

DECLARA

Editorial

Martha Inés Giraldo, REUNATA Executive Director, Colombia

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Editorial



Martha Giraldo
REUNATA Executive
Director, Colombia

In November we will celebrate the third anniversary of RedCLARA's existence. Writing about this makes me summarise, think, recall and dream.

I feel proud to have been appointed as Executive Director of RENATA, the Colombian National Advanced Technology Academic Network, one of the national networks in RedCLARA. I am proud because I have been in RedCLARA for long enough to know that the most important things there are professionalism and the real interest of each of the representatives from the member countries in getting researchers and academics from the Universities and Research Institutes in each country to grab and understand the possibilities offered by this resource, which at long last is available to us. The idea is that they can give free rein to their projects and their imagination for the benefit of science, education and the development of the country.

RedCLARA stands as a challenge for all its members; to bridge the gap, to learn together, COLLABORATE. The latter is probably the key word, the most important thing.

To collaborate means to work together in order to address our needs and solve problems which are a regular part of our everyday activities. In national networks we share very similar problems, we have similar objectives and therefore we have common needs. What nonsense it would be if each of them wanted to solve their problems on their own. The great challenge: to identify suitable people with a real interest to efficiently lead the associated groups, to bring interests, knowledge and capacities together to help us gradually move forward in the process of clearing the way, technically and academically, in terms of management and thus turn this network into a new engine which furthers development.

To collaborate is to learn to draw up new agreements, new types of relationships, quality relationships which are agile, efficient and productive. This is hard but fundamental task in which there is a lot to be done, and a lot of lessons to be learnt.

Collaboration involves getting to know each other, to know who we are, which projects we are working on, to identify what our allies in Europe, Latin America, Asia and North America are doing and to identify the opportunities to work in collaboration.

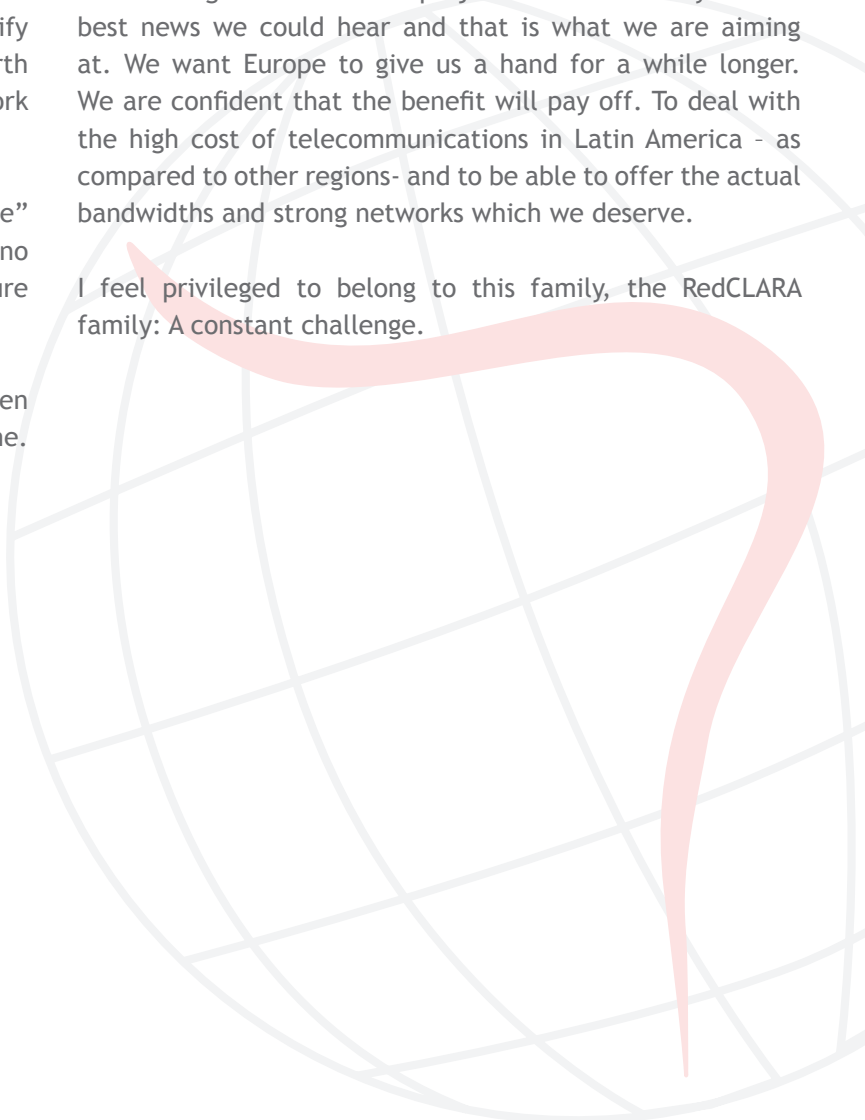
In short, to collaborate we must learn how to “collaborate” because we come from a very different culture with no collaboration. Just like that. We come from a ME culture which we are urged to change.

Our friends are a long way ahead of us since they have been making use of these advanced networks for a long time.

However, RedCLARA has shown that we can learn very fast, that we have understood the challenge and we know that united rather than individually we will be able to move forward more quickly, and eventually we will teach others. This is the challenge, this is how we face it and the same view is shared by the European Commission when it acknowledges the network’s fast extension and implementation, to the point of comparing it to the GÉANT network.

In RedCLARA we recognise and thank the European Commission because thanks to its important support we were able to lay the groundwork and the way towards the consolidation of the network in Latin America. Given the current management units in CLARA, the scenario is favourable for us to keep moving forward, eagerly and full of enthusiasm. However, in order to move forward in a competitive way we must keep on looking for support for connectivity, while waiting for better conditions related to the cost of telecommunications, so that this issue ceases to be our main obstacle. Getting the funding for the ALICE2 project would certainly be the best news we could hear and that is what we are aiming at. We want Europe to give us a hand for a while longer. We are confident that the benefit will pay off. To deal with the high cost of telecommunications in Latin America - as compared to other regions- and to be able to offer the actual bandwidths and strong networks which we deserve.

I feel privileged to belong to this family, the RedCLARA family: A constant challenge.



25 September was a Virtual day for CLARA-TEC

36 engineers and technicians from 22 institutions in 12 countries in Latin America and Europe, attended the 7th CLARA-TEC Meeting which was held through the Isabel videoconference platform for the first time ever.

María José López Pourailly



The First Virtual CLARA-Tec Meeting, CLARA's Technical Forum - made up of engineers and technical representatives from CLARA's member national networks connected to RedCLARA - was held through the Isabel Plaza videoconference platform on Tuesday 25 September. We must say that the activity was a great technical and human achievement: having 36 people from 12 countries actively participating in a virtual scenario is not something that you can overlook. Apart from the participants, Michael Stanton (RNP - Brazil) is responsible for the merits as coordinator of the activity and President CLARA's Technical Commission.

Another significant element of this achievement was the technical support for the meeting provided by: Daniel Díaz (RAAP - Peru), coordinator of the CLARA Videoconference Work Group, Claudia Córcova (RAAP) and Jaime Mejía and Abel Carril from the Madrid Polytechnic University (Spain).

21 September, with the arrival of spring in the Southern Cone, marked the onset of the necessary technical tests to ensure the correct development of the meeting, which on 25 September focused on the following topics: Insights for

the second version of RedCLARA, the relationship between CLARA and LANIC and the preparation of the Technical Meeting to be held in November in Panama.

As regards the first topic, Florencio Utreras, CLARA's Executive Director, indicated that in RedCLARA2 the use of an optical cables infrastructure will be relevant, and thus he declared himself in favour of scheduling training activities on optical networks aimed at engineers from the national networks in RedCLARA. Iara Machado (RNP), Coordinator of the CLARA Training Work Group, will be the one to take on the responsibility for the training proposed by Utreras.

As for LACNIC, an emphasis was made on the need to get the institutions in CLARA to support its activities and especially on the campaign for IPv6 led by LACNIC.

The deployment of PlanetLab on the RedCLARA nodes was also discussed and it was pointed out that there is already a CLARA Work Group devoted to this subject, the one led by the academic Hugo Cancela (Uruguay), who has already activated the group's wiki at the URL: <http://wiki-planetlab.reuna.cl/wiki/index.php/Portada>.

The participants at the Virtual CLARA-TEC Meeting were:

Argentina: Javier Martínez (INNOVARED) and Guillermo Cicileo (RIU).

Brazil: Eriko Porto (RedCLARA NEG), Iara Machado (RNP), Michael Stanton (RNP) and Mauricio Noronha (RNP).

Chile: Florencio Utreras (CLARA), Sandra Jaque (REUNA), Andrés Hernández (REUNA) and Claudia Inostroza (REUNA).

Ecuador: Neil Nuñez (CEDIA) and Rommel Torres (UTPL).

Guatemala: Iván Morales (RAGIE)

Mexico: Azael Fernández (UNAM) and Fernando Muro (CUDI).

Panama: Iván Armuelles (RAAP), Máximo Escobar (UP), Armando Jipsion (UTP), Kateila Gómez (UTP) - all members of RedCyT.

