF Latin American and Caribbean Catchall Grid Certification Authority (UFF LACGrid CA) passed its operational review, and therefore was entitled to be included in the IGTF's (International Grid Trust Federation) list of accredited CAs. That was a great achievement for the EELA Project, and of course that achievement was a goal that had a surname: Rebello. Yes, because the effort of Vinod Rebello was a great part of it. And now that effort has been fully recognized by the members of TAGPMA who have elected him as the new Chair of the institution.

The TAGPMA election results were given on May 22nd, and the nominees as before for each office were (listed alphabetically):

Chair: Javier Diaz, UNLP

Scott Rea, Dartmouth Vinod Rebello, UFF

Vice Chair: Bob Cowles, SLAC

James Marsteller, PSC

Secretary: Jim Marsteller, PSC

Margaret Murray, TACC

Finally, the listed positions were given to Vinod Rebello, Chair; James Marsteller, Vice Chair, and Margaret Murray, Secretary. The terms for new officers took effect on May 22nd.

For EELA the nomination of Rebello means a huge success, totally unthinkable 17 months after the project started. In words of the new Chair of TAGPMA: "This is a great success for the EELA project! This does not only reflect the importance of the EELA project to the Latin American research community but also it is the recognition of both the quality and sincerity of the work being carried out by all of the EELA members in LA and of how much has been achieved in such a short time".

Although it is still not clear if the TAGPMA new officers are going to hold their positions for one or two years, Vinod has huge goals in mind, and about that and of course about EELA we spoke with him in this interview.

Which are the next activities for the new Chair of TAGPMA?

I am currently involved with organizing and setting the agenda for the 5th TAGPMA Face-to-Face Meeting which will be held in Banff, Canada, from the 16th to 18th of July, 2007. As well as the usual work on the accreditation of new CAs, discussions on the effects of evolving technologies and the requirements of relying parties and wishes of users, I want to take a look back at the first 18 or so months of the TAGPMA and see what we have learnt and where we can improve as a service to the Grid and PKI communities. As well as an active mailing list, the TAGPMA also maintains fortnightly video conferences to keep track of on-going activities and to allow members to discuss the latest issues.

Between March 2006 and March 2007 four face to face TAGPMA meetings have taken place, how many EELA CAs have been accredited since those events started?

So far, only one CA has been fully accredited and included in the IGTF distribution. The UFF BrGrid CA (the Brazilian national CA) has been operating as an IGTF accredited CA since July 2006. This was the first CA to be accredited by the TAGPMA. Since then however, the accreditation process for the TAGPMA has been reformulated. This is now a three step process. Accreditation is the approval of the document that defines the policies and practices of the CA. Next, an Operational Review is carried to verify if the CA is indeed operating in accordance with the previously approved policy. Both the REUNA CA (Chile) and UFF LACGrid CA (Catch all CA) have completed this stage. Finally, an administrative step requires the secure transfer of CA information to David Groep, chair of the IGTF



and maintainer of the IGTF CA distribution and to an independent third party repository (TACAR). Since meetings between TAGPMA members and David are restricted to the TAGPMA face-to-face meeting, we are working a more agile set-up to complete this final stage. Also just recently, TACAR has dropped it restriction to European CA's only and has modified it strict acceptance procedures. The PMAs most now adapt their process to meet these requirements.

Are there any other EELA CAs waiting to be accredited? Which one and when do you think this will happen?

Both the Argentinean and Mexican CAs are practically ready and the Venezuelan CA is well on the way. If all goes well we hope to have the Argentinean, Chilean, the Catch-all and perhaps the Mexican CA all in the next IGTF distribution due out at the end of July.

What are your objectives as Chair of TAGPMA?

My goals are to help the TAGPMA continue to grow and flourish not only in terms of membership, but also in terms of developing of policies to foster trust between grid communities; help publicize and encourage the use of certification and development of PKI in LA. The TAGPMA is new and just finding its feet, I aim to devise a roadmap for the following year which will help the role of the TAGPMA to continue to evolve. The principal role of the TAGPMA is to define appropriate authentication policies and accredit new CA in accordance with such policies. While some initial objectives include getting the remaining EELA CAs fully accredited and into the IGTF distribution as soon as possible, it is important to evaluate the work done so far in terms of creating new policies and streamlining the accreditation process to see where improvements can be made.

