DeCLARA

EVALSO:
A world class communication infrastructure for world class observatories

RENIA:
With one foot inside CLARA

Open Access Day:
Scientific information for all

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«The European Union is made up of 25 Member States who have decided to gradually link together their know-how, resources and destinies. Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders».

The European Commission is the EU's executive body.

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Editorial

Luis Furlán, President of CLARA, Director of RAGIE (Guatemala)

… on Superhighways and Vehicles

Since I took over CLARA's presidency, I have had the honour of participating in the signature of three collaboration agreements; with the Inter-American Organisation for Higher Education (IOHE), the Mexican National Council for Science and Technology (CONACyT), and the Advanced Research Technology Collaborative for the Americas (ARTCA).

While reflecting on the importance of these agreements, I remembered one of the many stages of my professional career at Guatemala's Universidad del Valle, where I worked in the area of Remote Sensors and Geographical Information Systems. In a course delivered at the European Space Agency (ESA), we were presented a case study about a region in Rio Branco, Brazil. We were given a sequence of satellite images of that region, taken consecutively, where the first one showed a virgin forest with vegetation in full splendour. In the next image there was a highway cutting the forest in half, and in the last images we could clearly see the emergence of villages and communities along the highway. It was obvious that the highway had served as a catalyst for the region's development, enabling the flow of vehicles which facilitated the exchange of goods and services between the different villages.

It is easy to associate that memory to the signature of these agreements. RedCLARA is the "superhighway" that we have built in Latin America and these organisations, the IOHE, the CONACyT and ARTCA have, or have access to, "vehicles" that we want to travel over it. In highways we find vehicles of all kinds, sizes and colours; buses, trucks, cars, motorcycles, bicycles, and sometimes we still find carts pulled by beasts. In the same way, the "vehicles" provided by these three organisations are varied; researchers, professors, students, projects, high capacity computing resources, high technology equipment such as radio telescopes, scanning electron microscopes, videoconferences, and much more. All these "vehicles" will serve to link our "villages" and to promote the development of Science, Technology, Innovation and Education.

I am very well documented and know that those nations which have managed to achieve high development levels, have done so precisely though the enhancement of their own development in the areas mentioned at the end of the previous paragraph. This is where the importance of these agreements lies; RedCLARA and these organisations are coming together collaboratively to promote the development of our countries and are contributing to the main objective... the wellbeing of our population. I am certain that, with the work and enthusiasm of all the members of RedCLARA, there will be more agreements of this kind and hopefully we will be able to crowd this "superhighway" with "vehicles" which travel throughout every corner of our beloved Latin America and the rest of the world.

Have a nice trip!

Calgary, Canada:

CLARA and IOHE strengthen collaboration and take it to strategic levels

Within the context of the Conference of the Americas on International Education (CAEI), held in Calgary between October 20-23, the Inter-American Organisation for Higher Education (IOHE) and CLARA signed a collaboration agreement which identifies important actions that the two organisations will jointly undertake in the field of Science, Technology and Innovation.

María José López Pourailly

With the aim of carrying out a number of actions that strengthen the national innovation systems across the region, on October 22 Luis Furlán, President of the CLARA Board, and Raúl Arias Lovillo, President of the IOHE and Vice-Chancellor of the Universidad Veracruzana, with the participation of Patricia Gudiño, General Secretary of IOHE and Carmen Gloria Labbé, CLARA Director of Innovation and Development as witnesses, ratified the alliance that both institutions have had since 2008 through the signature of an Addendum which includes:

1. The organisation of meeting spaces for knowledge sharing, which will bring the following actors and purposes together:
   - Universities and businesses to establish joint action lines in innovation
   - National bodies in charge of public policies and universities to analyse public policies on innovation
   - Universities to exchange good practices in the promotion of a culture of entrepreneurship
   - Multilateral organisation and universities to identify project lines which promote the strengthening of innovation in Latin America.

Luis Furlán, President of the CLARA Board, Patricia Gudiño, General Secretary of the IOHE, Raúl Arias Lovillo, President of the IOHE and Vice-Chancellor of the Universidad Veracruzana, and Carmen Gloria Labbé, CLARA Director of Innovation and Development.

2. Networks development
3. The development of joint projects to identify instruments and actions that support the implementation of public policies related to science, technology and innovation.

As part of the strategic lines of both regional institutions, the first point of the agreement has to do with the organisation of an Annual Congress on

Science, Technology and Innovation which will create a key meeting space among universities, research centers, businesses, and national and international organisms. This is ideal for innovation actors and leaders to establish joint action lines and common development strategies; reflect upon Science, Technology and Innovation policies; exchange knowledge and best practices in the promotion of a culture of entrepreneurship, and develop projects related to e-science and e-collaboration.

The current scenario indicates that Science, Technology and Innovation are a priority to improve competitiveness, and within this context Higher Education institutions are strongly urged to carry out a more competitive research; this is why the strengthening of relations in the field addressed by IOHE and CLARA is fundamental. This is what the UNESCO celebrated following the signature of the Addendum by highlighting that until now there wasn't any organizations or networks that harnessed regional and national actors in innovation, and which are dedicated to supporting Higher Education in Science, Technology and Innovation.

By enhancing the promotion of Science, Technology and Innovation, the development of projects in the region promoted by the agreement, engages both institutions to explore joint and/or complementary ways to procure funding that enables the implementation of specific initiatives (with the Inter-American Development Bank, IADB, and the International Development Research Centre, IDRC, among others) for the university-enterprise articulation, the creation of technology park networks, the training of human resources for technological management, the leverage of innovation indicators and the support to the formulation of the corresponding public policies.

The complementarity between CLARA and IOHE has been efficiently proven since 2008 through the joint development of a project called A Regional Strategy and Interoperability and Management Framework for a Latin American Federated Network of Institutional Scientific Documentation Repositories.

More information:
IOHE: http://oui-iohe.org/
CAEI: http://caie-caei.org/

RedCLARA exchanges direct traffic with the National university of Singapore

On October 27, the RedCLARA's Network Engineering Group (NEG) established a peering with the National University of Singapore (NUS) which allows the advanced Latin-American network to exchange direct IP traffic with NUS, improving the speed and efficiency in the communications and activities that over RedCLARA develop its users with the scientists and researchers from NUS.

María José López Pourailly

RedCLARA (ASN 27750) has previous peerings with GÉANT (pan-Europe), Internet2 and National LambdaRail (USA), y ESnet (Energy Sciences Network), among others. Before this new peering, the Latin-American researchers ans scientists connected to RedCLARA that were developing academic activities with the National University of Singapore (ASN 7610), had to wait their data to travel through RedCLARA to other advanced networks domains in order to get to NUS, but today this is a direct and bidirectional path which furthers even more the processes and, of course, boots the development of new initiatives.

This peering is established under the Pacific Wave project, designed to enhance efficiency in the exchange of IP traffic between major networks and projects, reducing the cost of such traffic and increasing efficiency and speed of data transfer.

Previously, through Pacific Wave, RedCLARA established peerings with the following institutions:

AS 2153 - CalREN - CENIC's California Research and Education Network / CENIC - The Corporation for Education Network Initiatives in California (http://www.cenic.org/, http://www.cenic.org/calren/, http://www.pacificwave.net/participants/current/cenic.html)

AS 101 - Pacific Northwest Gigapop - PNWGP, operated by the University of Washington - UW (http://www.pnw-gigapop.net/)

AS 293 - ESnet - Energy Sciences Network (2 peerings - http://www.pacificwave.net/participants/current/esnet.html)

ASN - Autonomous System Number: is the identifier of each Autonomous System (AS), which can be defined as a network (RedCLARA, for example), or a group of routers, or as part of a great networks interconnection under a single administrative authority. RedCLARA's ASN is the number 27750; NUS ASN is 7610. All the major networks - including national networks (NRENs) - have their own ASN.

More information at:
RedCLARA in Pacific Wave:
http://www.pacificwave.net/participants/current/nus.html
NUS in Pacific Wave:
http://www.pacificwave.net/participants/current/clara.html
Application projects that are currently benefiting from the Pacific Wave infrastructure:
http://www.pacificwave.net/participants/user_projects/

EVALSO:

A world class communication infrastructure for world class observatories

In the north of Chile, stretching 100 kilometres through the Atacama, the most arid desert in the world, the Atacama desert, a newly inaugurated data cable is creating new opportunities for astronomical research. The interconnection of ESO's Paranal Observatory and the Cerro Armazones Observatory to the Chilean academic network, REUNA, and its connection to the main Latin American scientific data backbone, RedCLARA, and from there to GÉANT, completes the last gap in the high-speed link between the observatories and Europe. A new scenario for astronomical discoveries and study has been put in place.

María José López Pourailly

Launched in a ceremony carried out on 4 November at the ESO facilities in Santiago (Chile), the new cable for the EVALSO (Enabling Virtual Access to Latin American Southern Observatories) project that connects the Paranal and Cerro Armazones observatories to the Chilean academic network, REUNA, signals the interconnection of the astronomy facilities to Europe through REUNA's link to RedCLARA and on to GÉANT. The EVALSO link provides 10 Gbps between Paranal and Santiago, traffic capacity that will be shared by ESO, REUNA and RedCLARA.

"This is the first green observatory in the world", stated Rolf Chini, Director of the Astronomy Institute of the Ruhr-Universität Bochum, who participated in the launch event by videoconference. Chini explained that before EVALSO the astronomers that are currently benefited by the project had to wait for five weeks to receive a hard disk with observation data captured by the European telescopes placed in the north of Chile. "Today, EVALSO allows the astronomers to plan their observations for every night in a very efficient way, we don't need to wait for five weeks, we can operate the robotic telescopes in Atacama in a remote way, we don't need to travel, this extremely reduces the contamination and it is also a very efficient use of the instrument and of the researchers and operators times", concluded Chini.

EVALSO is a European Commission FP7 co-funded programme co-ordinated by the University of Trieste and is partnered by ESO, Ruhr-Universität Bochum (Germany), Consortium GARR (Gestione Ampliamento Rete Ricerca - Italy), Universiteit Leiden (Netherlands), Istituto Nazionale di Astrofisica (Italy), Queen Mary, University of London (UK), CLARA (Cooperación Latino Americana de Redes Avanzadas – Latin America), and REUNA (Red Universitaria Nacional - Chile).