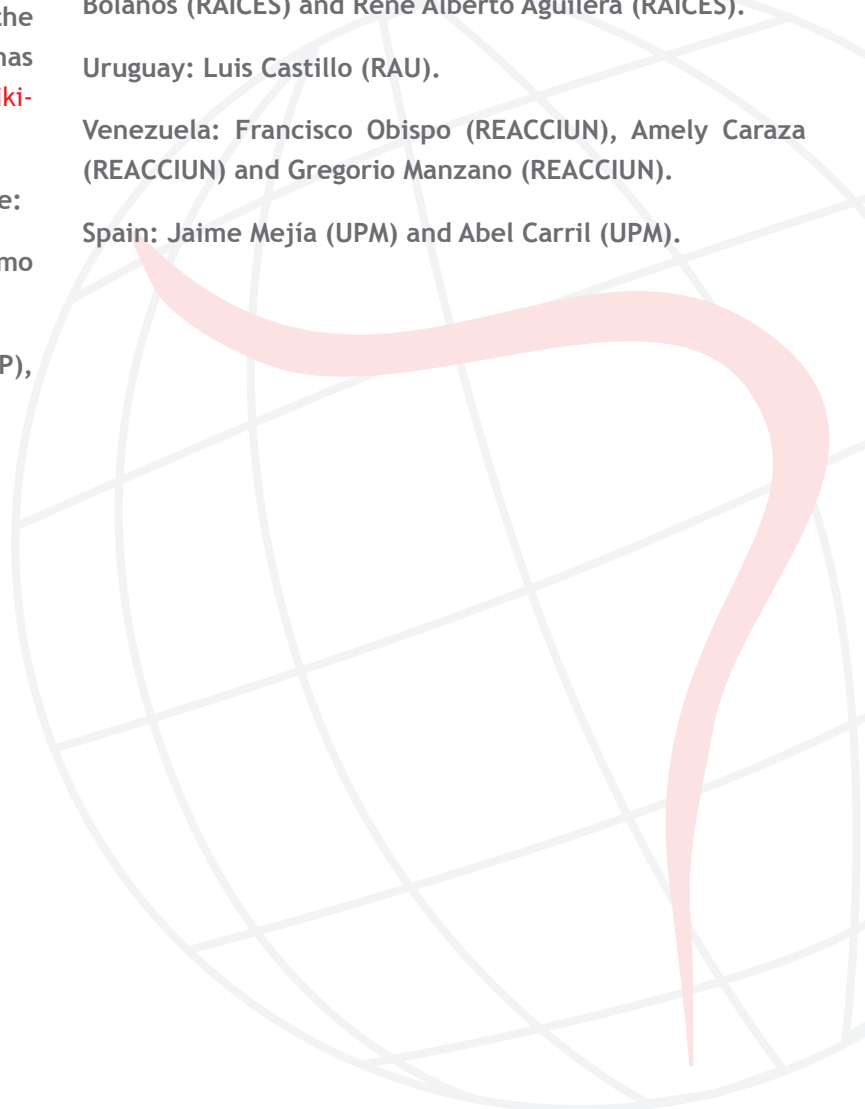
Peru: Daniel Díaz (RAAP), Beau Flores (RAAP), Claudia Córdova (RAAP), Walter Munguía (UNMSM), Joel Telles (INICITEL), Fernando Ardito (UPCH), Leslie Salas (UPCH) and Fred Aviles (URP).

El Salvador: Enrique Fernández (RAICES), Wilfredo Antonio Bolaños (RAICES) and René Alberto Aguilera (RAICES).

Uruguay: Luis Castillo (RAU).

Venezuela: Francisco Obispo (REACCIUN), Amely Caraza (REACCIUN) and Gregorio Manzano (REACCIUN).

Spain: Jaime Mejía (UPM) and Abel Carril (UPM).



19-23 November

ALICE and CLARA meet in Panama

“A long time ago, a dream came true, linking seas and continents” This is what the first line of “Por el Canal de Panama voy”, a popular Panamanian song by David Choy, whose lyrics are the most suitable to talk about ALICE, CLARA and RedCLARA. Why? Because when the members of the ALICE project meet up in Panama City with the people from the network which originated their project, RedCLARA, and with those who run this network, CLARA, we will be commemorating the third anniversary since the Latin American dream of direct interconnection and link with other continents came true.



María José López Pourailly

The Panamanian Scientific and Technological Network (RedCyT) is getting ready to welcome around thirty men and women who technically and executively direct the Latin American National Research and Education Networks. We are speaking about those networks that belong to CLARA and, certainly, about those which are part of the ALICE project (where NRENs from Portugal, Italy and Spain also participate). Thus, during five days, from 19 to 23 November there will be six highly relevant meetings, namely:

November 19:

- NSF-CLARA Meeting

November 20 + 21:

- CLARA-TEC Meeting
- CLARA BID Project Training Meeting

November 21

- CLARA BID Project Training Meeting

November 22:

- Technical Training on Optical Networks
- ALICE Meeting

November 23:

- Technical Training on Optical Networks

- ALICE Meeting (during the morning)
- CLARA Assembly (during the evening)

These activities will be held at the Centre of the School of Graduates of the Technological University of Panama.

NSF-CLARA Meeting

In November 19th the institutional representatives from the CLARA member NREN will participate in the “Workshop on Cyber Infrastructure Applications in Latin America”, which aims at analysing, together with the US National Science Foundation (NSF), the requirements of those applications for collaboration with the US which could be highly demanding in terms of bandwidth. Obviously this workshop is part of the next IRNC (International Research Network Communications) call of the NSF.

In accordance with the objectives related to connection for research networks linking the US with the rest of the world, in this case with Latin America, we find the following areas included in the aforementioned Workshop: Astronomy, Biodiversity, Genomics, Climate Change, Oceanography, Meteorology, Seismology, Volcanology and High Energy Physics.

Technical Training on Optical Networks

This workshop aims to prepare technicians from the NREN in CLARA, and their member institutions, in those aspects which are relevant for the incorporation of optical technologies in academic networks. According to the President of CLARA's Technical Commission, Michael Stanton (RNP), "during the workshop we will describe the potential of these technologies, especially WDM (Wavelength Division Multiplexing) and how they integrate with other common technologies; besides, a great deal of the workshop will be devoted to access to optical fibres, either by hiring the link or, eventually, lambdas (optical channels), or by building your own cable infrastructure".



Needless to say, this training seems very complete, but it wouldn't do any harm to take a look at the draft programme (sure, it could change, but the essence is not very likely to change, is it? Such is life).

1. Introduction
2. Optical transmission for communication networks
 - 2.1. Optical fibres and transmission systems
 - 2.2 Elements that limit the functionality of optical transmission and corrective measures
 - 2.3 Light Channels Multiplexing (WDM)
 - 2.4 Optical fibre standards
 - 2.5 Optical links projects
 - 2.6 Use of optical links between electronic equipment
3. Light channels Commutation
 - 3.1 OADM, ROADM, OXC
 - 3.2 Optical networks architecture
 - 3.3 Administration of optical networks: management plan / control plan
4. Access to optical fibres
 - 4.1 Contracts to hire optical fibres or channels
 - 4.1.1 Alternatives and opportunities: IRU contracts

- 4.2 Construction of your own cable network
 - 4.2.1 Underground and overground alternatives: rights of passage, types of cables
 - 4.2.2 Necessary physical infrastructure
 - 4.2.3 Physical project and documentation
 - 4.2.4 Relationship with outsourcers and inspection
- 4.3 Practical design cases
 - 4.3.1 Design and planning, construction, documentation, operation and maintenance of an overground Optical Network
5. Layer 2 and 3 technologies
 - 5.1 SDH/Sonet
 - 5.2 N-GigE
 - 5.3 IP
 - 5.4 Hybrid network
 - 5.5 Integrated management
6. Applications in hybrid networks
 - 6.1 Highly demanding applications in terms of bandwidth
 - 6.2 Broadband service on demand
7. Real cases
 - 7.1 Design of a WDM network for services
 - 7.2 Relevant considerations during implementation
 - 7.3 Operation of a WDM network and associated services

BID and CLARA

On 20-21 November, the executive representatives from the networks in CLARA will participate in the BID Project Training Meeting named "Strengthening of Regional Advanced Academic Networks through CLARA as a Regional Public Asset", which will focus on enhancing the management capacity.

ALICE

Although finding formulas for the continuity of RedCLARA will be the core issue in the CLARA Assembly, the situation will not be very different in the ALICE meeting since this meeting will have to yield an action plan for the next year which is coherent with the ALICE objectives of not only keeping the network alive but also increasing the number of linked countries and the connection capacities in RedCLARA, and the goals to be faced as part of the ALICE second phase. To do this, as usual, the meeting will be conducted by Cathrin Stöver, ALICE Manager, Joaquín Guerrero, President of the CLARA Board, and Florencio Utreras, Executive Director of CLARA. The meeting will also be attended by Mathew Scott

as Financial Director in DANTE (institution responsible for the ALICE project).

Within the issues to be reviewed during the meeting we find the updates of the activities and the work developed by:

- CLARA-TEC (CLARA's Technical Forum), led by Michael Stanton (RNP), President of CLARA's Technical Commission.
- CLARA-WG (CLARA Work Groups), led by Iara Machado (RNP), Training Coordinator.
- CLARA-NOC (RedCLARA's Operations Centre) and CLARA-NEG (RedCLARA's Engineering Group) led by Florencio Utreras.
- CLARA-PR (CLARA's Public Relations and Communications) led by María José López, CLARA's Communications Manager.

Other issues to be discussed include the situation of the national networks in some of the ALICE member countries, the state of the ACLARA repository (as regards its database feeding) and the current situation of the groups of users, applications and project proposals (led by Rocío Cos, CLARA's Project Manager).

The ALICE meeting will also offer an opportunity to remotely attend the Technical Sessions which RedIRIS, the Spanish NREN (member of ALICE) is carrying out in Oviedo (Spain).

Clearly the present stage in which we find ALICE will be a paramount issue to be discussed, as well as the second phase of the European Commission @LISII programme, and obviously ALICE2.

CLARA Assembly

Finally, the CLARA Assembly, to be held on 23 November after the closure of the ALICE project meeting, will have to look ahead to 2008 and face the issues related to the end of the funding for RedCLARA through ALICE. However, there will certainly be a lot more issues to be discussed and March 2008 will be the key issue for the Assembly.

Is there anything else to add? Nothing. Now it's time to pack and get our brains ready for a lot of work. Panama is already prepared for this.



2nd Latin American Conference on Learning Objects was held in Santiago - Chile

The faculty of Physical and Mathematical Sciences at the University of Chile was the host of the event, held between 22-25 October. LACLO 2007 featured the participation of a renowned Belgian expert, Erik Duval, Co-president of the ARIADNE Foundation, standard Technical Editor at LOM and professor of the Hypermedia and Database Research Unit at the Leuven Catholic University (Belgium). This second edition of LACLO aimed at deepening and opening new paths in relation to Learning Objects (LOs) technology.

María José López Pourailly

The Internet is the most powerful tool to search, select and organise information. Its use is crosscutting and both professors and students benefit from it, regardless of their educational levels. It is in this context that the Learning Objects technology emerges as a powerful and valid alternative for the creation, storage and retrieval of information. By enabling access to huge resources banks -distributed in repositories throughout the world- this has enhanced the possibilities of students and teachers.

Along these lines, the last years have witnessed the succession of important efforts in the development of contents and technologies, and of tools which make it possible to create the necessary conditions for the reuse, accessibility, interoperability and durability of these contents. However, the issue for Latin America in relation to the availability of contents is critical: contents in Spanish are highly scarce and the institutions cannot undertake this long-term and expensive task on an individual basis.

Precisely under these circumstances and within the context of this great educational issue, in October 2006, the Higher

Polytechnic School of the Coast (ESPOL) and the Centre for the Development of the European Repository ARIADNE organised the First Latin American Conference on Learning Objects, whose great goal was to constitute the Latin American Community on Learning Objects. Thus LACLO was born, a community which initiated its operations by means of a call for institutions, researchers and academics interested in LOs. They have been invited to constitute a space for discussion, research and exchange of experiences.