From the creation of the TAGPMA to now, how has this authority evolved, respect to their pairs in Asia Pacific and Europe?

While the Europeans had their first meeting back in 2000, long before the IGTF existed and the APGrid PMA in November 2005, the first TAGPMA meeting took place in March 2006. Before this there were just two CAs from the Americas in operation and both were members of the EUGrid PMA. With the advent of the EELA project and new national CAs being set-up, the TAGPMA has been forced to evolve and get operational very quickly. This in turn has attracted attention and involvement from other laboratories and Grid programs like TeraGrid and from other PKI initiatives including the US federal government and national education initiatives in the US and Brazil for example. Interoperability with these other



initiatives and the associated technologies is a big issue. Also during this time, the TAGPMA has proposed and is responsible for two of the three currently approved IGTF authentication profiles. With its fortnightly video conferencing meetings and F2F meeting three times a year, it is one of most active PMAs. But credit for the hard work goes not only to TAGPMA members but also to various members of the other PMAs who have help the TAGPMA grow up so quickly.

How is the work dynamics between authorities which belong to de IGTF?

This is excellent and is of tremendous benefit to everybody involved. Any member of a PMA is welcome at any of the PMA Face-to-Face meetings. The participation of members of different PMAs generally means that these meetings are enriched with input and insights from people with a wide range of backgrounds, interests and experiences. Remember that almost all members are volunteers and that they take on this work in addition to their daily workload.

Which are the issues that are going to be addressed during the Fifth Face to Face meeting?

We are still defining an agenda for the 5th Face-to-Face Meeting, but topics will range from the status of the CAs, the accreditation process, a revision of the TAGPMA Charter, updates and feedback on policy documents, new policy profiles etc.



As new Chair of TAGPMA, what would you like to tell to the EELA community?

First of all, I have to thank the EELA project and the EELA members for being given the opportunity to get involved in such project and for the help to set up national CAs across Latin America. These CAs are intuitions which we expect to out live the EELA project itself and thus will stand as proof of what can be achieved with collaboration and team work. The fact that I am Chair is just a reflection of the EELA management team's drive for success. Congratulations to everyone! Remember that EELA is a relying party member of the TAGPMA and, as such, the TAGPMA is here to serve the EELA community in what every way it can. So as the Chair, please feel free to contact me.

TAGPMA is a federation of authentication providers and relying parties headed by a Policy Management Authority of those responsible for grids in North and South America. TAGPMA goal is to foster the cross-domain trust relationships that are needed to deploy grids in the Americas and around the world.

For more information please visit: TAGPMA: http://www.tagpma.org/ UFF LACGrid CA: https://lacgridca.ic.uff.br/



Application candidatures results will be delivered next week:

THE SECOND EELA GRID SCHOOL IT IS ON ITS WAY

EGRIS-2, the Second EELA Grid School, will take place in Mérida (Venezuela), from July, 30 to August, 10, 2007. Built on the successful experience of EGRIS-1 (Itacuruçá, Brazil, December 2006), the



School aims to create the necessary environment in Latin America for the porting of new applications to the EELA Grid Infrastructure. The deadline to submit proposals for applications was the 15th of June, and now the submitters are waiting for the results that are going to be given by the 24th of June 2007.

The Second EELA Grid School (EGRIS-2) builds on the successful experience of the previous edition and aims to create the necessary environment in Latin America for the porting of new applications to the EELA Grid Infrastructure. To fulfil this goal, the EGRIS-2 programme, based both on lectures and hands-on practices, will cover in-depth the main topics of Grid technology, as well as the EGEE/EELA middleware technicalities.

The target audience will consist of researchers both from EELA and non-EELA partners, technical industries, research laboratories, and academic universes. In order to maximize the didactic impact and effectiveness, the number of applications to be ported will be limited to 8-10.

Currently, the Selection Board is analysing and evaluating the application candidatures that were submitted by those groups (composed of at most four persons) interested in participating in EGRIS-2, till the $15^{\mbox{th}}$ of June, which was the proposals deadline date. Only one application per team could be submitted and each application team had to fill the questionnaire available on the web at the URL http://www.eu-eela.org/eela_application_questionnaire.php, describing the application they want to port on the EELA e-Infrastructure, and in addition they had to provide at least one recommendation letter supporting their application.