Mario Campolargo, Director of Emerging Technologies and Infrastructure at the European Commission, Massimo Tarenghi, Representative of ESO in Chile, Sub secretary of International Relations of Chile, Ambassador Fernando Schmidt Ariztía, José Palacios, President of REUNA's Board, Fernando Liello, Director of EVALSO, University of Trieste, Giorgio Filippi, EVALSO's Infrastructure Manager, ESO, and Sandra Jaque, Operations and Technology Manager of REUNA.

"This project has been an excellent collaboration between the consortium members. As well as giving a fast connection to the two observatories, it brings wider benefits to the academic communities both in Europe and Latin America", said Fernando Liello, EVALSO project co-ordinator who highlighted the benefits of the bi-continental initiative and of its powerful side effects: "In the north of Chile REUNA's backbone grows stronger and so does RedCLARA's". Liello was extremely clear at the time of talking about the infrastructures behind the initiative that he leads: "EVALSO runs and exists because other infrastructures exist and those are REUNA, RedCLARA and GÉANT".

The clear skies of the Atacama Desert, the high altitude of the Paranal and Armazones observation facilities and their distance from sources of light pollution make the sites ideal for astronomical observations. However, with this privileged location comes isolation. Before the EVALSO connection was established, these world class facilities were very far from the pre-existing communications infrastructure, and had to reply on a microwave link to send the enormous amounts of scientific data collected by the telescopes back to a base station near Antofagasta. And enormous means precisely that; over 100 gigabytes of data are produced every night by the telescopes at ESO's Paranal observatory, a quantity of information that is equivalent to more than 20 DVDs even once the files have been compressed. While the microwave link is sufficient to carry the data from the current generation of instruments at the Very Large Telescope (VLT), it does not have the bandwidth required to handle data from the VISTA telescope (Visible and Infrared Survey Telescope for Astronomy), or for the new generation of VLT

instruments which will come online in the next few years. This is why the only practical way to send a major part of the data collected at Paranal to the ESO Headquarters in Munich has been to save that data on hard drives that are sent by airmail from Chile to Europe. This means that a matter of days and even weeks which are lost in analysis time. This is precisely the problem that EVALSO will solve by means of this new connection.

Tim de Zeeuw, ESO General Director, said: "ESO's observatory at Paranal is growing, with new telescopes and instruments coming online. Our world-class scientific observatories need state-of-the-art infrastructure." And that is what EVALSO is, a world class communication infrastructure for world class observatories.

EVALSO will provide a much faster 10 gigabit/s link between the observatories and REUNA, a speed fast enough to transfer an entire DVD movie in a matter of seconds.

Mario Campolargo, Director of Emerging Technologies and Infrastructure at the European Commission, who took part in the launch event by means of a videoconference, said: "It is strategically important that the community of astronomers of Europe gets the best access possible to the ESO observatories: this is one of the reasons why the European Union supports the deployment of regional e-infrastructures for science in Latin America and interlinks them with GÉANT and other EU e-infrastructures".

The dramatic increase in bandwidth will allow real-time and remote access to data from Paranal. It will also make it easier to monitor the VISTA telescope's performance, access VLT data. In addition, the expanded bandwidth will open up new possibilities for astronomers and technicians, enabling them to take part in meetings via high-definition videoconferencing without having to travel to Chile. Experts will also be able to work remotely on unexpected and unpredictable events, such as gamma-ray bursts, almost as if they were at the observatory. Perhaps most importantly, the new link will provide enough bandwidth to keep up with the ever-growing volumes of information from Paranal and Armazones in future years, as new and bandwidth-intensive instruments come into use.

José Palacios, President of REUNA's Board of Directors, emphasized that EVALSO is a great example of the success that international collaboration initiatives can reach in terms of infrastructures development. Palacios invited the national scientists, academics, industrials and the Government to be a part of these initiatives, and to recognize them as an opportunity to generate a technological platform that promotes the development of research, education and innovation in Chile.

More information:
EVALSO project:
http://www.evalso.eu
EVALSO inauguration:
http://www.evalso.eu/evalso/2010-nov04-launching-event/
REUNA:
http://www.reuna.cl

RedCLARA Transatlantic Link & Launch of EVALSO Connectivity

Written by GÉANT

The EC-funded ALICE2 project aims to enable the Latin American research and education community to improve links among Latin American NRENs and to Europe. With this objective in mind, CLARA, the Latin American research and education organisation, has recently held a successful procurement to increase the capacity of the transatlantic link between the Latin American network, RedCLARA, and GÉANT.

Since the creation of the RedCLARA network, the Latin American and European research and education communities have been connected by a 622-Mbps link between Sao Paulo and Madrid. Following the recent procurement, the link will be increased to 1.2 Gbps in the late autumn of 2010 with a further increase to 2.5 Gbps being implemented a year later.

Among the user groups which will benefit from the increased transatlantic capacity are members of the European astronomy community who require virtual access to the ESO Paranal and Cerro Armazones observatories in Chile's Atacama Desert. Following the launch on 4th November of EVALSO (Enabling Virtual Access to Latin-American Southern Observatories) connectivity between the observatories and the Chilean capital, Santiago, astronomical data collected at the observatories can be quickly and reliably transmitted to researchers in Chile, Latin America and Europe across Chile's REUNA network, RedCLARA and the transatlantic link which interconnects Latin America with Europe.

GISELA is officially launched

The GISELA project (Grid Initiatives for e-Science virtual communities in Europe and Latin America), co-founded by the 7th Framework Programme of the European Commission, was officially launched at its kick-off meeting held in San Luis Potosi, Mexico, between September 21st and 24th 2010.

Herbert Hoeger, GISELA

The meeting was an excellent opportunity for the participants to get to know each other, exchange views and discuss in a warm environment about the challenges for the next two years. Many interesting presentations, motivating fruitful discussions, and the official election of the Project Management were the highlights of GISELA's kick-off meeting hosted by the Univesidad Autonoma de San Luis Potosi (UASLP).

GISELA's launch was an occasion not only to present the project, but to interact with outstanding stakeholders such as Dr. Enrique Villegas Valladares, General Director of the Potosino Council of Science and Technology, and Dr. Felipe Pazos Flores, Chief of the UASLP Division of Informatics. A session with 15 local members from the industry community raised interest on ways to promote industry-academic collaboration on technical solutions to some of their needs.

GISELA brings together 19 partners from 15 countries, 11 in Latin America, in a solid alliance, strongly collaborating to establish a powerful Grid e-Infrastructure facility, structure and implement a sustainability model for the e-Infrastructure and support Virtual Research Communities. This Grid, which clusters a large amount of computers and storage provided by the project partners, is now available for groups of scientists working on problems that demand high quantities of computing resources, that without this e-Infrastructure would be difficult to solve. GISELA is helping this communities to be more productive by improving the time that takes them to get their results and therefore providing more efficient solutions to problems.

The presentations given during GISELA's kick-off meeting can be found in the Event Server at http://indico.gisela-grid.eu.

For more information about GISELA, please vistit it's Web Site
http://www.gisela-grid.eu,
and Document Server
http://documents.gisela-grid.eu

A meeting full of meaning and promises

If, as the tango says, 20 years are nothing, what can five days be? A mere ripple on the water; a light breeze amidst a storm; one single bit amidst a sea of Teras. But no, five days can contain a whole universe and the trust, talks, collaborations, initiatives, knowledge and relationships that can be established in such a small amount of time can be great, as they were during the week that featured the development of the ALICE2 project and CLARA meetings in Managua, Nicaragua, between September 27 and October 1, 2010.

María José López Pourailly

Hosted by Nicaragua's National Autonomous University in Managua (UNAN-Managua) and with the participation of almost a hundred representatives from the academic networks that are members of the ALICE2 project and CLARA, and from the member universities of RENIA, the Nicaraguan academic network, the activities developed as part of the second annual ALICE2 and CLARA meeting were certainly fruitful and successful, in its broadest sense.

For each of the executive, technical and Communications and PR representatives from the member networks of the ALICE2 project and CLARA, and for the representatives responsible for the COMCLARA2010 communities, the agenda was full. Because when it comes to promoting regional scientific, academic, technological and innovation development, the time element is not abundant. The weekly menu included the following activities:

- CLARA-TEC Meeting and Technical updating Workshop (Tuesday 28 in the afternoon): 27 and 28 September from 8.30 to 18.00.
- IADB Workshop on Project Formulation Management (executives and communities): 27 and 28 September from 8.30 to 18.00.
- LA PR Network Meeting: 27 and 28 September

- NRENs Directors' Meeting /CLARA Assembly: 29 September from 8.30 to 18.00.
- Technical Workshop for Communities – Videoconferences: 29 September from 8.30 to 13.00.
- VoIP (Voice over IP) Technical Training Course: from 29 September to 1 October, from 8.30 to 18.00.
- ALICE2 Project Meeting: 30 September (from 8.30 to 18.00), 1 October (from 8.30 to 13.00)

In the following pages we will review in detail each of these sessions, along with the state of the local academic network, RENIA, and the activities in which CLARA's executives participated alongside Nicaragua's governmental institutions, agencies and Vice-presidency. But we will begin specifically at home, with the ALICE2 meeting.

The heavy rain of the previous days decided to stop on the night of Wednesday 29 September so as not to wet the costumes of the dancers who delighted the UNAN-Managua's hundred guests with modern and Nicaraguan traditional dances at its facilities. The university also treated its guests to a traditional dinner to celebrate the organisation of the ALICE2-CLARA meetings in its facilities. Thus, with joy and festive colours, the fourth biannual meeting of the ALICE2 project since its beginning in late 2008 was opened.

The sun came splendidly out on September 30 and October 1 across Managua's sky, the days scheduled for the organisation of the ALICE2 meeting, which featured the participation of institutional representatives from the Latin American networks that are members of the project and the CLARA staff who play different roles in it.

The project's execution and financial report were the topics addressed first, followed by RedCLARA's sustainability, through the presentation of the finance and business plan for the next five years made by Florencio Utreras, Executive Director of CLARA -coordinating institution of ALICE2-, a presentation by CLARA's Director of Innovation and Development, Carmen Gloria Labbé, called "Innovation as a new key sector for CLARA" and presentations on the Marketing and Services Plan and on SIVIC and planned services, both made by Rafael Puleo, CLARA's Marketing and Services Manager.