Today LACLO is growing in Latin America, bridging the evident gap existing in these matters. Besides, as evidence of the importance of the work on LOs, the Latin American Federation of Learning Object Repositories (FLO) is already working. Certainly, FLO is constituted by several LACLO member institutions.

Having reached the first goals, LACLO invited the Latin American LO's academic and research community to participate in its 2nd Latin American Conference on Learning Objects, which was held between 22-25 October 2007 at the Faculty of Physical and Mathematical Sciences at the

LACLO 2007

2da. Conferencia Latinoamericana
de Objetos de Aprendizaje

Santiago de Chile, 22-25 Octubre 2007

University of Chile (Santiago de Chile). LACLO 2007 tried to deepen its themes and open new paths in relation to Learning Objects technology.

In order to achieve its goals, LACLO 2007 invited Erik Duval (<http://www.cs.kuleuven.ac.be/~erikd/>), Co-president of the ARIADNE Foundation, standard Technical Editor of Learning Objects Metadata (LOM) and professor of the Hypermedia and Database Research Unit at the Leuven Catholic University (Belgium).

Topics

Some of the topics addressed as part of LACLO 2007 are the following (the programme can be visited at <http://www.laclo.espol.edu.ec/laclo2007/index.php?option=content&task=view&id=19>):

- Pedagogical aspects
 - Learning Objects and Instructional Design
 - Impact of Learning Objects on the Teaching/Learning Process
 - Critical views on the use of Learning Objects
 - Learning Design

- Technical Aspects
 - Tools for the creation, (Dis) Aggregation, Indexation, Sharing, Use and Reuse of Learning Objects.
 - Usability
 - Scalability
 - Interoperability between Learning Objects Tools
 - Interoperability between Learning Objects Systems and other systems
 - Current Research and Challenges for Learning Objects Technology

- Administrative Aspects
 - Ownership and Copyrights
 - Sustainability of Initiatives involving Learning Objects
 - Incentives Schemes for the Creation of Learning Objects
 - Business Models

LACLO 2007 was organised by: APROA Community, Latin American Community for Learning Objects - LACLO, Latin American Cooperation of Advanced Networks - CLARA, the Higher Polytechnic School of the Coast, the Southern University of Chile and the University of Chile.

The event was sponsored by: National University Network - REUNA, Santander Universities, and UVIRTUAL.

Further information:

LACLO 2007 website: <http://www.laclo.espol.edu.ec/laclo2007/>

Chile, Spain and Peru are working together:

Grid Sequence of Climate in EELA Project

In the framework of the EELA Project, of which CLARA is partner, a Grid Sequence of Climate applications is being developed by 15 people distributed among three institutions from Spain, Peru and Chile. The goal of the project is to obtain a better understanding of how the events like “El Niño” phenomenon, do affect the regional climatic variability and the challenge is to unravel the different patterns of climate variability through different processes, from a temporal and spatial point of view. Through this interview we invite you to learn more about the important work that this team is carrying, the highlights of the project, its results, the beneficiaries and more.

María Paz Mirosevic Albornoz y María José López Pourailly

Several EELA (E-Infrastructure shared between Europe and Latin America) partners are currently working in four different fields of e-Science, namely Biomedicine, HEP, e-Learning and Climate. This last group have been working together in order to generate a regional model project, a project about analysis of local variability with respect to the remote variability and a project about collaboration between institutions.

We talked with some of the members of this group (which is actually formed by three groups, one from the Cantabria University in Spain, the second from the Servicio Nacional de Meteorología e Hidrología from Peru and the last from the University of Concepción in Chile) in order to know what are they currently doing and which are the challenges for the future. Check the outcomes of this interesting conversation that, through the RedCLARA network, we had with Rodrigo Abarca del Río (Chile) and Antonio Cofiño (Spain), and get astonished as we did with the outstanding work that they are developing.

What is the importance of your group for the Latin-American scientific community?

The Scientific Community of the Earth Sciences of Latin America has a short time to do calculations that allow them to make a model of the different constituent systems and their interactions, this allows a

better understanding about why and how different physical processes are involved.

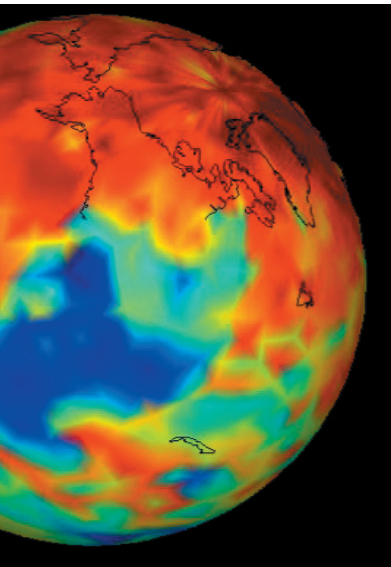
This is a reality for the different fields of research involving Earth Sciences. Not just in the geophysical field or in the processes involved in the tectonics of the plates (for example), which is important to understand seismology, but also in the processes related with the climate systems in the ocean, the atmosphere and its interactions.

For a better understanding of the climatic system it is absolutely necessary to have a great investment in time of computing in order to understand the different interactions between the ocean and the atmosphere and its processes at different special and temporal scales that affect the climate in South America, mainly in Peru and Chile, since they are influenced by the phenomenon of El Niño.

Another very important variable to understand the importance of the Climate Group for the EELA Project is the facility of the creation of models. That is because it is a very long process that requires years of studies usually in the form of a doctoral thesis.

Another important advance is the Grid Technology itself, which requires the formation of the support personnel and development of new tools that facilitate the use of the Grid Technology to all the scientific community. This formation is also being carried out in EELA.

About the work that you have been doing in the Climate Application, specifically in the El Niño phenomenon, what is the main goal?



From the scientific point of view, the main goal is to obtain a better understanding of how the events like El Niño affect the regional climatic variability. That means how micro climate systems, like a region or a river basin, are affected by climate variations produced by local or remote phenomena.

The challenge is to unravel the different patterns of climate variability through different processes, from a temporal and spatial point of view.

To achieve this goal we are studying the Bio-Bio region in Chile, where the University of Concepción is established, and in the central region of Peru (SENAMHI). This study uses different atmospheric models through nesting different resolutions. That means one global model of atmospheric circulation (CGM), the CAM (The Community Atmospheric Model, <http://www.cesm.ucar.edu/models/atm-cam/>) in low resolution (200-20 KM) that force soon different regional model of high resolution (for example 20 KM) by using the WRF (The Weather Research & Forecast Model, <http://www.wrf-model.org/>). These simulations are verified against regional observations. In addition, the groups of simulations are analyzed with data mining which allows us to obtain information about the regional variability patterns and of their remote connections, hence we gain a better understanding of the regional and extra-regional relations.

From the technical point of view the great challenge consists in making these simulations and data mining in a Grid environment that allows the collaboration and the access to results and remote data of the different centers involved in the study. In this point the Grid technology offers a great opportunity of technical and scientific development between institutions geographically separated.

Do you know if there exists any other project related with this theme?

Currently there are several projects around the world that are looking to better understand the regional climatic variability, analyzing the past and projections for the future. Our project has several characteristics or peculiarities that

make it different and very novel in that it is based on Grid Technology which allows an access to a shared calculation capacity and distributed storage, allowing an ambitious collaborative project.

Who are the main beneficiaries with this project?

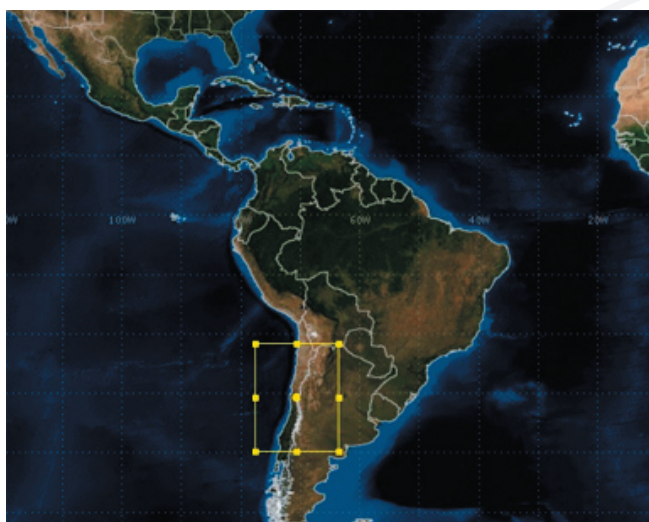
The main beneficiaries of this project are the members of the scientific community, not just in Latin America, but globally, as the progress obtained can be easily moved to other projects related to Grid technology and Earth Sciences. Particularly this project beneficiates Latin America because of the transfer of knowledge from Europe to this continent which helps to generate an easier access to technology for the scientific community in Latin America.

According to you, why is this project is so important?

It is important because thanks to the Grid technology it is possible to have access to the most relevant computing resources and to the geographically distributed storage, offering better capacity than the one that we could have in a local way. In other words, with the local time of calculation it could be possible to do just a few set of simulations, but with this access it can be possible to perform more sets of simulations making possible the generation of valid results. The main objective of our project is the technological transfer of knowledge.

How many people work in the project and how is it organized?

In the EELA Project, the work named as Grid Sequence of Climate is formed by three groups. One from the Cantabria University in Spain, which is the origin of the project, and two in Latin America, one is the SENAMHI (the Peruvian National Service of Meteorology and Hydrology), and the other is from the University of Concepción in Chile. We are 15 people distributed among the three institutions with different specialties: computing engineering, specialists in signs treatment, data mining, global and regional climate models, data engineering, PHDs in hydrology, climate and computing, and post doctorates in these three areas.



In the task there are objectives of work that we have to do all together in order to obtain final results. The strategy designed means that during the execution we must develop new computing tools of regional models in order to allow a progress in the scientific challenge of the climate models, data and methods of sign treatment.

Which is the main importance of the research you are carrying out for your countries?

We think that we are part of a little technological revolution that is happening in a global level and our contribution is in the field of the geophysics, specifically in climate. We are the first in South America (Chile and Peru), and in Spain to participate. About development we would like to highlight that this project is really original.

It is original for three reasons:

First, because it is based on Grid technology and allows to have shared access of calculation time and memory. In addition, it is part of a cross-sectional EELA Project where many institutions of South America and Europe are involved. This project is accompanied by the experience of all the different projects of different scientific fields (biology, medicine, high energy physics, etc). In other words, the project is nourished by the continuous renovation of the other fields of science and remarkably of the renovation of the Grid technology. Attending EELA conferences, in which different fields from sciences present their advances, is a very encouraging and exciting experience.