But that wasn't all, other important condition to be satisfied in order to be admitted in EGRIS-2 was the one of the experience and knowledge about grid technologies of the applicants; according to what has been published by the organisers in the EGRIS-2 website: "Only candidates who have followed at least one of the previous EELA Tutorials or an official training event of any other accredited Grid Projects will be considered for selection. However, candidates who can demonstrate notorious knowledge in the field will also be considered".

Now the Selection Board is ranking both applications and persons for the final approval, which is going to be made by the EELA Technical Executive Board. And there's not too much time for this, because the accepted candidates will be notified by the 24th of June 2007 and invited to fill the registration form to participate in the School.

EGRIS-2 is sponsored by EELA, CeCalCULA and University of Los Andes, Mérida, Venezuela, and is going to be held in the Hotel El Serrano at Mérida, Venezuela.

EGRIS-2 contacts:

Director of the School: Herbert Hoeger (ULA): hhoeger@ula.ve Deputy Director and Chair of the Organizing Committee: Nicolas Ruiz (ULA): nicolas@ula.ve

Technical Manager: Vanessa Hamar (ULA): vanessa@ula.ve

EGRIS-2 Website: http://www.cecalc.ula.ve/EGRIS-2/



During May:

EELA MARKED ITS PRESENCE IN THREE OUTSTANDING EVENTS

The IST Africa (May 9 - 11), the G8-UNESCO World Forum (May 10 - 12) and the LA Grid 2007 (May 15 - 16), are the events in which EELA took place and was able to disseminate its achievements and vision.

IST-Africa 2007 Conference

Part of the IST-Africa Initiative, which is supported by the European Commission under the IST Programme of Framework Programme 6 (FP6), the IST-Africa 2007 Conference & Exhibition took place in Maputo (Mozambique) on May 9th to 11th. It was the second in an annual conference series which aims to promote and facilitate networking and knowledge exchange between the African and European ICT research communities.

EELA marked its presence through a workshop called "eInfrastructures as 'Bridges' across the Digital Gap", proposed by EELA. The workshop started with a general presentation about the project, followed by a presentation about GILDA facilities, both given by Leandro Ciuffo - EELA WP4 Manager.

"The objective of both presentations was to show how non-European countries can benefit from joint projects with European institutes. Mainly for those countries or communities which doesn't have much money to invest in research infrastructure, a common scenario in Latin America. I tried to show our experience in a case study format to the Africans", said Leandro.

The workshop also counted with other two presentations: "Bioinformatics Challenges in Life Science" (by Luciano Milanesi, CNR, Italy) and "Grid-enabled Simulation of the Impact of Exploitation Uncertainty on the Seawater Intrusion of the Korba Aquifer" (by Giuditta Lecca, CRS4, Italy), which won the best paper award at the conference.

The presentation about EELA given at the IST-Africa Conference can be downloaded at: http://documents.eueela.org/getfile.py?recid=719.





Leandro Ciuffo, presenting the EELA Project.



G8-UNESCO World Forum

The G8-UNESCO World Forum 2007 "Education, Research and Innovation: New Partnership for Sustainable Development", was held in Trieste (Italy) on May 10-12, and EELA, EUChinaGRID, EU-IndiaGrid and EUMEDGRID were a part of it by means of a well placed booth devoted to exhibit and promote the scientific distributed computing ongoing projects.

In words of Philippe Gavillet, EELA Project Office Reader Board: "The joint EELA, EUChinaGRID, EU-IndiaGrid, and EUMEDGRID booth was very well placed at the entrance of the meeting room, people could not miss the projects with their banners well visible. The booth was by far the most attended, thanks to the dissemination material including the project brochures and the gadgets distributed. It had a great success through all participants. And there were tens of ministers, secretary of ministers, DGs, Rectors, and other relevant personalities. The Grid projects were well placed within the context of the Forum. They were mentioned several times by the speakers as ongoing world wide collaborations".

The presentations given at the G8-UNESCO World Forum 2007 can be found at : http://www.rvnet.eu/g8forum.

Latin America Grid Workshop

The LA GRID 07 Workshop was held in Rio de Janeiro, Brazil, from May 15th to 16th, in conjunction with the 7th IEEE International Symposium on Cluster Computing and the Grid — CCGrid 2007 (May 14 -17). LAGrid aims to act as a forum for technical presentations of ongoing research, development and relevant activities in the area of Grid Infrastructures, Services and Applications, in the context of and/or in partnership with Latin America. The event focused on bringing together researchers and professionals actively working in this field, promoting multi-institutional collaborations between groups of diverse competences.