As regards communities and ongoing projects, the state of the first and the relationship between them and academic networks and CLARA, was presented by Benjamín Marticorena, CLARA's Academic Relations Manager. The GISELA project and grid services were the main focus of the presentation prepared by the President of the CLARA Communities, Luis Núñez, and presented by Rafael Puleo.

On Friday October 1, the programme addressed the evolution, governance and funding of the Paraguayan and Bolivian networks, as well as the revision of the ARRANCA project and the meso-American connection, and the ALICE2 work plan for the rest of the present year.

Two intense days completely focused on turning RedCLARA and the ALICE2 project into the bridge towards scientific, academic and technological development for Latin American nations.

But, as we have already said, this is just the textual entrance into the large number of activities carried out and the topics and issues addressed during the five days that brought together all those who fight in Latin America for establishing a technological infrastructure which allows scientists, academics, engineers, technicians and researchers across the region to position themselves and shine within the global development and innovation scene. Find out how ALICE2, CLARA and the Latin American NREN shone in the Managua event in the following pages.

RENIA:

With one foot inside CLARA

As part of the second annual ALICE2 and CLARA meeting, held in Managua, the Nicaraguan Network of Advanced Internet (RENIA) expressed its interest in joining again the Latin American cooperation of Advanced Networks after almost six years of absence. To this end, the main local and international sectors involved must lay the foundations for the Central American country to build the necessary technological development bridge.

Gabriela Castro, Nicaragua

RENIA was born in 2005 to promote a telecommunications network with advanced capacities in Nicaragua, offered as part of the second generation Internet.

Its main functions include contributing and implementing quality networking services, facilitating research projects on advanced technology, as well as providing training for human resources in such networks and other similar projects.

RENIA is made up of four educational institutions, which are in turn part of the National University Council (CNU): Nicaragua's National Autonomous University (UNAN-León), Nicaragua's National Autonomous University (UNAN-Managua), National Engineering University (UNI) and Central American University (UCA). It also includes a guest member, Bursey & Wyss Investments (IBW), a local internet and digital television provider.

Derman Zepeda, Engineer at RENIA and network infrastructure administrator at UNAN Managua, points out the following landmarks as achievements and benefits obtained by the organisation with the support of CLARA:

- Updating and introductory courses on IPv6

Derman Zepeda.

- Mechanisms for transition from IPv4 to IPv6 (Linux and Cisco)
- Academic Network Service for member institutions, as well as logistic and technical support on connectivity.
- Organisation of videoconferences at a local and international level.
- Training activities for work groups and the processing of the information collected.

Likewise, during the period of connection to CLARA four major local research centres also became part of RENIA:

- The Institute of Nicaragua and Central America's History IHNCA / UCA
- Centre for Geo-scientific Research GICEO / Unan-Managua
- Centre for research on Aquatic resources / Unan-Managua
- National Centre for Agricultural Information and Documentation / UNA

With the aim of facilitating access to tests with internet service providers, in August last year RENIA's router was installed at the National Traffic Exchange Centre, also known as NicIX, as part of the work with the private sector. But RENIA does not have a connection to RedCLARA, and Nicaragua regrets it. "Since we are disconnected we cannot actively participate in any topic or research group that is being organised in CLARA. As a country and as a network, we falling behind and this is not good for us", comments Zepeda.

Roberto Blandino.

Let's talk about Reconnection

In last September several meetings were held to negotiate RENIA's reincorporation into CLARA. The first, between Nicaragua's Vice President and President of the Nicaraguan Science and Technology Council (Conycit), Jaime Morales Carazo and Florencio Utreras, CLARA's Executive Director. In that meeting, CLARA's new vision and mission were presented to the Nicaraguan Government official, who was highly interested in getting the country reincorporated into the Latin American advanced network through RENIA, with the necessary financial support.

"We (in Conycit) didn't know about the work of the Nicaraguan network, especially because of investment issues, but we have already been shown how its connection would work. We saw that it is possible to engage more actors, which would help us meet the goals proposed by the local network, with the budget that we should have as a country, the activities and thus join this network again", expresses Guadalupe Martínez, Conycit's Executive Secretary, who was present during the process.

The second meeting was held between the university vice-chancellors that are members of the CNU and CLARA's management staff. In this meeting, the vice-chancellors were briefed on the implications of being part of the network, the work commissions and projects put forward by CLARA across the region with the support of the European Community (EC) and the Inter-American Development Bank (IADB).

The third meeting was held by CLARA's management staff and the CNU's directing board,

represented by its President, Telémaco Talavera and the technical secretary Arturo Collado.

According to Roberto Blandino, RENIA's Executive Director, in this last meeting the president of the CNU told Florencio Utreras about his consent in becoming part of CLARA again. "CLARA and RENIA committed themselves to drawing up a document, ratified by the CNU, whereby the country becomes part of CLARA again and one of its members. In its turn, the CNU agreed to support CLARA in the different forums in which Nicaragua participates as a country in order to back CLARA's mission of supporting local and regional science and technology. Likewise, the vice president commits himself to providing support to the CNU and, above all, to RENIA, and thus find economic support within the national budget", summarises Blandino.

César Rodríguez, Director of the Technology and Information Department (ICT) of the UNAN-Managua, states that in order to accomplish this, certain local pre-requirements are needed: "First, an ICT commission must be created to deal with the conduction of an analysis of what has been done in RENIA's member universities. At the same time, a plan must be made to incorporate the rest of the universities that are part of the CNU and a few private ones which have shown their interest in obtaining the network's benefits, such as the Catholic University (UNICA) and the American University (UAM). It is obvious that a strategic plan will have to be made, including the investment, benefits and sustainability of this incorporation".

The beneficiaries

If RENIA's reincorporation into CLARA is effective, the benefits will be evident in many sectors and senses.

"By considering this incorporation, researchers, professors and students would have the chance to collaborate in projects which are currently being developed and they wouldn't have to repeat the processes that other researchers have already conducted. Besides, there would be better tools for teaching and research", argues Rodríguez.

César Rodríguez.

In other aspects, the reincorporation would also reduce costs and distances. This means joining the three regions which make up Nicaragua through teleconferences and other facilities that will be favoured in the digital field, and which will help general and egalitarian training.

"It is very important to carry out the reconnection to RedCLARA, because participating and collaborating through the internet is very difficult because of the low bandwidths available in Nicaragua's state universities, for example. Furthermore, the problem is not only the low bandwidth, but also the cost it has", remarks Zepeda.

And in the regional sphere, Nicaragua would work hand in hand with its neighbours in joint projects, especially because of the zone's climatic vulnerability.

"At a Central American level, we are working on a natural disasters network as a priority promoted by CLARA in order to develop and manage applications for this area. For example, the early alert and monitoring are processed, training for capacity human resources, experiences are reviewed, and instruments are created, among others.

The second meeting was held between the university vice-chancellors that are members of the CNU and CLARA's management staff.

In Nicaragua, the entity in charge of this is the SINAPRED, so it would be something like the entity and the universities working together", emphasises Blandino.

According to Roberto Blandino, by the beginning of the next year RENIA will be renewing its staff, equipment and ideas, as a commitment and stimulus of the CNU to strengthen the Nicaraguan academic network so that it is ready to return to CLARA.

In short, if everything goes well, it is expected that by mid 2011 this agreement will be a reality.

"Nicaragua must not be left behind technological development. We must learn about the state of science and technologies in our country by making use of advanced networks. We need to train professionals with cutting-edge technology at a Central American level, especially now that we are moving from analogue to digital technology. Various Nicaraguan public and private companies have announced this change, but, how are we going to make it? We need qualified staff with the people who work within CLARA, its networks and with its benefits", concludes Blandino.

Rafael Ibarra, Director of RAICES, member of the LACNIC board and Responsible for CLARA's inclusion area.

"Apart from our meetings, we spoke with the country's political authorities in order to try to convince them to join CLARA. I think we succeeded in this sense and the feeling is pretty much shared by everyone. All sectors agree on the fact that Nicaragua must be reincorporated and that this is very important for technology's development in the country and across the region.

It is very important that Nicaragua is part of the network and part of all this effort".

As part of the CLARA-ALICE2 meetings:

Nicaragua's Vice-President meets CLARA representatives

On 29 September, members of the CLARA board, accompanied by its Executive Director, Florencio Utreras, visited Nicaragua's Vice-President, Jaime Morales Carazo, with the aim of promoting the incorporation of this country into advanced networks.

Ixchel Pérez

Vice-President Jaime Morales Carazo had a meeting with CLARA representatives, which he described as "very positive" in the Executive's official website. The members of the Cooperation's Board invited Nicaragua to become part of advanced networks in order to promote the areas of research, innovation and knowledge transfer.

The meeting featured the participation of Florencio Utreras, CLARA's Executive Director, Rafael Ibarra, President of the Salvadorian Advanced Research, Science and Education Network (RAICES) and Director of informatics at El Salvador's José Simeón Cañas University; Francisco Vieria, Senior Specialist in Science and Technology from the Inter-American Development Bank (IADB); Benito Morales, representative from Nicaragua's National Autonomous University in León (UNAN-León); Luis Roberto Furlán, Director of the Department of Computer Science of Guatemala's Universidad del Valle and César Antonio Rodríguez Lara from UNAN-Managua.

The people from the Nicaraguan Government who accompanies the Vice-President were: Eduardo Bolaños, General Director of the Vice-Presidency of the Republic and Guadalupe Martínez, Executive Secretary of the Nicaraguan Council of Science and Technology (CONICYT), presided by Morales Carazo.

During the meeting, the members of CLARA explained how they put forward strategic projects aimed at multiplying the possibilities of progress for Latin American science and academia, as well as at enabling collaboration by means of advanced telecommunication networks for research.

"Currently, there are 14 Latin American countries connected to this system which enables the connection to Europe, North America and the rest of the world. The pending countries are Paraguay, Bolivia, Cuba, Honduras and Nicaragua. In this sense, the CONICYT regards as a good opportunity to be part of these networks since they will enable the development of various scientific projects in priority areas for the country", explained the Nicaraguan Vice-Presidency website. "From the point of view of public policy design and funding for enabling infrastructures for science, technology and innovation, it is beneficial to support the deployment and strengthening of these advanced networks, as well as the widely spread use of the internet".