Second, EELA-Climate Project is not a simple project about climate, or another project about regional model, or a project about analysis of local variability with respect to the

remote variability or a project about collaboration between institutions. Actually it is a project of all of these things put together. It is a project absolutely different in its conception with a very ambitious objective in technological terms and very notable in usability terms. It is not a tool but it is the creation of a tool that didn't exist before, it is a dynamic integration and statistics that make easy the work of models and analysis in the researches. All thanks to the Grid Technology and to the cultural and scientific diversity of the participants that take part in this project. In other words it is the combination of the philosophy of the Grid Technology, the interchange of knowledge and technology of the models and analysis of climate fields.

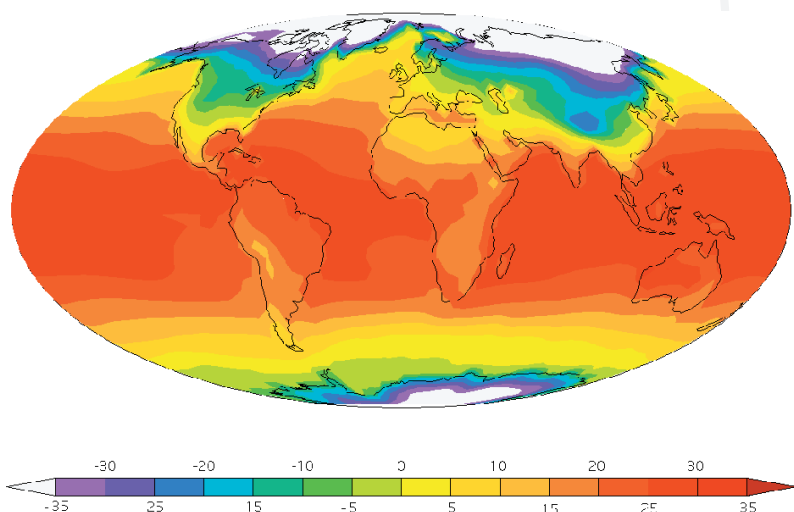
Third, we hope that at the end of the project all the process will be automated. This is important because automating is one of the most original points of the project and make it very different and novel respect to the other projects that exist in local and global levels.

Which are the challenges once the project is finalized?

After the technical viability of the developed tools is proven, we have to demonstrate the scientific viability. To do that we are planning to progress in that field doing emphasis in the study of El Niño phenomenon, that affects Latin America. In addition we will try to pursue the objective of taking this tool to a bigger number of institutions and research groups in all Latin America.

Do you think that the results of your group will be useful for new researches in the Latin-American region? How?

One of the most important contributions is that our project will facilitate the integration and access to computer resources and storage capacity for the Earth Sciences scientific community. The idea is that this community will get benefits from this new technology thanks to the divulged work that is being carried out in the EELA Project and particularly by the climate working team.



Mark it now in your Agenda:

December 3 to 5 will be named as 3rd EELA Conference by the Italians

Hosted by the INFN (National Institute of Nuclear Physic) in Catania, Italy, the Third EELA Conference is meant to be an “open conference” devoted to the scientific results attained by EELA, EGEE and all related projects. The event will take place at the Department of Physics and Astronomy of the University of Catania between the 3rd and 5th of December, 2007.

The 3rd EELA Conference is meant to be an “open conference” and its Scientific Programme is conceived to reach two main objectives:

- present a selection of the most impressive scientific results that have been obtained in the last two years not only by EELA but also by EGEE and the other EGEE “Related Projects”;
- discuss the main achievements of the Projects and provide an outlook to the near future with special attention to the issue of the long term sustainability of Regional e-Infrastructures.

In the beautiful surroundings of the Etna volcano, EELA will try to demonstrate why it is drastically changing the perspective about e-Science in Latin America. But just to give you a little sight about what we are talking about, have in mind that it is not only because of the number of grid sites, or CPUs, or Terabytes, but rather because EELA is:

- “Building” the human network fostering scientific collaborations across the Atlantic;
- Raising the awareness of new ways of doing (e-) Science;
- Putting the seed for a long term sustainability of e-Infrastructures in the Region.

Tentative Programme

The 3rd EELA Conference Programme is structured by a Programme Committee which is constituted by relevant scientists and academics from EELA and the most important related projects and initiatives:

- Bernard Maréchal (UFRJ/CEDERJ - Brazil)
- Diego Carvalho (CEFET-RJ and UFRJ - Brazil)
- Federico Ruggieri (University of Roma Tre - Italy)
- Herbert Hoeger (ULA - Venezuela)
- Luciano Milanesi (CNR - Italy)
- Malcolm Atkinson (e-Science Institute - U.K.)
- Ognjen Prnjat (GRNET - Greece)
- Philippe Gavillet (CERN - International)
- Rafael Mayo (CIEMAT - Spain)
- Ramon Gavela (CIEMAT - Spain)
- Robert Jones (CERN - International)
- Roberto Barbera (University of Catania and INFN - Italy)

The Programme has been drafted as follows, but it is important to have in mind that this structure is preliminary, so it can be modified:

- Day 1 - Session 1: Project results - administrative and general presentation of all projects
- Day 1 - Session 2: Project results - Presentation of work packages
- Day 2 - Session 3: Grid Communities and Applications
- Day 2 - Session 4: e-Infrastructures case studies
- Day 3 - Session 5: e-Infrastructures for Development

The 3rd EELA Conference is an open event; the registration will be opened soon.

Further information: www.eu-eela.org/conference3/

TERENA Networking Conference 2008 has issued a Call for Papers exploring the theme “Beyond Connectivity”

The conference will be held from 19-22 May 2008 in Bruges (Brugge) in Belgium, organised by TERENA and hosted by BELNET, the Belgian national research and education network.



TNC 2008 will take place at the Congress Center Oud Sint-Jan. This is a former medieval hospital that dates back to the 11th century.

The Programme Committee of the TERENA Networking Conference 2008 invite to send abstracts of 600-1200 words. Extended abstracts (rather than full papers) are invited on all subjects relevant to the spirit and objectives of the conference: to present, discuss and learn about the latest developments in networking technology for the research and education community and their use by the community. The topics are available in the URL: <http://tnc2008.terena.org/call-for-papers/topics.php>

The abstract can be submitted via the drop box at: <http://tnc2008.terena.org/submit>. The deadline for submission is 30 November 2007 and authors should follow the guidelines for extended abstracts.

For more information about the call for papers is available at: <http://tnc2008.terena.org/call-for-papers/index.php>.

There are some podcasts in the web site available for the interested (<http://www.terena.org/podcasts/>).



September and October 2007

CLARA participated in important eLAC activities in preparation for the Ministerial Meeting on the Information Society



The advances of the eLAC 2007 Work Groups and the results of the Delphi study on Public Policies for ICT Priorities for Development were presented on September 12 at the ECLAC in Santiago de Chile, in preparation for the 2010 eLAC.

On the other hand, the Regional Consult Meeting in preparation for the 2nd Ministerial Conference on the Information Society in Latin America and the Caribbean was held in Buenos Aires (Argentina) on October 4-5.

Florencio Utreras, CLARA's Executive Director, was invited and participated in both meetings. Get to know about them in the present article.

María José López Pourailly

The so-called Inter Institutional Meeting took place after the Event on Electronic Government Interoperability and the Latin American Meeting on Telecentres and Social Inclusion 2007, which were held in parallel on September 10-11. The Meeting brought together representatives from the public and private sectors and from the civil society, all of them highly active in issues related to Information and Communications Technologies (ICT) for development.

Within the context of the preparation for the Latin American and the Caribbean Ministerial Conference on the Information Society, which will be held on 6-7-8 February 2008 in San Salvador (El Salvador), ECLAC organised this meeting which in order to review the progress made by the eight work groups as established within the context of the eLAC Regional Action Plan, and to review the results of the Delphi Study on Public Policies for ICT Priorities for Development. The survey at the basis of the Delphi Study, has provided elements for the development of a new Regional Action Plan

for the subsequent period after the completion of the current eLAC2007, and serves as the basis for the draft documents which will be discussed at the Ministerial Conference on the Information Society in San Salvador.

Regarding CLARA as executor of the Work Group 10 - Research and Education Networks - which is directed from Uruguay, there were presentations on the progress made by RedCLARA and the perspectives for the 2007-2008 period. The BID project was among the themes discussed - "Strengthening of Regional Advanced Academic Networks through CLARA as Regional Public Asset". This project was established with NSF (USA) for the improvement of RedCLARA's link with the USA and the projects which CLARA develops in the line of integrating Latin American scientific communities. In relation to these issues, the participants stressed the need to have regional connection capacities in accordance with the needs of scientific and technologic communities and systems, which will result not only in the continuity and future

sustainability of the Latin American advanced network, but also of the national research and education networks. Here the core issue of the debate focused on the importance of developing policies and mechanisms to access better infrastructures, following the technological development logic that today allows for a more efficient and economically viable administration of optical fibre infrastructures. The representative from REGULATEL, reflecting the debate, indicated that this is an issue that effectively deserves to be analysed.

In the line of the things mentioned, there was a call to not see university networks as a competition for commercial internet providers as this is not only harmful for the development of science and research. It is a contradiction and a mistake, since research and education networks contribute with demand and opportunities for technological and, certainly, scientific development of nations.

The end of the funding for the network through the ALICE project in March 2008 was one of the themes of great concern among the participants, who are afraid that there will be another digital, and obviously scientific and academic divide if the budget for the second phase of ALICE is not ratified next year. In this respect, the European Commission delegate stated that the @LIS II project is already an item considered in the AidCO 2007-2011 budget. However, the allocation of resources requires an evaluation process and a call for competition, which could mean that funds would only be released as of 2009.

October 4-5: Regional Consultation Meeting in preparation for the 2nd Ministerial Conference on the Information Society in Latin America and the Caribbean

This meeting, held at the San Martín Palace (Buenos Aires, Argentina), home of the Ministry of Foreign Affairs, International Commerce and Cult of the Argentinean Republic, in collaboration with the Economic Commission for Latin America and the Caribbean -ECLAC- had a technical and eminently political approach. Its objective was to determine the degree of progress of the implementation of the eLAC2007 Regional Action Plan for the Information Society, and to draw up new proposals for a new Regional Action Plan to be discussed in San Salvador.

The elements used in this meeting, where CLARA's Executive Director participated as guest, were the reports of the eLAC 2007 Work Groups, the Delphi study and the first structure plan for eLAC 2010.

CLARA, now officially integrated into eLAC, was invited to present the advances in the construction of RedCLARA.

The governmental representatives from the countries in the region unanimously indicated that a key element to ensure funding for RedCLARA was that governments send letters to the European Commission expressing their support to the work of DANTE and CLARA and the need to ensure RedCLARA's continuity. In fact, several representatives from Latin American governments informed that they are already working along these lines with the European Commission.