LA GRID 07 started with the presentation of the CLARA representative in EELA, Michael A. Stanton (Director of Innovation of RNP, the Brazilian NREN), entitled "The Current Situation and Perspectives for e-Science in Latin America". After Stanton's view, it was the time for the "Technical Session: Promoting e-Science collaborations in LA", that was opened with the presentation "Building a Grid in Latin America: The EELA Project e-Infrastructure", given by Diego Carvalho. The title and the contents of this presentation were also the title and contents of a paper that was written by Bernard Marechal,



Pedro Henrique Rausch Bello and Diego Carvalho, that as it says on its conclusion part, it presents "the EELA e-Infrastructure and the project evaluation metrics, which attest the success of the project, one year after its launching. Thanks to this e-Infrastructure, Latin America deployed its own Grid Certification Authorities (Public Key Infrastructure), Grid Operations Centre and Grid knowledge and competence. This outcome is contributing to diminish the digital divide. The new WP2 challenge, during the second year of the project, will be the creation of a Latin American production quality grid e-Infrastructure".

That wasn't the only space for EELA in LA GRID 07, during the "Technical Session: Grid applications for LA", held on May 16th, Pedro Henrique Rausch Bello gave the presentation entitled "Applications ported to the EELA -Infrastructure".

"We profit the workshop to extend our contacts in Latin America and beyond; I mean people from Colombia, Brazil, the Netherlands, etc", said Diego Carvalho who was invited to organise the next LAGrid Workshop.

The Latin America Grid Workshop, LA GRID 07: http://lagrid07.lncc.br/

7th IEEE International Symposium on Cluster Computing and the Grid: http://ccgrid07.lncc.br/



SENAMHI is almost ready to use its connection to RedCLARA

THE EELA PERUVIAN PARTNER WILL INCORPORATE ITS SITE TO THE TEST BED IN SHORT

About the new connection, Richard Miguel San Martin, the SENAMHI (National Service of Meteorology and Hidrology of Peru) representative in EELA, said: "SENAMHI was one on the few EELA partner institutions that didn't have an advanced Internet connection and thanks to the support of CIEMAT and to the compromise of the authorities of our institution, the connection to RAAP and therefore to RedCLARA has been well achieved, and by using this connection we hope to unite our site to the EELA test bed in a short while".

María José López Pourailly

RAAP is the Peruvian research and education network and it is connected to the advanced Latin-American network, RedCLARA, since 2005. Therefore, the natural way to connect SENAMHI to RedCLARA was through RAAP, and that is exactly what SENAMHI and EELA have been trying to do since early 2006. Why? Simply, to make the Peruvian climate expert institution site a part of the EELA test bed.

Finally the physically connection was done in May, but due to addressing problems it was non operative till the first week of June.

The connection requirement was of a link of Dark Fiber of 2 Mbps, but because of the technical issues SENAMHI is running up to 1 Mbps, which should change within the next months.

The SENAMHI infrastructure is connected to RAAP and the network tests with the installed equipments started during the second week of June.

"For SENAMHI it has been very important to make this connection a reality, because that allows us to reach an enormous amount of possibilities in scientific and technologic terms. The connection to RAAP will allow SENAMHI to interconnect with different research centres at a national and international level, and therefore to develop collaborative projects", said Richard Miguel San Martín.

Related links:

SENAMHI: http://www.senamhi.gob.pe/

RAAP: http://www.raap.org.pe/ RedCLARA: http://www.redclara.net



Universidad de Los Andes, Venezuela

AN EELA MEMBER INSTITUTION CREATES A PORTABLE AND VIRTUAL BIOINFORMATICS LABORATORY

CeCalCULA propels the creation of a Virtual Laboratory in Bioinformatics in a single "Live" DVD, thanks to the efforts of the Free Software Unit of the Technological Park of the University of The Andes (ULA).



CeCalCULA (www.cecalc.ula.ve/en), in its continuous quest for innovating in information technologies to fulfil the continuous necessities and expectations of its academic and scientific community at a regional level, challenged the Free Software Unit (nux.ula.ve) of the Technological Park of the ULA (cptm.ula.ve) to produce a DVD with frequent software applications, in the area of the Computational Biology, that could be used to solve public health problems.