According to a note published in that official website, Nicaragua's scientific community requires an infrastructure for collaboration, education and access to equipment that the private sector cannot offer. "That infrastructure enables a collaboration space to address issues which are global challenges and which require many groups of researchers

From left to right: Florencio Utreras, CLARA's Executive Director; Rafael Ibarra, President of the Salvadorian Advanced Network for Research, Science and Education (RAICES), Jaime Morales Carazo, Vice-President of Nicaragua; Francisco Vieria, Senior Specialist in Science and Technology from the Inter-American Development Bank (IADB); Benito Morales, representative from Nicaragua's National Autonomous University in León (UNAN-León): Luis Roberto Furlán, Director of the Guatemalan Advanced Research and Education Network (RAGIE) and César Antonio Rodríguez Lara from UNAN-Managua. Photo by: Guillermo Hernández – Vice-Presidency of the Republic of Nicaragua.

working on enormous volumes of data", established the official note.

The Vice-Presidency emphasised that the advanced network is the infrastructure for scientific collaboration which makes it possible to undertake global challenges. "At the same time, it is the test station for what will be the internet of the future. These networks are fundamental for the globalisation of research and development (R+D). Given the relative position for Latin America and the small critical mass of researchers, the joint action of these networks is even more necessary, since they are the natural mechanism for effectiveness. The region has an infrastructure for this purpose, RedCLARA", he pointed out.

Between lakes and volcanoes:

13th CLARA Technical Meeting

With a temperature of 38° C and heavy rain, Managua, Nicaragua's capital, hosted the second annual meeting of the technicians from RedCLARA's national networks, Network Engineering Group (NEG) and Network Operations Centre (NOC). The tight agenda of activities included presentations by the national networks and the Work Groups, the participation of members of DANTE and Internet2 and the delivery of a technical updating workshop by Tandberg.

Tania Altamirano L

On September 27-28, the warm city of Managua hosted the second annual version of CLARA's Technical Meeting, CLARATEC, which twice a year brings together the technical representatives from national networks and the members of RedCLARA's Work Groups, Network Engineering Group (NEG) and Network Operations Centre (NOC).

The activities, carried out at the Carlos Martínez Rivas auditorium in Nicaragua's National Autonomous University (UNAN), aimed at showcasing the work done by CLARA's Work Groups, planning RedCLARA's development, introducing the technical advances of the projects in which CLARA is involved and raising issues of general interest for the technical community.

"It was an intense meeting because we had one day and a half; lots of topics were added and we regretted the lack of time to learn about projects which are being run in academic networks, but in general it was very positive. Besides, we had people from DANTE and Internet2 coming, and this allowed us to update ourselves; in terms of participation, almost all national networks were present; just a few weren't present", indicated Sandra Jaque, President of CLARA's Technical Commission.

The content

The activities began with the CLARA Network and Services Report presented by RedCLARA's Technical Manager, Gustavo García, and the introduction of Openmeeting as a CLARA service presented by Carlos Aponte, Rubén Jiménez and Jorge Zambrano, all of them from the National Experimental University from the Western Plains "Ezequiel Zamora" (UNELLEZ).

In the next activity, Emilse Serafini, Coordinator of Paraguay's Academic Network for Education, Science and Technology, talked about the processes that ARANDU has undergone in order to constitute and consolidate its technical team. This was followed by the presentations on the European network GÉANT, done by Xavier Martins-Rivas, and on the North American network, Internet2, done by Rick Summerhill.

Antonio Fernández Nunez, from the Brazilian network, RNP, spoke about the federal network interconnection point (FIX) and the IXPs across the country; after this, Florencio Utreras, CLARA's Executive Director, made a presentation about RedCLARA and the ALICE2 project.

The subsequent presentations were done by Derman Zepeda, Network Administrator at UNAN-Managua and Technical Coordinator of the Nicaraguan Network for Advanced Internet (RENIA), and Fernando Muro, from Mexico's University Corporation for Internet Development, who spoke about CUDI's state networks.

Tuesday 28 began with the participation of Arturo Díaz Rosemberg, from Peru's Pontifical Catholic University, and Eudys Zerpa, from the National Technological Innovation Centre Foundation (CENIT) from Venezuela, who made a presentation on the Videoconference Integrated Service (SIVIC).

After the coffee break the work groups presented the advanced in each area: IPv6, Azaél Alcántara (UNAM-CUDI); Measurements, Daniela Brauner (RNP); Security, Liliana Solha (RNP); Mobility, José Luis Quiroz; TVIP, Jaime Martínez (RENATA/-GTIPTV); and VoIP, Paulo Aguiar (NCE/Aguiar).

The coordinator of the Work Groups (WG), Iara Machado, was responsible for conclusions and in her presentation she made a summary of the proposals submitted for the following work cycle of 2011-2012, which include:

- Defining three types of Work Group categories: Studies Group, which elaborates recommendations; Experimentation Group, which perform tests with technologies already developed in order to test and recommend them; and Application Development Groups, which start from free software platforms and make adaptations for use in RedCLARA.
- Depending on the WG category, defining a set of reports, demonstrations and training activities.
- Extending the end of the current WGs until March 2011 and begin the new ones in April 2011 with a presentation in the next CLARA meeting.
- Providing resources for the WGs for scholarships, virtual machines in CLARA servers, support for face-to-face meetings, support to participate in international events representing CLARA in technical forums and for the development of a WG coordination system (lists, videoconference).

Near the end of the event Tandberg-CISCO introduced the possibilities offered by this telepresence system. "The presentation focused on the topic of videoconferencing equipment as a way of bringing NREN representatives closer to providers of equipment which might serve for their networks and, also bearing in mind the fact that soon there will be a tendering process in which CLARA will buy videoconferencing equipment to implement a coordinated VC service for the whole of RedCLARA", explained Iván Morales, Technical Coordinator of RAGIE and Vice President of CLARA's Technical Commission.

Strengthening links

According to Morales, one of the most relevant aspects of CLARA's technical meetings, are the inclusion initiatives reflected in the organisation of events in countries which are not part of the network

yet. “This has made it possible to give a new impetus to the issue and create interest among countries. For example, it was done in Paraguay, which was not connected and now they have joined; it was done in Bolivia and they have joined; now in Nicaragua, the feedback we’ve had is positive and there are good chances that it will join too”, expressed Morales.

According to Iara Machado, coordinator of CLARA’s Work Groups, during these meetings the networks have the opportunity of making contact with their peers and learning about what they are doing. “Many times they get inspiration from what others are doing and not only during talks, also during coffee breaks and lunch networks are created; people must grab that chance and make use of it”, she stated.

For Derman Zepeda, from UNAN Managua and Member of RENIA, this was one of the most valued points by Nicaragua’s national network during the meeting. “We are interested in the work done by the TVIP group because this is something we want to implement for the University’s school of education. Furthermore, we are interested in the security issue because in Nicaragua there isn’t any system or organisation which responds to attacks, and there have already been a few incidents in the servers of this university and others. In those cases, solutions are provided and the service is restored, but a follow-up is not conducted and prevention measures are not taken”, stated Zepeda.

“These are meetings have a human and social character; you make contacts. This morning I spoke with Martha Benítez, from Paraguay, and we were coordinating how to perform videoconference tests between ARANDU and RAGIE, since we have a pretty large equipment for multiconferences which we use very little and they have some deficiencies in this regard, and since traffic over the network does not have any cost and the idea is to generate that activity, I offered them our MCU to create connection links between people to make projects, share ideas and resources. If we didn’t have these meetings, it would not be possible to see experiences and examples which, in my case, serve to establish contacts and do things in Guatemala. It is positive for all those of us who participate and the more interest we give to these activities, the more benefits we receive”, concluded Iván Morales.

To access presentations, visit:
http://indico.rnp.br/conferenceDisplay.py?confId=101

Technical Training on VoIP:

Spreading the voice across networks

Experiments, tests and installations were part of this dynamic course which covered the Voice over an Internet Protocol and where technical representatives from the national networks participated. What are the benefits of this technology? Reduce communication costs, promoting the use of the equipment available and strengthening the links between national networks.

Tania Altamirano L

Participants during the training course

As part of the activities planned in the technical component of the second annual ALICE2 and CLARA meeting, held in Nicaragua from September 29 to October 1, the Technical Training course was developed. It was aimed at technical representatives from all national networks that are members of RedCLARA, and featured the presence of members of the Nicaraguan Network for Advanced Internet, RENIA, which has not been connected yet, but is in the process of getting incorporated.

In this opportunity, the topic addressed was Voice over an Internet Protocol, also called Voice IP, VoiceIP and VoIP, which is a group of resources which make it possible for the voice signal to travel over the internet making use of an IP protocol (Internet Protocol).

"For our institutions, which lack telephony and have restrictions in the use of telephones, the extended use of IP technology will be greatly beneficial. Your phone calls are currently limited to three minutes; with VoIP this will not happen; in fact, this technology already exists in the University; we need a little more investment to boost it because its mass implementation is expensive but the results pay off. We thought about the use of local VoIP and now we see it as an international project, we finished with a different perspective", tells José Antonio Medal, who is part of the technical team of Nicaragua's National Autonomous University in Managua (UNAN-Managua).

The extensive course's programme, delivered by Paulo Aguiar, Thiago Maluf and Oscar Castro, included topics such as basic concepts in VoIP and SIP; description of the VoIP CLARA environment; introduction to proxy and installation recommendations; testing of calls between SIP clients from different NRENs; introduction to Asterisk and its capacities as PBX IP; and configuration of SIP clients in the PBX IP.

Furthermore, a session to review the tests conducted and to discuss the problems found was

Paulo Aguiar at the beginning of the course.

held, including a moment to evaluate the knowledge gained by the participants.

According to Augusto Hidalgo, member of UNAN-Estelí, the workshop was very beneficial. “It was excellent, because we received a lot of information and now we want to put it into practice as soon as possible so as not to forget about the knowledge acquired. In the University we are implementing something similar; the UNAN tries to get all its branches across the country to use IP telephony in order to save resources. In fact, all the regions, including Managua, are communicating with each other through Voice over IP. This course has been a good technical and theoretical support for our work”, he indicated.