Further information:

- Monitoring of eLAC2007: advances and current state of the development of Information Societies in Latin America and the Caribbean (OSILAC) <http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/5/29945/P29945.xml&xsl=/ddpe/tpl/p9f.xsl&base=/socinfo/tpl/top-bottom.xsl>
- eLAC2007 Newsletter #3: Final reflections on eLAC2007: <http://www.cepal.org/cgi-bin/getProd.asp?xml=/socinfo/noticias/noticias/2/29952/P29952.xml&xsl=/socinfo/tpl/p1f.xsl&base=/socinfo/tpl/top-bottom.xslt>
- Delphi study on eLAC Policies Priorities: multi-sector consultation on policies priorities for ICT for 2010 in Latin America and the Caribbean: <http://www.cepal.org/cgi-bin/getProd.asp?xml=/socinfo/noticias/noticias/4/29954/P29954.xml&xsl=/socinfo/tpl/p1f.xsl&base=/socinfo/tpl/top-bottom.xslt>

New FP7 Environment research information service on CORDIS

The new service will allow to get the most complete information and resources related to environment and global climate change; network connections, events, ongoing projects, documents, will increase the knowledge of those who are interested in this relevant scientific area.

Original note: http://cordis.europa.eu/fetch?CALLER=WN_EN&ACTION=D&DOC=3&CAT=NEWS&QUERY=1191505649828&RCN=28147

CORDIS, the Community Research and Development Service has launched a new environment information service under the Seventh Framework Programme (FP7). This will provide a gateway to this high-level theme, including Climate Change, under the auspices of the Cooperation programme.

The primary objective of research for the environment is to promote sustainable management of both man-made and natural environments and their resources. This means that the theme has, and will continue to have, a broad global and dynamic impact.

Accordingly, the home page opens with 'Highlights' giving details of the most important topical news articles. There is also an outline of the wide focus of funding actions, from the prediction of climate and systems change to technologies for monitoring environmental change and pressures. Furthermore, there are links to the vast amount of background information through 'Previous relevant European research'.

A 'Get Support' portal provides links to the network of National Contact Points (NCPs). These provide personalised, local support in the proposers' own languages. Other support includes the new 'Enquiry Service' that replaces the traditional Help Desk e-mail service, IGLO (Informal Group of RTD Liaison Offices), and the CORDIS Mini-Guide.

Due to the global status of environmental issues, a page on international cooperation within environment research outlines how FP7 aims to open all the themes and projects to international collaboration. Specific International Cooperation Actions (SICA) is a new element that addresses research problems of mutual interest and benefits between the EU and international cooperation partner countries.

An 'Events' link gives a full account of future information exchange venues as well as past symposia, conferences and other important events. Details of agenda and presentations from previous events can be accessed where available.

For the wide range of actors wishing to research the correspondingly large amount of data on the topic, there is a 'Library' page where legislative documents, relevant work programmes, newsletters and miscellaneous documents under FP7 can be traced and accessed.

Finally, a 'Useful Links' page leads to European and global addresses for activities, organisations and research. There is also a link to relevant projects under the previous programme on every page.

The new service on environment and climate change is available at:

http://cordis.europa.eu/fp7/environment/home_en.html



CORDIS

LACNIC, ARIN and CTU sign Collaboration Agreement for the Caribbean

The agreement intends to offer mutual support in the technological and cultural integration of the various communities in the region.

María Paz Mirosevic Albornoz

The Latin American and the Caribbean Internet Addresses Registry (LACNIC) signed a framework collaboration agreement with Caribbean Telecommunications Union (CTU) and with American Registry for Internet Numbers (ARIN).

It is expected that this agreement will allow for a better integration between the three regions, a rapprochement to face some common challenges in the Caribbean and to achieve stability in this region, avoiding duplicities and adding the view of the participating organisations. The agreement was signed last August, within the context of the Third Caribbean Internet Governance Forum which was held in the Island of Curacao, in the Dutch Antilles.

Representatives from regional organisations stressed the importance of this collaboration agreement which will allow for mutual help in all the technical areas, in human resources formation and in raising awareness about relevant and current issues which have an impact on the sustained growth of the Internet and fundamentally on the mutual support in technological and cultural integration of the various communities.

Among the most important aspects of the agreement we can highlight: collaboration in common issues -within the context of their general objectives- the urge to avoid duplicity in spending and efforts, the organisation of activities for capacity-building and the organisation of events and seminars which facilitate the effective adoption and use of the Internet, all of these within the context of the Caribbean community.

The full version of the agreement is available at the URL: http://lacnic.net/documentos/ctu_arin_lacnic_declaration_of_cooperation.pdf.

About the Caribbean Telecommunications Union (CTU)

CTU was established in 1989 by leaders in the governments which were members of CARICOM (Caribbean Community) in order to rationalise the framework of telecommunications policies for the region and address problems of regional incompatibilities in the spectre frequency. Recently CTU has emerged as the paramount facilitator for the creation of the Information and Communications Technologies (ICT) policies in the Caribbean and the greater contributor to the development of ICT capacity within the region.

About the American Registry for Internet Numbers (ARIN)

ARIN is a non-profit organisation which provides services related to numeric resources of Internet in its region, which includes Canada, several islands in the Caribbean and the Northern Atlantic, and the USA. The ARIN headquarters are located in Chantilly, Virginia (the USA).

About the Latin American and the Caribbean Internet Addresses Registry (LACNIC)

LACNIC is the organisation which runs the space of IP addresses, the Autonomous System of Numbers (ASN), inverse resolution and other resources for Latin America and the Caribbean (LAC) on behalf of the Internet community. The LACNIC headquarters are located in Montevideo, Uruguay.



If you are connected to RedCLARA, then the planetary laboratory is just one click away

PlanetLab Nodes are already inside Latin American academic networks

A great computing laboratory hosted within worldwide academic networks whose main objective is to make computing resources available to the scientific and research community so that they can test applications which require a data network for their execution. This is the best definition possible for PlanetLab. Recently, thanks to an agreement between CLARA, the Hewlett Packard Company and the initiative of Princeton University, five nodes of the worldwide network PlanetLab have been installed in the POPs of Argentina, Brazil, Chile, Mexico and Panama with the aim of providing access to this network for all researchers from Latin American academic institutions which are part of the national networks connected to RedCLARA.

María José López Pourailly

In rough terms, PlanetLab is a set of servers distributed throughout academic networks worldwide. These servers, in turn, make up a computing laboratory at planetary scale; hence the name. In the set of servers that make up the PlanetLab network it is possible to develop, install and run applications in a testbed environment deployed on a network with real-world conditions.

Today PlanetLab is made up of 809 servers distributed in 403 places all over the world. Most of its servers are installed in universities connected to academic centres while others are in Operation Centres for those networks, as in the case of RedCLARA's nodes (called "PlanetLab Colo - CLARA" and located in the cities of Buenos Aires, Panama City, Santiago, Sao Paulo and Tijuana), Internet2, etc.

What is PlanetLab?

PlanetLab is, for research, a testbed scenario of global dimensions which has been designed to support the development of new services in advanced academic networks. It was born in 2003, led by Princeton University in the USA, and was built thanks to the addition of a great number of servers distributed throughout academic networks worldwide which, in turn, make up a computing laboratory at a planetary scale; hence its name. In the set of servers which make up the PlanetLab network it is possible to develop, install and run applications in a testbed environment deployed over a network with real life conditions. More than 800 servers distributed in over 400 places in more than 40

countries host the implementation that makes PlanetLab's existence possible and donate part of their bandwidth so that it can effectively work. Most of its servers are installed in universities connected to academic networks and other Operations Centres of those networks, as in the case of the nodes of the Latin American advanced network, RedCLARA (called "PlanetLab Colo - CLARA" and located in the cities of Buenos Aires, Panama City, Santiago - REUNA, Sao Paulo and Tijuana), Internet2 (The USA), etc.

A community

One of the initial purposes of PlanetLab is to serve as a testbed site for distributed systems and network research communities. Since the beginning of 2003 more than one thousand researchers from the most important academic institutions and research laboratories have made use of PlanetLab to develop new technologies and to evaluate new projects and ideas.



The researchers' community in Chile is associated to the Latin American community which is pushing CLARA forward. In practical terms, this group of users interacts through a discussion forum where usage policies, applications selection criteria and representation in a users committee are defined, among other usage norms. All these criteria are placed within the context of PlanetLab's own usage policies.

A development platform

In its testing space, members from the PlanetLab community are developing novel and highly useful services, at a planetary scale: masking in routing and multicast, scalable location of objects, network measurements, distributed computational tables for network embedded storage, distribution of contents in PlanetLab, to name but a few, since the kind of applications likely to be deployed on this planetary laboratory is only limited by inventiveness and by the needs of the academics and researchers who make use of it. Other examples of applications which can be deployed on PlanetLab are: distributed archive system, application of network monitoring, P2P applications, network simulator, storage system, file transfer system (parallel fluxes or any optimisation method), analysis of networks under attacks, etc.

For researchers the advantage of using PlanetLab is that it allows them to experiment with new services under real life conditions and, as already mentioned, at a global scale. All the examples already presented greatly benefit from the world distribution through the network: because it features multiple strategic locations from which researchers can observe applications and reactions to the network behaviour; because of the proximity established with many resources and data centres, and because it is distributed across multiple administrative frontiers.

A software package

As for the software for its operation, the operative system used by PlanetLab is Linux, specifically Red Hat's Fedora Core.

In terms of the benefits for PlanetLab users, they get access - appropriately authenticated and independent from other users- to resources in the form of virtual spaces, the so-called "slices". Regarding these spaces, the user has choices to incorporate nodes (servers) which he/she requires to install and run his/her application. The autonomy in control

is such that if an application requires specific libraries, the user will have to install them on all the servers which he/she has chosen to run his/her application.

Considering that each virtual space or "slice" works in a safe way and in an isolated environment from the rest of virtual spaces of other users, the user of one "slice" obtains certain super-user (root) privileges in each server, which allows him/her to create new users, control services and install new packages (libraries), etc.

The right to use virtual spaces/slices is given for limited periods of time, which can be renovated after justification. A short period typically lasts one month and a long period lasts about six months.

A microcosm for Advanced Internet

The services at a planetary scale provide an opportunity to introduce revolutionary technologies which change the way in which society uses the Internet. Researchers are using PlanetLab to understand what the network architecture should be like so that it provides a better support for services, thus enhancing its performance and increasing its scalability.

Who can access PlanetLab?

PlanetLab is aimed at academics and researchers in the area of Computer Science and related disciplines, which benefit from a scenario with servers deployed on a real environment (of data network) at a large scale, with real parameters in terms of latencies, "jitter", bandwidths, etc. Despite the definition of "target audience", individual users cannot be part of PlanetLab. The only way to become part of this laboratory is through the institution one belongs to, which must be a member of the laboratory. In the case of Latin America, academics and researchers from the institutions that are members of the national networks connected to RedCLARA will be able to be users of PlanetLab.