The answer to the challenge is a DVD - a LiveDVD (the details of this definition can be consulted in http://nux.ula.ve) - codenamed Bio-ULAnix, with more than 220 Bioinformatic programs installed and ready to work, "just a click" programs, freeing the end user of any worry about installation details.

Also, the DVD has information of about ten complete bacterial genomes so that it can be a source of input data for typical problems in courses of sequence analysis taught in graduate programs of Cellular Biology, Biotechnology as well as the elective course in the Interdisciplinary Academic Program (PAI: Programa Académico Interdisciplinario) of the ULA Faculty of Sciences.

The selection of the different applications in the DVD had to do with the continuous training work of CeCalCULA in the region, such as the Workshop on Tools for Sequence Analysis with more than ten years of experience, and by supporting the needs of graduate students in Biology and Biotechnology at the University of The Andes.

Why a DVD? Bio-ULAnix will allow the academic and research community to take advantage of the great amount of computational applications in Bioinformatics that have been specifically developed for the GNU/Linux Free Operating System. This, without the users having to worry about installing and tuning their own Linux. Bio-ULAnix becomes, thus, an easily transportable Biocomputing Laboratory.

A lighter version for a regular CD or a USB memory is envisaged. However, the challenge raised in this first version was to offer to the users a complete set of integrated applications in the same work environment consolidated on the GNU/Linux operating system.

Requirements to run the DVD: to execute Bio-ULAnix a standard DVD drive unit is needed, and at least 256 Mb of RAM memory (recommended 512 Mb). It is essential that the machine is configured so that it can boot from the DVD drive unit. In case of doubts, please feel free to call to the Free Software Unit at the Technological Park through the telephone +58 274 2401125 or by the e- mail: nux@ula.ve.

Your help is welcome: Bio-ULAnix should be seen as a virtual laboratory able to cover the needs in the Computational Biology area, and particularly designed for the academic and scientific community, and for that reason commentaries, critics and formal questions on the matter are highly appreciated. Please use the forum, wiki and blogs available at the project portal http://nux.ula.ve, where you will also find a collection of frequently answered questions (FAQ).



Where can Bio-ULAnix be obtained: Bio-ULAnix (beta version 1r3) is going to be distributed among the cellular biology and biotechnology graduate students as well as in workshops supported by CeCalCULA. If you wish to have a copy of Bio-ULAnix, please call (Venezuela, Mérida) +58 274 2401125, or by e-mail nux@ula.ve. It is also possible to download the "ISO image" that allows you to generate the DVD from the Web site: ftp://ftp.ula.ve/ulanix/bio-ulanix and use it with any DVD burner, to recreate Bio-ULAnix. It is highly recommended to use the latest available version.

Do you wish to know more about the design principles and objectives of the ULAnix DVD project? The following Web links describe the philosophy behind this important development that offer the possibility to create thematically customized environments while keeping the easiness of use. Some details in:

 $\label{eq:http://nux.ula.ve/documentos/Plan_de_Migracion_Mayo_20 http://nux.ula.ve/documentos/Plan_de_Migracion_Mayo_20 06_CCA.pdf$



Chilean NREN, REUNA, delivers

THE FIRST SOUTH AMERICAN E-SCIENCE BOOK

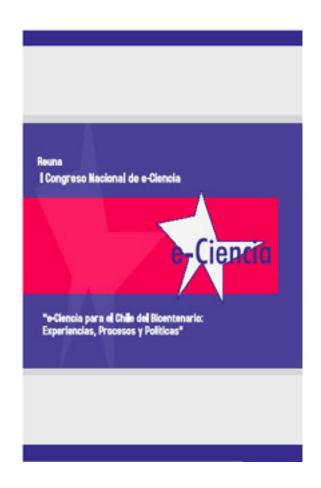
"e-Science for the Chile of the Bicentennial: Experiences, Processes and Policies" is the title of the first book referred to e-Science that has been written in South America. Done by the national research and education network of Chile, REUNA - an EELA member institution-, as a result of the 1st National e-Science Congress (September 2006), the book revises the alternatives of that event, and gives a broad analysis of the important e-Science ongoing projects and of the successful experience of those countries that have implanted a national e-Science Programme. The book is available for downloading, only in Spanish, in REUNA's Website (in PDF format).