For Derman Zepeda, network administrator at UNAN and technical coordinator of RENIA, if a more extensive use of this technology is implemented in universities it will be possible to have a significant impact on the work of academics and scientists across the country. “It will be interesting for academics and it will be possible to reduce communication costs between universities and between them and their peers in the rest of the world, so it would be greatly beneficial”, he highlighted.

Augusto Hidalgo, José Antonio Medal and Derman Zepeda.

Thanks to the IADB project for strengthening academic networks:

CLARA trained communities and network executives in project management

The correct formulation of projects and the search for funding were two core topics in a series of workshops received offered to leaders and representatives from the COMCLARA 2010 communities, who gathered in Managua, Nicaragua during three days to share experiences and receive training on various topics.

Ixchel Pérez

The most convincing way of applying for funds from different sources and the tips to formulate a project and ensure it has a greater impact and possibilities of being implemented, were the most relevant topics in a workshop organized by CLARA with all the communities at the end of September, thanks to funding from the IADB-CLARA project for strengthening academic networks.

The event was held within the context of the three-day training course organized by CLARA in Nicaragua, and was delivered by CLARA executives who are experts on the subject.

Carmen Gloria Labbé, CLARA's Director of Innovation and Development, explained to the coordinators and representatives from the nine COMCLARA communities that the task of getting funds begins from the very formulation of the problem: "When we formulate it, let's not write it focusing on the solution but on the gap, on what we want to overcome", she explained.

Labbé also emphasized that it is necessary to study and learn about what the different project funding agencies are looking for, in order to have more chances that they focus on the proposals submitted to them.

For example, she explained, if a call for scientific-technological cooperation is opened, and if in its terms of reference it says that it will fund initiatives of up to $500.000, this will not necessarily be so.

"No project is like any other, even when the source of funding and the terms of reference are the same. If this one says it will provide funding up to $500.000 and one makes a project for $499.000 it is very likely that this project will not be considered, because generally what happens is that they actually have resources to fund projects up to $500.000 but they have to share that amount in many portions", she explained, recommending that before submitting a proposal it is convenient to contact the source of funding and try to get more details.

"Experience shows that when there is funding up to $500.000 we have to think between "200.000 and $250.000", she stated.

Another recommendation given by Labbé was to take into account the strategic-political objective of the source of funding, which usually is explicit. For example, if the funding agency is going to favour the participation of researchers from certain countries. "In international projects you have to find information about the way or path of the source of funding", she specified.

The training course also included the keys to search for funding, tips for the execution and evaluation of projects, as well as a team workshop

in which participants were able to put into practice the advice given.

"The result was very positive because we managed to create six work groups; each one of them developed its project topic, its profile and sustained it. Afterwards, there was a round of critical observations, which made it possible for them to make corrections and improve their presentations. In principle, a couple of projects searching for international funding should stem from this", explained Dr Benjamín Marticorena, CLARA's Academic Relations Manager.

According to Marticorena, the aspect in which the communities expressed more need for support at the moment of doing the exercise was the formats used to apply for funds. "The differentiation between formats is a problem and we have to gain experience in filling them out. First we do the simplest ones, with small amounts, because this way they gain experience. Subsequently, they can apply for larger sources of funding", he remarked.

CLARA's Academic Relations Manager added that another aspect that was strengthened by the training course was how to constitute suitable teams of researchers to participate in a project, looking for balance, so that not too many people are included and that an appropriate group of people gets together to achieve a coherent and efficient plan.

The workshop also featured the participation of emerging members and CLARA members. "The workshop is highly important because of the fact that our Advanced Network (ARANDU) is in an initial development stage. It has to do with learning about the way to develop a project, the way to reach universities, research centres and all those institutions which could be interested in the services, in the scientific and collaborative community that will be determined once the Network is established", pointed out Emilse Serafini, Coordinator of Paraguay's network, ARANDU.

Days of experiences

During the three days in which they gathered, the representatives from COMCLARA communities were also trained on videoconferences, grid and CLARA's dissemination services, among other topics. Participants also had the opportunity to share knowledge and experiences, discover common challenges and share strategies.

"I am satisfied at a personal level with the content of the workshop; I think it was interesting, although no one has the recipe to make these procedures or this kind of things, but we have developed a favourable environment to encourage community work, learn about the other countries and find similarities and differences", said Widman Said Valbuena, coordinator of the URDIMBRE community.

Valbuena expressed that, in the meeting organised by CLARA the communities had the chance to learn from each other about how they see science and how it is developed in structural aspects.

The event was inspired by the meeting of TERENA's Communications and Public Relations group

ALICE2 and CLARA gathered in Managua communication representatives from Latin American academic networks

On September 27-28, the Latin American Cooperation of Advanced Networks (CLARA) gathered in Managua (Nicaragua) the communication representatives from the academic networks that are part of it in Latin America. It was the first face-to-face meeting of the LA NREN PR Network group, which was created within the context of the ALICE2 project.

Simone Cardoso

The birth of the Communications and Public Relations Group of Latin American networks (LA NREN PR Network) is the result of the inspiration of María José López, RedCLARA's Communications Manager. At the meeting's opening, López remembered the work that began with CLARA in 2004 and her dream of creating a group of communication representatives from Latin America's academic networks in order to join efforts in the dissemination of initiatives carried out by the NRENs and CLARA. "This first meeting is the seed of a process. I hope this network yields many fruits", indicated her on the opening session.

María José told briefly about the beginning of the communications work in CLARA. In those times, there were no people responsible on this subject in the academic networks that were emerging, naturally focusing on operation issues. Communication channels featured quite handcrafted feedback. Despite the difficulties, by the end of the ALICE project, there had been 17 issues of the DeCLARA bulletin, which today is the historical heritage of all Latin American networks.

Visibility

In 2009, the European Community, through the ALICE2 project, asked CLARA for a Visibility Plan. It was the moment of disseminating the developments of the network's projects and of the ALICE2 project; communicating the investments made in Science and Technology and reaching researchers, promoting the opportunities for developing cooperation between Latin America and Europe.

CLARA makes it possible for the initiatives developed in each country and regionally to become international, therefore their dissemination across Latin America and CLARA's peer networks could not be more natural. With this intention, María José and Rafael Puleo, CLARA's Marketing and Services Manager, introduced ALICE2's Visibility Plan to the representatives of Latin American networks. The focus of communications is placed on services and researchers communities that already use or expect to use RedCLARA's services. The creation of the LA NREN PR Network group is appropriate to contribute to that strategy, as well as enabling the teaching of communicational processes within an academic

network to those networks that are creating their public relations and communications areas.

In this road, it is fundamental to exchange information and experiences at a regional and continental (with TERENA, Dante, CKLN, CLARA and the nascent African network) level, in order to share the knowledge acquired so far in terms of how to communicate what networks are, what they provide and how that can cover the needs of the audiences that are related to them.

Motorcycle Diaries

For those who saw the film "Motorcycle Diaries", directed by the Brazilian Walter Salles, the meeting in Managua brought back to mind the story about the trip of the recently graduated doctor Che Guevara and his friend Alberto Granado: the dream of a united Latin America, sharing joys and challenges.

Following the example of the TF-CPR group in TERENA (Trans-European Research and Education Networking Association) –which brings together the communication representatives from European academic networks-, LA NREN PR Network constitutes itself as a forum where problems and solutions for academic networks and RedCLARA are shared. This is why after the presentations already mentioned and CLARA's welcoming speech, the representatives from the networks in Costa Rica, El Salvador, Uruguay, Spain, Colombia, Brazil, Chile, Ecuador, Argentina, Mexico, Peru and from the pan-European academic network GÉANT introduced the basis for communication for their networks and their resources to contribute to the group's communicational success.

Showcasing Latin America to the rest of the world

The presentations delivered by the representatives from national academic networks demonstrated that a lot of dissemination work is being done. Today there are new technologies and communication channels within networks.

Carolina Almarás, from the Argentinean InnovaRed, reviewed the history of the institution

and highlighted as the most relevant aspects the current promotion of access to IPv6, the Ubuntu Official Repository and the videoconference rooms. Adriana Ferranni, from the Brazilian RNP, said that the organization invests a lot in communications towards its collaborators so that they become multipliers of what is done in the institution.

Mónica Aguilera, from the Chilean REUNA, told about the emphasis they place on event transmission on the website as a strategy to demonstrate the use of the network. Camilo Jaimes Ocaziónez, from the Colombian RENATA, spoke about the participation experience in social networks and the importance that they will gain as the generations who have been brought up incorporating new technologies into their lives get to work doing research in universities.

Ixchel Pérez Santamaría, from the Salvadorian RAICES, introduced the new institutional website and spoke about the network promotion effort within universities. Raquel Illescas and Tania Washco, from the Ecuadorian CEDIA, highlighted the Digital Repository and video services offered to the network's members.

Martha Ávila, from the Mexican CUDI, introduced the institution's website and the space devoted to the LA NREN PR Network. Julio Cardozo, from the Uruguayan RAU, spoke about the challenges faced within universities in his country. Sonia Contreras, from the Peruvian RAAP, offered a special area for CLARA in her institution's website.

Cornelia Miller, from the Costa Rican CoNaRe, said that the institution's website will soon be launched,

and indicated that today her network is in a stage of articulation with participating universities and with other institutions from abroad.

Paul Maurice, from the pan-European network GÉANT, and Cristina Fernández, from the Spanish RedIRIS, greatly praised the work done by CLARA and the effort of all the networks to promote science and technology in their countries.

Different stories with the same challenges

An important remark of the meeting is that the problems and challenges faced are the same, regardless of the degree of maturity of each NREN.

So, let's get down to business. The LA NREN PR Network group worked together: suggesting slogans to RedCLARA and training participants in issues like bulletin and news distribution list management, usefulness of social networks and journalistic writing.

Furthermore, after presenting on the communications group in European networks (TF-CPR), María José López suggested the creation of committees and the articulation of a participative agenda to define the deadlines and topics to be addressed in face-to-face meetings and also via videoconference. She also drew up, with the contribution of all those who were present, a thank you letter addressed to the directors of CLARA, ALICE2 and TERENA for their support to the group, stating the commitments acquired in the Managua meeting.

To conclude, Florencio Utreras, CLARA's Executive Director, thanked all participants for their presence and contributions, and reminded them that the new services made possible by technology require an objective communication. "It is necessary that we have passion not only for technology, but also for the usefulness it offers. Communication is fundamental for this", he concluded.