Those who are interested have to visit CLARA's wiki on PlanetLab at:

<http://wiki-planetlab.reuna.cl/>

PlanetLab Website: www.planet-lab.org/



October 24-27:

International ICFA Workshop on Digital Divide Issues for Global e-Science

Carried out in the Ibero-American University in Mexico City, the Workshop was a key meeting point for all those scientists, researchers and decision makers that are currently involved in Grid technologies, e-Infrastructures for e-Science, advanced networks and, of course, for those who are currently working to find a viable solution for the major digital divide problematic.

“Today, physicists from some developing regions need substantial improvements in their national and international network connections, or they will be unable to make significant contributions to their experiments. Without these improvements, physicists in these regions will be denied the right to be full partners in their experiments, and their students at home will be unable to take part in the physics discoveries.

“Meeting these challenges is vital for the future of our field, but the inequities between different regions as information technology has advanced have in many cases only increased with time. Technological advances in networking in the most-favored regions (e.g. the US, western Europe and Japan) have progressed much faster than Moore’s Law over the last 20 years, while less-favored countries have been held back by problems of unfavorable government policies, lack of infrastructure and/or lack of training. We have therefore reached a critical point where, unless we take concerted action, the “Digital Divide” that separates the more- and less-favored regions will only widen.

“ICFA, understanding the vital role of these issues for our field’s future, commissioned the Standing Committee on Inter-regional Connectivity (SCIC) to survey and monitor the state of the networks used by our field in 1998. For the past four years the SCIC has focused on understanding and seeking the means of reducing or eliminating the Digital Divide, and

proposed in ICFA that these issues, as they affect our field of high energy physics, be brought to our community for discussion. These activities led to ICFA’s approval of the first Digital Divide and HEP Grid Workshop, which took place in Rio de Janeiro in February 2004, and of this second Workshop. The first workshop provided very useful insights into the particular Digital Divide-related problems in Latin America. The discussions at and following the workshop taught us how better understanding, and cooperative work by the local and international communities can be effective in overcoming these problems. We intend to follow a similar format in the second workshop, and hope that similarly positive results will be obtained for the Asia Pacific region”.

These quoted paragraphs were written by the Workshop Co-Chairs and served both to invite some of the key speakers and to give an introduction to the Workshop for those who participate in it as audience. And when we say audience and key speakers we do mean the most relevant world-wide researchers, scientists and engineers and representatives of the national research networks and the international advanced networks and governmental agencies of the five continents.

The Workshop main purpose was “to review the network and grid developments in various regions between the high energy physics groups in developing regions (for example, Asia Pacific) and the laboratory sites of their experiments,

as well as their collaborators in other nations to identify the key problems and to discuss the means of developing effective solutions”.

An this main purpose was reflected in the four missions that the organizers and the International Advisory Committee define and, it must be said, the missions were well acquire. The missions were:

- To provide information about the present status, state-of-the-art and issues now and in the future in data-intensive Grid computing, inter-regional connectivity and Grid enabled analysis for high energy physics, and relate them to the key problem of the Digital Divide;
- To exchange information and to promote awareness of these issues in various regions, focusing on the Asia Pacific, Latin America, Russia, and Africa;
- To develop approaches to reduce or eliminate the Digital Divide, and;
- To help ensure that the basic requirements for global collaboration are met, related to all of these aspects.

All the information related to the ICFA Workshop is available at: <http://fismat.uia.mx/HEP/ICFADDW2007/>

About ICFA-SCIC: ICFA-SCIC (International Committee on Future Accelerators - Standing Committee on Interregional Connectivity) mission statement is “to monitor and review interregional connectivity, high energy physics requirements and make recommendations for network improvements”. Website: <https://icfa-scic.web.cern.ch/>.



ORIENT and GÉANT2 Link the World's Largest Telescope



Radio Astronomers from Europe and China have for the first time used the trans-Siberian ORIENT circuit to connect telescopes thousands of miles apart, demonstrating what can be described as the world's largest telescope.

Original Article: The Works of DANTE: <http://www.geant2.net/server/show/ConWebDoc.2575>

The ORIENT circuit linking together Chinese networks, CERNET and CSTnet, and the European GÉANT2 network and its Dutch partner SURFnet, allowed high speed transfers of astronomical data from a Chinese telescope to a supercomputer in the Netherlands. The use of ORIENT not only brings high network capacity, but also, by using the most direct route possible from China to Europe, reduces the time taken by the data to reach Europe by half compared with trans-Pacific routes.

Collaborators in the EXPReS project (Express Production Real-time e-VLBI Service) conducted the first successful e-VLBI observations to jointly use telescopes in China and Australia, China and Europe, and for a brief period Australia and Europe. The observations were demonstrated today by the Joint Institute for VLBI in Europe (JIVE), in partnership with their European VLBI Network (EVN) colleagues in Europe, China and Australia, to advanced networking experts at the 24th APAN (Asia-Pacific Advanced Network) Meeting in Xi'An, China.

e-VLBI, or real-time, electronic very long baseline interferometry, is a technique by which widely separated radio telescopes simultaneously observe the same region of sky, and data from each telescope are sent in real-time to a central correlator via high-speed communication networks. The correlator is a purpose-built supercomputer which analyzes the data to allow researchers to map the sky. The correlator can produce data with up to one hundred times better resolution than the best optical telescopes. In other words, this technique creates a virtual single telescope with an observing area equal to the distances separating the actual telescopes.

When data from the telescopes are sent electronically via fibre optic network, they can be correlated in real-time by the central processor at JIVE. This technique, known as e-VLBI, is ideally suited to observations of transient events such as supernova explosions and gamma-ray bursts. Astronomers receive data quickly and can plan follow-on observations accordingly. This is an improvement on the traditional VLBI process of shipping hard drives to the correlator, which can take weeks for delivery alone.

During the demonstration data was transferred to JIVE at a rate of 256 Mbps per telescope.

Read the complete original article at: <http://www.geant2.net/server/show/ConWebDoc.2575>

About JIVE

The Joint Institute for VLBI in Europe (JIVE) is a scientific foundation with a mandate to support the operations of the European VLBI Network (EVN). The major activity has been the development, construction and successful operation of the EVN Data Processor, a powerful supercomputer that combines the signals from radio telescopes located across the planet, creating a single virtual telescope of intercontinental dimensions. Using this technique of Very Long Baseline Interferometry (VLBI), astronomers can make detailed images of cosmic radio sources, providing astronomers with the clearest, highest resolution view of some of the most distant and energetic objects in the universe.

About EXPReS

Express Production Real-time e-VLBI Service (EXPReS) is a three-year project funded by the European Commission with the objective of creating a distributed, large-scale astronomical instrument of continental and intercontinental dimensions. This electronic Very Long Baseline Interferometer (e-VLBI) is achieved using high-speed communication networks operating in real-time and connecting together some of the largest and most sensitive radio telescopes on the planet. EXPReS is coordinated by JIVE, the Joint Institute for VLBI in Europe, which is hosted by ASTRON, the Netherlands Foundation for Research in Astronomy, in Dwingeloo.

About GÉANT2

GÉANT2 delivers the next generation research and education network for Europe. With over 30 million research and education users in 34 countries across the continent, GÉANT2 offers unrivalled geographical coverage, high bandwidth, innovative hybrid networking technology and a range of user-focused services. Its network extends more than 50,000 km and its extensive geographical reach interconnects with other world regions, enabling global research collaboration. GÉANT2 is co-funded by the European Commission under the Sixth Research and Development Framework Programme. The project partners are 30 European National Research and Education Networks (NRENs), TERENA and DANTE. For more information visit <http://www.geant2.net>

The Universal Cultures Forum is being developed with great success in Monterrey



The Universal Cultures Forum, Monterrey 2007, began on September 20 and will extend until 8 December 2007. During this period three kinds of activities will be held: Dialogues, Exhibitions and Cultural Expressions. The members of CLARA had the chance to learn about the way participation in the Forum Dialogues takes place, via an online activity, carried out on September 14.

CUDI, the Mexican academic national network, is supporting the execution of this event, by making its resources available to broadcast some of the most relevant Forum activities online.

The Universal Cultures Forum is a worldwide event taking place every four years which gathers citizens from all over the World. This time the city of Monterrey, Nuevo León, has been chosen to elaborate and propose solutions to issues of worldwide importance, such as peace, education, knowledge and conservation of the planet, among others.

This event, held at the Fundidora Park, is gathering its attendees around the over one thousand events that are being carried out regarding four big issues: cultural diversity, conceived as a renewable living treasure which guarantees the survival of humanity; knowledge, considered as the essential tool for development and well-being creation; peace, indispensable condition for happiness and welfare; and sustainability, necessary to think about the future of living species and natural resources.

Three types of activities are being carried out throughout the eight week Forum: dialogues, exhibitions and cultural expressions. The dialogues intend to achieve an emotion and content exchange to encourage acceptance towards people with dignity and respect; to use the word as a tool to listen and talk to our peers; and to act as a vehicle to achieve significant learning.

The exhibitions are aimed to generate dynamic learning by way of the senses. As a result of the interaction between the artworks and graphic and audiovisual elements, settings and space transformations, communication potentials are increased. Cultural expressions are conceived

as a way to celebrate cultural diversity present in Arts and letters; in language and intellectual production; in social organizations and lifestyles; in value systems, in traditions, in beliefs and in material manifestations of human groups.

All activities are focused on 12 guidelines:

- Peace and Spirituality, September 25 - 29
- Education, Science and technology, October 2 - 6
- Cities and Population, and Natural Resources, October 9-14
- Knowledge Based Development, October 16 - 20
- Health Culture and Quality of Life, October 23 - 27
- Governability and Participation; Human Rights and Justice, October 30 to November 3
- Identity and Diversity; Cultural Policies, November 6 - 10
- Communication, November 13 - 17

According to the event organizers, the Monterrey 2007 Forum is making important ideas available to everyone, ideas that are important to acknowledge ourselves as world citizens, respectful of its natural and cultural, co-responsible of the preservation of natural resources, encouragement of a sustainable development in a world without violence, and the defense of human rights. Diversity and quality in our choices will allow for each participant to find events according to their interests, and explore new areas of knowledge and artistic expression; a festive coexistence; face to face communication and fraternity, between dwellers of all



five continents; the satisfaction of having participated in a unique celebration.

The activity Schedule is available online at: <http://www.monterreyforum2007.org/>.