The concrete results of the first initiative of e-Science in Chile, the First National e-Science Congress, entitled as "e-Science for the Chile of the Bicentennial: Experiences, Processes and Policies", that was carried out in Santiago of Chile in September of 2006 (organized by REUNA), have been shaped in this first book of e-Science that is published in the country.

The main part of the book is of course referred to the event that gives the title to it, but it also has an important introduction devoted to e-Science, e-Infrastructures (Grid and Middleware), National e-Science programmes implanted in the U.K, Australia, Japan, Canada, etc., and international Grid projects, where EELA has its own chapter. Hence, the book it is not only interesting for the Chileans scientists, academics, researchers and engineers, but also for those who are interested in e-Science and e-Infrastructures for e-Science.

The book is available in the Press Room, section Publications, of the REUNA Website, or can be directly downloaded at URL http://www.reuna.cl/documentos/DOC2007/Libro_eCiencia_ 2006.pdf. REUNA does not only trust in the interest that this material will arise because of the e-Science analysis that it offers at an international level, but also in the seed which this experience can be in terms of encouraging the development of national e-Science programmes in the countries of the Latin American region. That's why the Chilean national research and education network has explicitly authorized the partial or total reproduction of the book, whenever the source is mentioned and that this reproduction is used to help the development of e-Science and e-Infrastructure in the region.

In terms of the First e-Science Congress, the book presents the abstract of the biographies and presentations given by the international experts that participated in it, plus some



interviews where they evaluate this first Congress. The experts were:

Bill St. Arnaud: Senior Director Advanced Networks for CANARIE Inc., Canada's Advanced Internet Development Organization.



Louis O. (Bob) Hertzberger: Director of the National Virtual Laboratory for e-Science project, which is based on Grid Technology (Netherlands).

Rajkumar Buyya: Director of Master of Engineering in Distributed Computing (MEDC) Programme and Director of the Grid Computing and Distributed Systems (GRIDS) Laboratory Department of Computer Science and Software Engineering The University of Melbourne.

Roberto Barbera: Since beginning of 2005 he is Associated Professor at the Department of Physics and Astronomy of the Catania University. Technical Coordinator of the EELA project - E-Infrastructure shared between Europe and Latin America.

Tony Hey: Corporate Vice President for Technical Computing of Microsoft Corp.

Robert Woodcock: Stream Leader and Principal Software Engineer for the CSIRO Division of Exploration and Mining. SEE Grid Community Director & Computational Services Architect.

Robert Christopher Smith: Associate Astronomer at the National Optical Astronomy Observatory, Cerro Tololo Inter-American Observatory, La Serena, Chile.

Finally, the text closes with the reproduction of the Final Forum were authorities of Government agencies, the international experts and outstanding personalities of the academic and scientific Chilean scope gave their vision of what it must be done to develop an e-Science Programme in Chile

REUNA (National University Network - Chile) will carry out the 2nd National e-Science Congress: "e-Science for Chile's Bicentenary" in September 12th and 13th, in the Neruda Hotel, located in Providencia - Santiago of Chile.

More Information at: http://e-ciencia.reuna.cl.

Roberto Barbera, EELA Technical Executive Manager, evaluates the 1St National e-Science Congress:

What is your own evaluation of the e-Science Congress?

In my opinion, the e-Science Congress, both from the point of view of the participants and from the point view of the programme, has been a very important event. It can be considered as a landmark in the path of Chile towards the development of e-Infrastructures and e-Science.

Having in mind this experience, what are the possibilities that you foresee for the development of e-Science in Chile?



The cultural and economic level of Chile, gives to this country big chances to set-up a National Grid Initiative (NGI) for the development of an important e-Science programme. E-Science represents one of the key enablers of the progress and sustainable development of a country, so Chile should aim at the establishment of flexible, reliable, and durable network and grid infrastructures. This should be done following both a "bottom-up" and a "top-down" approach. In the first one, Universities and Research Centres should collaborate more closely together and with REUNA, the Chilean National and Research Network, to develop applications (bio-medecine, climate, geology, etc.) that could be beneficial for the country and the society. The results of these applications should be shown to politicians and decision makers in periodic public events like the e-Science Congress. In the second one, the scientific community of Chile should form a Reflection Group formed by recognized high level people who can suggest and recommend to the Government the establishment of a permanent NGI for the benefit of e-Science