Open Access Day:

Scientific information for all

"It is very important to have the opportunity to learn about and understand the results of the scientific research work. It is not enough for a handful of experts to attempt the solution of a problem, to solve it and then to apply it. The restriction of knowledge to an elite group destroys the spirit of society and leads to intellectual impoverishment."

Albert Einstein (1948)

On October 20, during one hundred and fifty minutes and through an eighteen-point videoconference link and a simultaneous live and direct transmission through the internet, panellists from Colombia, Chile, Spain, Argentina and Brazil offered a conference on strategies which facilitate and promote open access to contents and the interoperability between institutional repositories across Latin America. What is the objective? To share experiences and to join efforts in order to achieve effective mechanisms for the recording, storage and collaborative administration of academic and scientific production in Latin America.

Tania Altamirano L.

As part of the Open Access Week, celebrated worldwide from October 18 to 24, the 20 of the same month featured the organisation of a conference called "Open Access. Good practices in Latin American projects", an event which brought together, through advanced networks, panellists and participants from different countries and institutions.

According to Malgorzata Lisowska, main organiser of the Latin American Community of Digital Libraries and Repositories (COLABORA) and member of the Latin American Federated Network of Institutional Scientific Documentation Repositories CLARA-IADB, the main objective of the conference was to create regional spaces to learn about and discuss highly topical issues such as open access to academic and scientific production, the role of institutions and countries in the development of this initiative and the regional integration in this matter. "Furthermore, we wanted to join ourselves to the celebration of the Open Access Week, which was developed on those days across the globe and which featured the Latin American presence for the first time", expressed Lisowska.

We have to take consider that in 2009 a few universities and institutions in Latin America and the Caribbean carried out with enormous efforts activities related to this initiative, which is why for this year the Latin American Cooperation of Advanced Networks (CLARA); the Chilean National Commission for Scientific and Technological Research (CONICYT), the University of the Rosario in Colombia; the National System for Digital Repositories in Science and Technology – Argentinean Ministry of Science, Technology and Productive Innovation; the Network of Virtual Social Science Libraries in Latin America and the Caribbean, CLACSO, from Argentina; the Higher Polytechnic School of the Coast, ESPOL, and the Constitutional Court from Ecuador; the La Molina National Agricultural University and the National Council for Science, Technology and Technological Innovation, CONCYTEC, from Peru, constituted an organising committee to work on the planning of this event, developed via videoconference and transmitted live and direct over the network through streaming, thanks to RENATA's (Colombia) connection to RedCLARA.

"Information is a support for science and represents the basis for a researcher and/or scientist to suitably develop his/her work, based on quality sources and developing collaboration. Nowadays it is almost impossible to work isolated; collaborative work is the most appropriate solution for many problems and, above all, thanks to the advances of technology this becomes very easy", points out Lisowska.

The Programme

The development of the event featured the participation of Paola Bongiovani from the National System of Digital Repositories in Science and Technology (Argentina), with the topic "Policies to promote and facilitate Open Access at a national and institutional level"; Caterina Groposo Pavâo from the Repository of the Federal University of Rio Grande do Sul (Brazil), who presented "Design, planning, implementation and management of an Open Access institutional repository"; Alicia López Medina, member of the "e-SpacioUNED" institutional Repository and of the executive Committee of

the RECOLECTA Portal, Spain's Open Science Collector, and member of COAR's (Spain) Executive Committee, who addressed the "Interoperability between repositories at a national, regional and international level"; Malgorzata Lisowska, from Colombia, who talked about "Cooperation between institutional repositories at a national and Latin American level". For the conclusion, from Chile Florencio Utreras, CLARA's Executive Director, spoke about the importance of the event and RedCLARA's contribution in the development of collaborative work in the region.

During the activity participants had the opportunity to make questions to the panellists through the videoconference connections and those who followed the event via streaming through Skype.

To conclude

"There are remarkable results, such as the mechanisms to disseminate regional good practices on the issue of institutional repositories, the cooperation between repositories and the initiatives for mandates on Open Access, as well as learning about the international aspects of the creation of networks and collaborative projects. But one of the most outstanding results for us is the "human interoperability", which is so hard to achieve. We had speakers from different countries, participants from at least eight countries; we joined 18 points via videoconference, which was cascaded to the different institutions, and we had 30 participants connected via streaming and internet transmission. We began to build regional presence and discussion on the subject", stated Lisowska.

For her, one of the main challenges is to achieve a uniform development of institutional repositories across the region and the creation of national policies on this issue. "Only on this basis we will be able to build common policies and regional networks that will contribute to the presence of Latin America in the world", she concluded.

Suggested links:

To learn more about the Federated Latin American Network of Institutional Repositories, visit:
https://sites.google.com/site/bidclara/Inicio
To access the presentations of the videoconference, visit:
https://sites.google.com/site/bidclara/noticias/jornadavirtualaccesoabiertoargentina2010
To learn more about the Open Access initiative, visit:
http://www.openaccessweek.org/

An initiative in progress

According to the website of the Open Access Week, this initiative represents an opportunity for the academic and research community to continue learning about the potential benefits of open access, to share what they have learnt from their colleagues, and to help encourage a greater participation in trying to turn this proposal into a new standard in study and research.

"Open access to information –free and immediate access, in line with the results of academic research and the right to use and reuse the results that you need – has the power of transforming the way of doing research and the way in which scientific research is carried out. This has direct and generalised implications for the academia, medicine, science, industry and for society as a whole", expresses the Director of Programmes and Operations of the initiative for the publication of academic resources, SPARC, Jennifer McLennan.

The participants speak

"I liked the topic a lot, because it tells about the trends in terms of repositories development and the relationship they have with the academic and scientific world. The transmission was very good; I didn't have many problems, although connection was lost at times or the sound quality was poor. It would have been good to devote one part to general conclusions in order to close the event and draw up a line of work in this field to continue in the long term".

Maricela Gómez Vargas
Coordinator of Digital information and services,
Universidad Pontificia Bolivariana, Colombia

"I work especially with Cybermetrics and to me it was a great update on institutional repositories and their policies, a highly important element since without these policies their proper functioning is not possible. Hearing about the experiences of Brazil, Argentina and Colombia is a useful example for their implementation in my university, the second largest in the country".

Teresa Rodríguez Jiménez
Editor of the electronic magazine e-Gnosis www.e-gnosis.udg.mx
University of Guadalajara, Mexico

"Online collaboration through videoconferences where many countries participate and above all with topics of common interest for all is one of the main goals of RedCLARA. In the particular case of this event, we have to take into account the fact that there are very good experiences and roads already used which can be very helpful for other countries, like Ecuador, which is beginning its work on national policies on Digital Repositories. This is why what the panellists offered will be very useful for the IADB project in which we are participating with CLARA".

Villie Morocho Z.
Executive Director
Ecuadorian Consortium for Advanced Internet Development (CEDIA), Ecuador

"Panellists offered a suitable presentation of the topics and the participants at the UNALM, most of whom are involved in the topic of information like libraries and documentation centres, thought that the theoretical explanation was correct and felt motivated to participate in more videoconferences. The training issue is one of the priority activities in any institution".

Myriam Coronado T.
National Agricultural Library, Peru

Alberto Barrios, CLARA's Operations Director

Simone Cardoso

Trained in Economic Sciences at the University of Buenos Aires and in Accounting Science at the University of the Rio de Janeiro State, with postgraduate studies in Finance, and several courses on management, the man from Buenos Aires who now has Brazilian nationality, Alberto Barrios, took over on June 1 CLARA's Operations Direction. In this post, Barrios is responsible for leading, administrating and guiding the technical, financial and administrative activities of the organisation. "I control, specifically, the activities related to the network's operation and the execution of the ongoing projects, as well as the financial, budgetary and administrative management. Together with the Executive Director and the Director of Innovation, I contribute to the strategic planning, evaluation and development of the operational strategy and the business performance control", explained Barrios.

Alberto is married to a Brazilian and has two children. He lives in Rio de Janeiro (Brazil) and works from home, often participating in videoconferences with other CLARA collaborators in the facilities of the Brazilian academic network, RNP. "Within the CLARA scenario, the use of telework is fundamental, mainly facilitated by resources such as internet and Skype, which keep up connected with all the team's members, processing our work daily, as in any office. But discipline and dedication are necessary for everything to work properly".

The change of paradigm requires new skills to manage groups and processes in a remote way. In the case of Alberto, his direct teams are in Uruguay (Finance and Administration), Colombia (Technical Management) and Mexico (Project Management). Apart from a good time management, Alberto Barrios overcomes the different time zones of the teams, by making use of good management techniques,

keeping daily contact through Skype, even frequently resorting to the use of webcams, which he feels brings him closer, although in a virtual way, to his teams, beyond a good administration of time.

Today, the challenge for RedCLARA's Operations Director is to review and update the processes of the financial and administrative area, since by the end of the year a new control and management system will be installed. This will be faster and more effective, and will feature more complete information to run the budget and project controls, with more financial reports in real time. "To do this, I have travelled to Montevideo at least once a month. Sometimes I stay there for a week", tells Barrios. Another important task will be the leveraging of processes of the organisation, including a redefinition of posts, tasks and responsibilities.

With the support of ALICE2:

Bolivia present in e-Challenges 2010

In trying to strengthen Latin America's national networks and their user communities by providing training as well as technical, administrative and academic tools, CLARA funded, through the ALICE2 project, the participation of ASDIB's technical representative, Roberto Zambrana, in the twenty-first version of this conference that aims to encourage the fast incorporation in the industry of the results obtained as part of research and technological development, and to promote the opening of the European Research Area towards the rest of the world.

Tania Altamirano L.

From October 27 to 29, the city of Warsaw in Poland hosted the twenty-first version of eChallenges e-2010 , a conference organised with the support of the European Commission which usually attracts over 650 representatives from world leading organisations in areas of trade, government and research in order to share knowledge and experiences in issues related to research, development, industry and new technologies.

CLARA, through the ALICE2 project, invited Latin American researchers to participate in the call for scientific papers made early this year by eChallenges e-2010, and as a way of supporting them as well as the region's research communities, it announced the availability of scholarships aimed to provide support in terms of airfares, accommodation, meal allowances and registration for the event for those who submit papers which are accepted by this call.