The dialogues are being broadcast online, thanks to the collaboration of CUDI, the advanced academic Mexican network, at the following URL: <http://eventos.uanl.mx/forum/>

To access the events' live broadcast, CUDI has set up a site with the full Schedule, at:

http://www.cudi.edu.mx/eventos/2007/20_09_forum_culturas_index.html.

Preparation:

Latin American networks members of CLARA gathered, via videoconference, last September 14 to learn about and commit to spreading the remote participation possibilities offered by the Universal Cultures Forum. The occasion also served as an opportunity for the organizations connected to RedCLARA to introduce themselves.

On this videoconference, carried out through CUDI's VNOC, the following program was carried out:

- Presentation of the Forum Project (Jorge Ángel Díaz López, Director of the Forum Dialogues)
- Telmex Project (José Luis Gómez García, Telmex Commercial Assistant Director)
- Forms of participation by the CUDI community (José Antonio Ramírez Vidal)
- Q&A



Within the framework of the EELA Project

REUNA has been accredited by TAGPMA as Certification Authority

REUNA, the Chilean National Research and Education Network (NREN), has been fully accredited by The Americas Grid Policy Management Authority (TAGPMA) as a Certification Authority (CA). This achievement does not only imply the success of this NREN, but of EELA, since after its establishment has been possible to have two CAs in Latin-America -the first one was UFF LACGrid CA (Brazil). The Accreditation was given to REUNA during the 5th TAGPMA face-to-face Meeting, held in July in Banff, Canada. Later in August 6th, REUNA-CA was included in the IGTF's (International Grid Trust Federation) distribution list of all the globally accredited CAs.

María José López Pourailly

“Chile and Brazil are currently the only two Latin-American countries that can issue certificates to be used in computational Grids”, explained Sandra Jaque, Technical Manager of REUNA, who added that “this great news and achieved goal must be recognized within the context of the EELA Project (E-Infrastructure shared between Europe and Latin America) and here, we must acknowledge and thank the collaboration of LIP and particularly of Jorge Gomes, who is the Task Leader of the T2.2 of EELA, which is ‘Certification Authorities and Virtual Organizations’, and also we must distinguish the role of TAGPMA and of the good collaborative environment that has established”.

Thanks to the new status as CA of REUNA, the Chilean academic community will now be able to be certificated in order to be validated in the world of Grid technologies, which will open new possibilities for the scientific, engineering and academic communities of Chile, in terms of applications, resources and future projects.

REUNA is now working to establish the required Registration Authorities, as most of the CAs do, whose mission is to know those who are asking for a certificate and to guarantee that they are who they say they are.

Within the EELA framework, the success of Brazil and Chile in terms of obtaining the accreditation is going to be followed

in short by both the Argentinean and Mexican CAs who are practically ready and also by the Venezuelan CA is well on the way.

TAGPMA is a federation of authentication providers and relying parties headed by a Policy Management Authority (PMA) 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. TAGPMA is member of the International Grid Trust Federation (IGTF), that gathers the PMAs of Europe and Asia-Pacific. These institutions are the ones that are called to validate the CAs in terms of their accomplishments of the procedures required in security and operation, that's why they are accredited as trust organisms for the certification release.

More information:

EELA Certification: http://www.eu-eela.org/eela_wp2_certification.php

REUNA-CA: <http://reuna-ca.reuna.cl/>



RNP launches high speed network to link university hospitals

The Project, operated through the RUTE Network, will allow RedCLARA in the future to collaborate with institutions in Latin America, Europe and the USA. In the first stage 19 hospital units in 14 Brazilian states will participate. The project intends to link 33 other hospitals and five faculties.

Adapted from an original RNP article, published in : <http://rute.rnp.br/noticias/?noticia=45>.

On Wednesday 1 August, RNP, the Brazilian Education and Research Network, gathered another achievement. Together with the ministries of Science and Technology (MCT) and of Education (MEC), they launched a project by the University Network on Telemedicine (Rute) to implement a physical infrastructure of services and applications in high speed networks which will make it possible to incorporate existing telemedicine projects for the development of university hospitals in Brazil.

The initiative, supported by the Studies and Projects Funding Agency (Finep/MCT) and the Brazilian Association of University Hospitals (Abrahue), will enable the implementation of medical images analysis systems with remote diagnoses, which can contribute to mitigate the lack of specialists, as well as providing treatment and training for medical professionals without the need to go to reference centres.

This project will enable, in the first stage, the use of applications which require greater network resources or which need greater exchange of medical data from university hospitals and institutions participating in RNP. In the second stage, Rute will be able to bring the services developed in university hospitals in the country to professionals located

in distant cities by means of a system to share electronic records, consultations, exams results and second opinions. It will also be possible, through the RNP connection, to collaborate with institutions in Latin America, Europe and the USA.

In the first stage, 19 hospital units in 14 states are benefiting from the project. The project will be expanded to other 33 university hospitals and five faculties in the medical area, thus covering all Brazilian states.

Thanks to an agreement between the Ministry of Health and RNP, it will also be possible to incorporate the Rute network into 32 tele-health clusters that are part of the National Pilot Project on Tele Health, by providing support in the qualification of professionals in this area so that they provide basic care for the population.

Further information on RUTE at: <http://rute.rnp.br/>



In 2009 CLARA will organise the meeting

CCIRN articulates new plans collaboration at the celebration of its 20th anniversary

The Coordinating Committee for Intercontinental Research Networks, CCIRN, annual meeting was held on Saturday August 26 in Xi'an, China, as part of the 24th APAN (Asia Pacific Advanced Network) meeting. The core objectives of the meeting, in which Florencio Utreras, CLARA's Executive Director, represented the Latin American block, were to encourage the exchange of experiences; to present the developments of the networks in each continent and to create synergies which can favour research development.

María José López Pourailly

The event marked two decades of CCIRN activities. More than 20 representatives from four continents participated in the meeting, thus confirming CCIRN as the forum in which research networks, grouped into continental blocks, agree on and develop a series of activities in order to get interoperable network services in favour of research and academic goals. On the basis of the agreed requirements, CCIRN discuss issues related to policies, administration and technical problems.

During the last years, CCIRN has consolidated as a great meeting point for organisation which bring research networks together, namely: TERENA (Europe), APAN (Asia-Pacific), CLARA (Latin America) and the Internet2, NLR and CANARIE.

During the meeting in China, leaders and representatives from the blocks represented in CCIRN articulated new and concrete plans aimed at enhancing interregional scientific collaboration. These plans include the elaboration of a shared inventory of transoceanic connections for research networks; cooperation in transference of knowledge and training and coordination for the production of regional digests of the national research and education networks (NREN). Furthermore, they agreed to explore the possibility of establishing collaboration to monitor the performance of multi-domain networks.

The decision to create a shared inventory of transoceanic connections for research networks is rooted in the issues around submarine cables that conduct these networks and the physical location of cables. According to CCIRN members, an inventory could constitute the bases on which to coordinate the procedures and use of intercontinental connections, providing solutions for their vulnerabilities. This last issue is what definitively captures the attention of network leaders, who do not forget that in late 2006 the earthquakes affecting the Taiwan area interrupted most of the Internet traffic in Asia for many days. What happened? These seismic movements cut off a significant amount of fibre cables which were located under the sea at very close to each other. This last fact was unknown until then.

As for Latin America, Florencio Utreras had the chance to introduce CLARA and the developments in RedCLARA. "The representatives from North America were very impressed by the effort made to establish a RedCLARA node in the USA", stated Utreras, who also engaged CLARA to be the organiser of the 2009 CCIRN meeting.

The representative from the US National Science Foundation (NSF) indicated that soon they will be opening a call for regional interconnectivity (of different continents with the USA) with characteristics similar to those of the IRNC (International Research Network Connections) latest call,



Co-ordinating Committee for Intercontinental Research Networking CCIRN

which allocated \$US 25 million for 5 year projects distributed throughout the five continents.

The 2008 CCIRN meeting will be held in Bruges (Belgium) on May 18, one day before the TERENA Conference.

Further information:

- CCIRN: <http://www.ccirn.org/>
- 24th APAN Meeting: <http://www.apan.net/meetings/xian2007/index.html>



The scientists belonging to the CLARA community can participate:

SciVee, the scientists' YouTube

According to the creator of SciVee, Philip Bourne, this tool is intended to be a complement to the works published by scientists in specialized publications, so as to facilitate the understanding of the contents to the general public.

Scientists who are members of the Latin-American networks connected to RedCLARA may start using this tool, by visiting the Web: <http://www.scivee.tv/>.

María Paz Mirosevic Albornoz

SciVee is broadcasting medium designed to facilitate a free and extended understanding of Science. It's defined as a new tool created by scientists for scientists, who can, from now on, display their work as a multimedia presentation, accompanied by a video where the work is described in the form of a short lesson, and a presentation that incorporates the contents of their previously published articles.

The idea is that scientists can create a space of their own to display their work, as well as viewing the presentations available on the site and participate in virtual discussions with the authors, and become part of the different communities regarding specific subjects. Through this medium, men and women of Science will be able to get to know their peers and carry out future collaborations on their research, which becomes essential in today's world.

There's plenty of reasons to encourage scientists that are connected to the Latin-American networks linked to RedCLARA to participate in this innovative initiative.

The communities that have been originated from SciVee are currently in full development, but the invitation stays open for each one of the scientists wishing to participate. This can be done on "testing volunteer" mode, adding their name to the lists published on the web (<http://www.scivee.tv/>), from which an email will be sent enabling them to become part of the teams.

So far SciVee is associated to three partner institutions: The Public Library of Science (PloS, <http://www.plos.org/>), The National Science Foundation (NSF, <http://www.nsf.gov/>), and The San Diego Supercomputer Center (SDSC, <http://www.sdsc.edu/>).

It's Bourne's idea

Professor of the Department of Pharmacology at the University of California, San Diego, Philip Bourne is the creator of

the SciVee Project. According to an interview done and published by the specialized magazine Ars Technica (<http://arstechnica.com/index.ars>), this idea came to existence as an attempt to bring Science closer to more people, combining written and video content.

The first premise behind SciVee, according to its creator, is that it needs to provide a means of scientific communication that is set in a gray area between an abstract (which only takes a couple minutes to read) and a full paper (which may take hours to read). The first type of video-presentation SciVee is trying to host is one called "pubcast", where the researcher publishes a video, with a short description of the paper, which is synched with the work's text.

In Bourne's opinion, making a video is not a difficult task, once fear is put behind. In fact, the site has a guide on how to record and edit video content on both Mac and Windows platforms.

Regarding one of the greatest benefits Professor Bourne sees in this new approach to displaying Science, is that papers Publisher on SciVee will have a greater chance to be quoted in works by other scientists and, as a result, results could be discussed with other scientists.