GRID EVENTS AGENDA

June

EELA-BELIEF e-Infrastructures Conference From 25th and 28th of June in Rio de Janeiro, Brazil

http://www.belief-eela.org/index.html

22nd International Supercomputing Conference - SC'07: The World's First HPC Forum

From 26th and 29th of June in Dresden, Germany

http://www.supercomp.de/isc2007/index.php5?s=default&M ore=1

IEEE International Symposium on High Performance Distributed Computing

From 27th to 29th of June in Monterey Bay, California, USA http://www.isi.edu/hpdc2007/

July

International Summer School on Grid Computing From 8th to 20th of July in Mariefred, Sweden http://www.iceage-eu.org/issgc07/

Summer School 2007: Perspectives on Technological Entrepreneurship

From 11th to 14th of July in Brindisi - Italy

http://www.ebms.it/experience/summer/Summer2007/home.html

1st DEGREE Workshop: Earth Science Applications From 14th to 15th of July in Pula (Cagliari), Italy

http://www.eu-degree.eu/DEGREE/wpx/private-folder/crs4-meeting/workshop-on-grid-portals-and-data-management-techniques-for-es-applications-sardinia

Trust in e-Systems and the Grid Workshop at CS-Tegrid 2007 22nd of July in Sheffield Hallam University, UK

http://www.iccs.info/cstegrid2007.php

Second EELA Grid School (EGRIS-2) From 30th of July to 10th of August in Mérida, Venezuela http://indico.eu-eela.org/conferenceDisplay.py?confld=90

August

CoreGRID Symposium

From 27th to 28th of August in Rennes, France

http://www.coregrid.net/mambo/content/view/358/330

30th Computing School CERN

From 20th to 31st of August in Dubrovnik, Croatia

http://www.cern.ch/CSC/

September

5th International GridKa School From 10th to 14th of September in Forschungszentrum Karlsruhe, Germany

http://www.fzk.de/gks07

UK e-Science All Hands Meeting 2007 From 10th to 13th of September in Nottingham, United Kingdom http://www.allhands.org.uk/index.html

2nd National e-Science Congress: "e-Science for Chile's Bicentenary"

From 12th to 13th of September in Santiago de Chile http://e-ciencia.reuna.cl/C2007/en_01_01.htm

7th Annual Global LambdaGrid Workshop
From 17th to 18th of September in Prague, Czech Republic
http://www.glif.is/meetings/

3rd VLDB Workshop on Data Management in Grids From 23rd to 24th of September in Wien, Austria

http://www.irit.fr/~Jean-Marc.Pierson/DMG VLDB07/



Breaking news

EELA-2 PROJECT WAS INVITED TO ATTEND TO THE HEARINGS IN BRUSSELS

"EELA-2 passed the required threshold at the first stage of the evaluation and we have been invited to attend hearings in Brussels on 26/06/07." With these brief lines Bernard Maréchal, EELA-2 (E-Science Collaboration Between European And Latin American Communities) project Coordinator, announced the first achievement in the road of this new collaborative project.

Presented to the EC 7th Framework Programme within the lines of Capacities and Research Infrastructures, the vision of EELA-2 is to transform the current EELA e-Infrastructure into a high capacity, production-quality, scalable e-Infrastructure providing round-the-clock, worldwide access to distributed computing, storage and network resources for applications from a wide spectrum of scientific communities. This ambitious goal translates into specific objectives defining the EELA-2 mission:

- Support existing communities in the fields of Biomedicine, e-Education, Climate and High Energy Physics;
- Support new communities in the fields of Earth Science, e-Health and e-Government;
- Establish contacts with potential industrial associates to raise awareness about the benefits of adopting grid technology;
- Collaborate with EGEE and related projects on developments of common interest;
- Make available knowledge of Grid technology to all users through an extensive Training and Dissemination programme;
- Define a roadmap for the creation of NGIs in Latin America;
- Prepare the field for the long-term sustainability of RedCLARA through consultation with Governmental Authorities, NRENs, NGI stakeholders and user communities.

EELA-2 is the largest European - Latin American collaboration gathering together 79 institutions organized in 8 Joint Research Units and 10 single partners.

After the hearing in Brussels, EELA-2 will receive its Evaluation Summary Report from the EC Project Officers and, if it is successful, negotiations will start in order to define the final workplan and make all the necessary administrative steps needed before the signature of the contract.





E-infrastructure shared between Europe and Latin America