Roberto Zambrana, technical representative of the Agency for the Development of Information Society in Bolivia (ASDIB), participated in the call with the paper "Inexpensive Optical Ethernet Solutions for High-Reliability, High-Availability Enterprise Networks", a research project he had been developing at the Institute of Applied Electronics in the Universidad Mayor de San Andrés de La Paz, Bolivia.

Can you describe the application process?

Firstly, you had to submit the abstract, and then the full paper by the end of June. The process included different stages, which consisted in the revision of advances made by European research peers. At the end of this long assessment process, mi paper was accepted. Then I told the senior staff in RedCLARA about this great news and I received confirmation for the scholarship from Benjamín Marticorena.

What is the importance or impact of your participation for ADSIB?

For the ADSIB it has meant accessing and exchanging experiences on various ICT issues for development, particularly in the elaboration of projects that can be applied in the Latin American region. The links with other researchers and relevant actors from different countries has enabled us to expand our contact network. In my university, an outstanding aspect is the capacity of Latin American researchers in general, and particularly in our country, to propose papers which are at the level of international congresses and conferences.

From the personal point of view, I am proud of having developed an applied research project which, according to the scientific panel of judges, is relevant in the international context. I also feel very grateful towards RedCLARA, which through the ALICE2 project has made my participation possible. Likewise, I am deeply grateful towards its executive staff, who also participated in the event, encouraging me and giving me more confidence during my presentation.

About the Conference

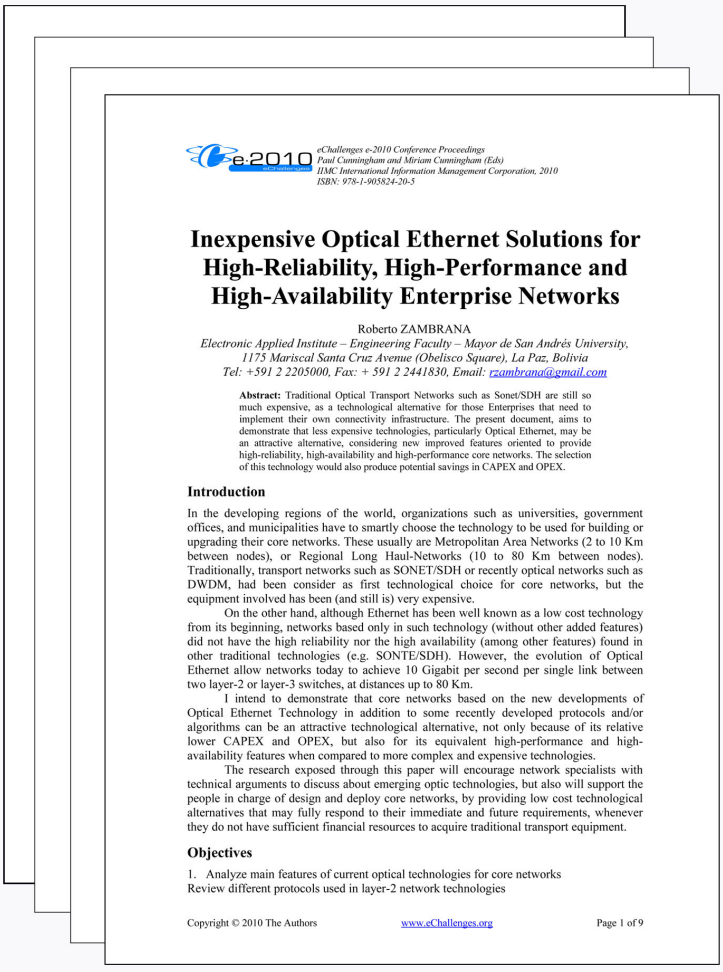
eChallenges is organised every year with the aim of encouraging the fast incorporation in the industry, especially in small and medium businesses, of the results obtained as part of research and technological development; and to promote the opening of the European Research Area (ERA) towards the rest of the world.

In this opportunity, the conference focused on the presentation of papers and the proposal of practical workshops on topics which include: e-Infrastructures, e-Government and e-Democracy, e-Health, digital libraries and cultural heritage, technology to stimulate learning, security and identity management, intelligent contents and semantics, live laboratories and collaborative work environments, and networking, intelligent and virtual organisations.

The members of CLARA that were also present during the event were Florencio Utreras, Executive Director, Carmen Gloria Labbé, Director of Innovation and Development, and Rocío Cos, Projects Manager.

For more information, visit:
http://www.echallenges.org/e2010/

Roberto Zambrana during his presentation



e-2010 *eChallenges e-2010 Conference Proceedings*
Paul Cunningham and Miriam Cunningham (Eds)
IIMC International Information Management Corporation, 2010
ISBN: 978-1-905824-20-5

Inexpensive Optical Ethernet Solutions for High-Reliability, High-Performance and High-Availability Enterprise Networks

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Abstract: Traditional Optical Transport Networks such as Sonet/SDH are still so much expensive, as a technological alternative for those Enterprises that need to implement their own connectivity infrastructure. The present document, aims to demonstrate that less expensive technologies, particularly Optical Ethernet, may be an attractive alternative, considering new improved features oriented to provide high-reliability, high-availability and high-performance core networks. The selection of this technology would also produce potential savings in CAPEX and OPEX.

Introduction

In the developing regions of the world, organizations such as universities, government offices, and municipalities have to smartly choose the technology to be used for building or upgrading their core networks. These usually are Metropolitan Area Networks (2 to 10 Km between nodes), or Regional Long Haul-Networks (10 to 80 Km between nodes). Traditionally, transport networks such as SONET/SDH or recently optical networks such as DWDM, had been consider as first technological choice for core networks, but the equipment involved has been (and still is) very expensive.

On the other hand, although Ethernet has been well known as a low cost technology from its beginning, networks based only in such technology (without other added features) did not have the high reliability nor the high availability (among other features) found in other traditional technologies (e.g. SONTE/SDH). However, the evolution of Optical Ethernet allow networks today to achieve 10 Gigabit per second per single link between two layer-2 or layer-3 switches, at distances up to 80 Km.

I intend to demonstrate that core networks based on the new developments of Optical Ethernet Technology in addition to some recently developed protocols and/or algorithms can be an attractive technological alternative, not only because of its relative lower CAPEX and OPEX, but also for its equivalent high-performance and high-availability features when compared to more complex and expensive technologies.

The research exposed through this paper will encourage network specialists with technical arguments to discuss about emerging optic technologies, but also will support the people in charge of design and deploy core networks, by providing low cost technological alternatives that may fully respond to their immediate and future requirements, whenever they do not have sufficient financial resources to acquire traditional transport equipment.

Objectives

1. Analyze main features of current optical technologies for core networks
Review different protocols used in layer-2 network technologies

 www.eChallenges.org

Roberto Zambrana' paper

President of RAGIE participated in Salvadorian forum on the use of networks

Via videoconference and for an audience of fifty people, Luis Furlán, president of the Guatemalan Advanced Research and Education Network (RAGIE), made a presentation on the advantages of Advanced Internet and the different distance learning techniques in a forum held in El Salvador.

Ixchel Pérez

Distance learning is one of the activities that have evolved thanks to information and communication technologies. In the past, this was done through traditional mail; now it is done through the internet, with videoconferences and forums which enable a greater interactivity, even in real time.

The Universidad del Valle, in Guatemala, uses technological tools to conduct distance learning since 1995. Luis Furlán, director of the Centre for Applied Informatics Studies of that institution, and president of RAGIE, shared, via videoconference, this practice with the audience of the forum called "Impact of Networking Technologies to eliminate distances", which was part of the Day of the Computing Professional in El Salvador and on October 6 gathered fifty entrepreneurs, academics, computer engineers and communicators.

Furlán participated in the activity via videoconference through the RedCLARA infrastructure that interconnects RAGIE and its Salvadorian counterpart, RAICES. "This is one of the clearest examples of how networks eliminate distances" indicated Furlán, referring to the high-quality videoconference and the presentation system he used, which was on a cloud. That image quality is precisely what the Universidad del Valle achieves in a series of courses that students receive via videoconference, thanks to the connection of RAGIE's infrastructure to RedCLARA.

Before speaking about the merits and risks of distance learning, Furlán explained that the base that enables them to develop it in the Guatemalan university is the advanced network technology, which is the same that RAICES, the Advanced Network for Research, Science and Education, has in El Salvador thanks to its connection to RedCLARA."We could have a long talk about RedCLARA, but today I mention it so that you know that we're using that advanced network even for these videoconferences", remarked the leader of the Guatemalan academic network.

"At the Universidad del Valle, all the technology has enabled us to develop b-learning, a combination between traditional learning and new technologies, as opposed to e-learning, which is learning conducted totally online", explained Furlán about the Universidad del Valle. "In the University there is a variety of courses which are fully online and b-learning courses. Technology has enabled us to work on postgraduate programmes for which we do not have enough capacity here in the University, and through agreements with other universities across the globe we make use of their human resources, that is, professors with PhD studies", he added, quoting as examples a Sociology course that is delivered by a professor from the University who is currently doing her PhD in England, and another on artificial intelligence which is delivered by a professor who is doing his PhD in the University of Illinois, USA.

CLEI2010:

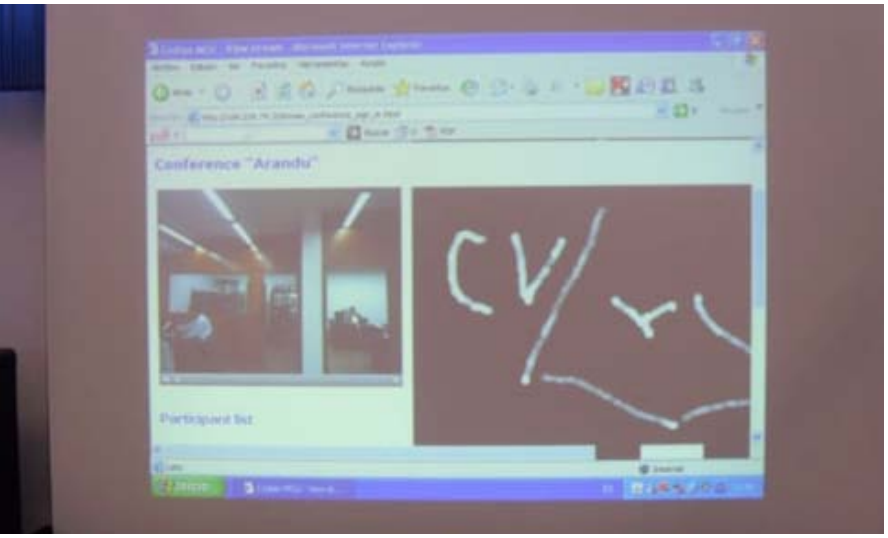
All for ARANDU and ARANDU transmitted for all

Wit, collaboration, enthusiasm and an exemplary teamwork were the elements that enabled the national Paraguayan network to be part of the Latin American Informatics Conference. Two online services from Brazil and the availability of Guatemala's MCU were added to the work done by local institutions to materialise the online participation of professors and researchers, the live and direct transmission via internet and the establishment of a permanent virtual room for the country.