For more information visit: <http://www.scivee.tv/>



e-Agriculture: A new Emerging Field

e-Agriculture is one of the courses of action identified in the Declaration of the Action Plan at the World Summit on the Information Society. As a consequence of the importance of this issue, the Cyber-Agriculture Work Group was created and is today gathering relevant information in order to work in the area of e-Agriculture and is also organising events to bring together the community devoted to work on agricultural issues.

María Paz Mirosevic Albornoz

With the rise of e-Infrastructure areas such as e-Health, e-Government, and e-Education, among others, e-Agriculture is also strongly emerging. e-Agriculture is one of the courses of action identified in the Declaration of the Action Plan at the Third World Summit on the Information Society (CMSI). In fact, the “Tunisia agenda for the Information Society”, published on 18 November 2005, puts the emphasis on the facilitating role of the United Nations agencies in the implementation of the Geneva Action Plan, and this is why the United Nations Food and Agriculture Organisation (FAO) was given the responsibility of organising the activities related to the C7 course of action on ICT Applications and Agriculture.

FAO organised the first workshop on Cyber-Agriculture in June 2006, which served as a meeting point for representatives from the main development organisations dealing with agricultural issues. The meeting marked the beginning of the development of an efficient process to involve a greater number of stakeholders to work on issues related to cyber-agriculture as a follow up to the CMSI, which resulted in a Cyber-Agriculture Work Group (CWG). This group founded on organisation called e-Agriculture.org (www.e-agriculture.org/es).

The objective of the CWG is to create platforms made up of various stakeholders, focusing on people and crosscutting so that it serves as meeting point for representatives from important areas of cyber-agriculture. Members of the CWG decided that the definition of Cybe-Agriculture established in the CMSI documentation, under the C7 Course of Action on ICT Applications, was inadequate and needs to be reviewed. Based on this, the first important activity for the CWG was to establish an initial commitment with the

different stakeholders by means of an open survey on Cyber-agriculture.

The 2006 survey on e-Agriculture asked people to share projects, initiatives or practices which illustrated potential or existing activities related to e-Agriculture. This list contains over 150 sources of information sent by participants from more than 135 countries. Some examples of countries which sent this information is available on the Web:

<http://www.e-agriculture.org/examples.html?&L=2>.

The CWG has 11 partners working in groups to create the platforms. The partners in this group are:

- Consultation Group for International Agricultural Research and the ICT-KM Programme. (<http://www.e-agriculture.org/cgiar.html?&L=2>)
- The United Nations Food and Agricultura Organisation (FAO). (<http://www.e-agriculture.org/fao.html?&L=2>)
- GTZ. (<http://www.e-agriculture.org/gtz.html?&L=2>)
- IFAD. (<http://www.e-agriculture.org/ifad.html?&L=2>)
- IICD. (<http://www.e-agriculture.org/iicd.html?&L=2>)
- World Bank - Agricultural and Rural Development Department. (<http://www.e-agriculture.org/worldbank.html?&L=2>)
- Technical Centre for Agricultural and Rural Cooperation (CTA). (<http://www.e-agriculture.org/cta.html?&L=2>)
- World Forum for Agricultural Research (GFAR). <http://www.e-agriculture.org/gfar.html?&L=2>)
- IAALD. (<http://www.e-agriculture.org/iaald.html?&L=2>)
- IICA. (<http://www.e-agriculture.org/iica.html?&L=2>)
- UNDESA. (<http://www.e-agriculture.org/undesa.html?&L=2>)

Currently the CWG has two Action Groups, the News Group and a Translation Group, made up of members interested in contributing to the website development. Those who are interested in participating in these groups just have to register at the e-Agriculture website (<http://www.e-agriculture.org/>).

Conference on e-Agriculture

The Conference called “A world perspective on e-Agriculture” was held between 21-28 September 2007 in Rome, Italy, and was defined as a dialogue on the use of information and communications technologies, as well as other related technologies for a sustainable agricultural development and food safety.

The e-Agriculture Week was planned as a follow-up to the CMSI, and was organised by several international organisations led by FAO. The event was developed based on the results

of the world survey on e-Agriculture in which more than 3,400 people from 135 participated. During the event the Community of Experts on e-Agriculture was launched.

The e-Agriculture Week facilitated the exchange of experiences among the participants. The emphasis was put on the following core areas:

Practice: Technologies and Methodologies: a combination of discussions and practical activities to review the different ways to use recently developed technologies and tools, focusing on good practices and on determining criteria to measure their success.

Policies: An opportunity for participants to discuss how different policies can influence activities related to e-Agriculture and what their effects would be.



Guatemala will host two important events in February:

6th International Conference on Community-Based Environments and 2nd International Conference on Integral Education

The 6th International Conference on Community-Based Environments will be held between 12-16 February in Antigua, Guatemala. On the 13th that same month the 2nd International Conference on Integral Education will be held in Guatemala City. The organisers are inviting to participate by submitting proposals for both events.

6th International Conference on Community-Based Environments

The approach of the Conference, organised by the Galileo University, is the development of communities based on websites (mainly built on OpenACS platforms, among others) and on communities based on e-Education environments. This event offers various activities for platforms users and developers, as well as for people interested in general information on the following topics:

- Website-based communities
- e-Education
- Collaboration environments
- Web 2.0 for e-Education environments
- Social Software
- Methodologies for online education
- Integration of e-Education and a LMS with third Web applications
- Support for educational standards and learning design
- Learning Objects Repositories
- e-Portfolios
- Competence modelling
- Ontologies for e-Education

- Educational Data Mining and possibilities for adaptation
- Agile content development
- Specialised learning components
- Usability for online learning
- Accessibility of services for learners
- Experiences and better practices
- Educational games
- Mobile learning
- Virtual education environments
- Remote work platforms for OpenACS
- Web services support
- Orientation of extended objects in OpenACS for better reuse and configuration
- Test environments and test approximation
- Architectural developments

The programme will feature tutorials and group discussions, three days of presentations and workshops. One part of the presentations will deal with the developments in research, while workshops will focus on short presentations, discussions and presentation of results via opinions, reports and proposals which will be presented in a common session.



The banner features the logos for OpenACS and .LRN (Learn, Research, Network) at the top right. Below the logos, the text reads: "OpenACS and .LRN Conference, Guatemala 2008", "International Conference and Workshops on Community Based Environments", and "February 12th -16th, 2008 - Galileo University - Antigua Guatemala & Guatemala City, Guatemala." The background of the banner shows a night view of a city with illuminated buildings.

Conferencia Internacional 2008

E-learningIntegral@
 acceso e innovación 2.0



Galileo Educational System

People interested in sending proposals for workshops, tutorials, posters and mini sessions can do so until 20 November.

Further information on the Web: <http://ges.galileo.edu/conf2008/es:feb2008>

2nd International Conference on Integral Education

The Research and Development Department (GES) of the Galileo University is organising the 2nd International Conference on Integral Education, whose main topic is “Access and Innovation in e-Learning”.

The event will feature experts on the subject from Spain, the USA and Austria, among others, and aims at presenting the possibilities offered by e-Education, as well as at encouraging and favouring access to the information society for every citizen, without forgetting that education in the 21st century requires constant innovation (better education, significant learning and learning that is coherent with society’s current context are required, especially for the younger generations), both in terms of online teaching-learning technologies and methodologies. All of these entails a change of paradigm, costumes and academic cultures, the latter being the greatest challenge.

The organisers of the event are inviting to submit papers, to participate in the posters presentation session or to present an information stand on the general topic of the conference and on the sub-topics listed below:

- Accessibility in e-Education
- Access to e-Education (Equipment and Technology)
- Web 2.0 and e-Education
- Social Software
- Methodologies for online teaching
- Support for educational Standards and Learning Design (IMS, LAMS, SCORM)
- Learning Objects Repositories
- e-Portfolios
- Competences modelling
- Ontologies for e-Education (Semantic web)
- Educational Data Mining and adaptation possibilities
- Specialised Learning Components
- Usage for online learning
- Experiences and better practices
- Educational games
- Mobile learning

Papers must be sent at the electronic address learning@galileo.edu and the deadline expires on 30 November 2007.

All those who are interested in attending the conference can visit the event’s website to register. URL: <http://ges.galileo.edu/conf2008/elearning>.

A G E N D A

N O V E M B E R

Monterrey Universal Forum of Cultures
 Del 20 September - 8 December, Monterrey, México
<http://www.monterreyforum2007.org/>

IV Latin American Congress on Computer Security
 26 - 28 November, Mar del Plata, Argentina
<http://www.cibsi2007.org/>

Do-Son school on Advanced Computing and GRID
 Technologies for Research
 5 - 16 November, Hanoi, Vietnam
<http://acgrid.in2p3.fr>

6th NRENs and Grids Workshop organised by TERENA
 29 - 30 November, Malaga, Spain
<http://www.terena.org/activities/nrens-n-grids/workshop-06/>

ALICE - CLARA and CLARA-TEC Meetings
 19 - 23 November, Panama City, Panama
<http://www.redclara.net>

D I C E M B E R

3rd EELA Conference
 3 - 5 December, Catania, Italy
http://www.eu-eela.org/3_conference/index.html

3rd Global Knowledge Conference
 11 - 13 December 2007, Kuala Lumpur, Malaysia
<http://www.GKPEventsOnTheFuture.org>

3rd IEEE International Conference on E-Science and
 Grid Computing
 10 - 13 December, Bangalore, India
<http://www.escience2007.org/>

J A N U A R Y

2 0 0 8

First Latin American Regional Workshop on Distributed
 Laboratory Instrumentation Systems in Physics
 7 January - 1 February, Valdivia, Chile
http://cdsagenda5.ictp.it/full_display.php?email=0&ida=a0727

Workshop on possible Grid applications
 30 January, Louisiana, USA
http://www.sura.org/programs/it_workshop.htm

25th APAN Meeting
 20 - 25 January, Hawaii
<http://www.apan.net/meetings/hawaii2008/index.html>

Mardi Gras 2008 Conference
 31 January - 2 February 2008, Baton Rouge, Louisiana,
 USA
<http://www.mardigrasconference.org/>

F E B R U A R Y

2 0 0 8

6th International Conference on Community Based Environments

12 - 16 de February, Antigua, Guatemala

<http://ges.galileo.edu/conf2008/es:feb2008>

2nd International Conference on Integral E-Learning

13 February, Guatemala City, Guatemala

<http://ges.galileo.edu/conf2008/elearning>

M A R C H

2 0 0 8

9th Latin American Congress on Educational Informatics

6 - 8 May, Caracas, Venezuela

<http://ares.unimet.edu.ve/ribie/ribie.htm>

8th IEEE International Symposium on Cluster Computing and the Grid

18 - 22 de March, Lyon, France

<http://ccgrid2008.ens-lyon.fr>