Tania Altamirano L.

"Despite the scarce resources available, ARANDU is underway". With these words Emilse Serafini, Coordinator of the Academic Network for Education, Research and Innovation, ARANDU, and member of the Mercosur Digital Virtual School, disseminated the participation of the Paraguayan network in the Latin American Informatics Conference (CLEI2010), an annual event promoted by the Latin American Centre for Computer Studies, which brings together professors and students from Latin American universities and research centres to discuss research, teaching and the development of the informatics area across the region.

Picture taken by RAGIE of the transmission to ARANDU.



ARANDU's transmission

ARANDU's Virtual participants in CLEI.

The agenda of the event, held from October 18 to 22 at the National University of Asunción, Paraguay, featured technical sessions with the presentation of papers, discussion panels, tutorials and plenary conferences. The thirty-sixth version also included the organisation of the 18th Ibero-American Congress of Higher Education in Computing (CIESC 2010), the 17th Latin American Competition for MA Dissertations (CLTM 2010), the Latin American Woman in Computing Congress (LAWCC), and the 1st Symposium on the History of Informatics in Latin America and the Caribbean (SHIALC 2010).

"Within this context, ARANDU focused its efforts on setting up an Operations Centre at the facilities of the Information and Culture Centre of the National University of Asunción's Polytechnic School, from where researchers and professors participated in the event through a 50 Mbps connection. Furthermore, the talks offered at the University's main lecture hall were transmitted via videoconference", tells Serafini.

Teamwork and transmission achieved

According to the coordinator, ARANDU's participation in CLEI2010 was made possible thanks to the collaborative work between ARANDU and various local institutions, as well as the support from the national networks of Guatemala and Brazil.

ARANDU's technical team was constituted for this occasion by Herman Mereles and Alberto Giménez, both from the National Computing Centre (CNC); Sergio Stadler, from the National University of Asunción (UNA); Felipe Stuardo and Marta Benítez, from the Catholic University (UCA); Armín Molas, Raúl Fusillo and Atilio Talavera from the Autonomous University of Asunción (UAA); Roberto Delgado and Cynthia Delgado from the National Council for Science and Technology (CONACyT); and Teodoro Salas and Hernán Franco, from the COPACO telecommunications network.

In turn, Brazil's national network, RNP, made available for ARANDU the experimental distance learning service (http://edad.rnp.br/content.

php?menu_id=content) and the CAPES Journals website (http://novo.periodicos.capes.gov.br/).

In the case of the Guatemalan network, RAGIE, after a series of conversations between members of both networks, conducted videoconferencing tests between Paraguay and Guatemala through the ConferenceMe function of its MCU, which makes it possible to download a JAVA applet (component of an application in JAVA programming language) so that a user with a webcam can join a videoconference room, with other users with professional H.323 equipment and, thus, incorporate those institutions which did not have the necessary equipment.

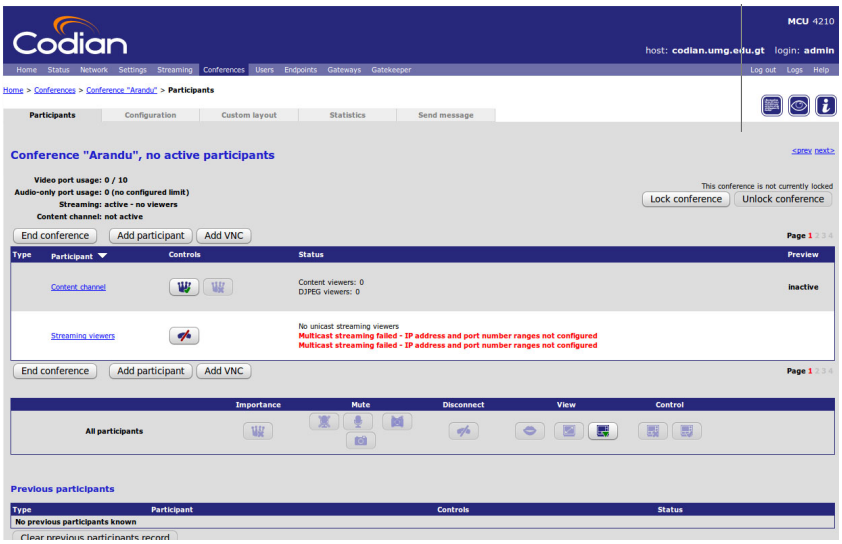
This way, on the day of the event the main site in Paraguay was connected to the MCU with a Polycom VSX7000 and all the other users live and direct through the internet (streaming). In order to further collaboration, a permanent room called ARANDU was created, featuring up to 10 connections in that MCU and made freely available for the Paraguayan network.

"This collaboration resulted from a conversation with Martha Benítez, ARANDU's technical representative, at the Managua meeting. Being aware of how difficult it is to begin to develop content and concrete actions in the NREN, I offered them RAGIE's help, making use of the 20-port Codian 4215 MCU of Guatemala's Mariano Gálvez University for videoconferencing activities in their network", tells Iván Morales, Technical Coordinator of Guatemala's RAGIE.

For Morales, the possibility of collaborating and participating in the events of other national networks represents for RAGIE a great marketing opportunity, both internally and externally, for both the potential of Advanced Networks and the network itself. "We have to remember that the biggest problem is not a technical one in the end, but the ingrained habits and lack of initiatives which have made our institutions and countries become islands which do not take advantage of the potential we have in a region like America, so marginalised, even by ourselves, because a lot of people think it is not possible", he states.

Emilse Serafini, Coordinator of the Academic Network for Education, Research and Innovation (ARANDU) and member of the Mercosur Digital Virtual School.

"It is a means to promote ARANDU and encourage institutions to become part of the network. Likewise, we disseminate the objectives and benefits of RedCLARA and the importance of being connected to it. Obviously, the Paraguayan scientific community is the main beneficiary, since ARANDU eliminates time and space barriers, enabling Paraguayan scientists to interact with colleagues from anywhere in the world, and to access and publish scientific material", concludes Serafini.



Virtual room set up for ARANDU in RAGIE's MCU

RENATA connects 15 hospitals and 10 research centres

Colombia's National Academic Network of Advanced Technology (RENATA) already has 121 institutions connected and continues consolidating itself as the suitable infrastructure for the country's scientific work.

Ixchel Pérez

A space where it will be possible to articulate the scientific collaboration between higher education institutions, research centres, hospitals, libraries and museums is taking shape in Colombia, thanks to the fact that RENATA continues to grow and relate entities.

With the support of the ICTPlan, Colombia's Advanced network linked at the end of October 15 healthcare facilities and 10 research centres and conducted intensive training events in order to introduce them to the benefits they will receive from their connection to its infrastructure.

"It is a very important step for the strengthening of the academic and scientific work that has been developed through the National Academic Network of Advanced Technology RENATA, which is consolidated through the ICTPlan of the Ministry of Information and Communication Technologies, through which the Government aims to take a leap in terms of the country's social inclusion and competitiveness through the incorporation and appropriate use of ICT, both in everyday life and as a productive tool for citizens, enterprises, the academia and the State", remarked Martha I. Giraldo, RENATA's Executive Director.

Giraldo added that through the ICTPlan the hospitals connected will be able to benefit from the connectivity services offered by RENATA. This will enable the academic and professional interaction with peers from 15 cities across the country and from the 12 Latin American countries connected to Colombia through RedCLARA.

RENATA's Academic Coordinator, Dago Bedoya, added that both research centres and hospitals will be able to interact with more than 100 institutions connected to RENATA and, in the case of healthcare facilities, Tele-health coverage is expected to be expanded.

"This becomes an important contribution to the quality of the healthcare services that each hospital can offer", explained Bedoya.

Health

In order to make the hospitals' connection official, 30 representatives from these centres gathered in Medellín, along with representatives from the Ministry of Social Protection, the Ministry of Information and Communication Technologies, from RENATA's Regional Academic Networks and their connected institutions.

The new hospitals linked to RENATA are: Cali's Imbanaco Medical Centre S.A.; Colombia's Cardiovascular Foundation Ibagué Heart Institute; Colombia's Cardiovascular Foundation Manizales Heart Institute; Colombia's Cardiovascular Foundation Santa Marta Heart Institute; Santafé de Bogotá Foundation; Valle de Lili Foundation; Juan Ciudad-Mederi Hospital; Santa Sofia de Caldas Departmental Hospital; Pablo Tobón Uribe Hospital; San Juan de Dios Hospital; San Vicente de Paul Hospital; Susana López de Valencia Hospital; San Jorge University Hospital and University IPS.

During two days, Liliana Quimbaya, representative from the Ministry of Social Protection, Fabian Zabala from the Ministry of Information and Communication Technologies and doctor Luiz Messina, leader of telemedicine projects from Brazil's National Research Network, RNP, exchanged experiences and highlighted the importance of the use of advanced technology networks for health's development.

Messina introduced the important advanced made by Brazil in Tele-health through advanced technology networks and expressed his availability to support the work between research groups and health institutions from Brazil (RNP Network) and Colombia (RENATA Network).

Bedoya delivered a workshop on the basic tools offered by RENATA in terms of virtual and long distance development. Thus, the doctors who attended the event gained deeper knowledge on videoconferencing and streaming.

During the event, RENATA's group of hospitals also proposed a work plan to promote the network's incorporation and to start taking advantage of RENATA's infrastructure.

Research Centres

In their turn, the representatives from the 10 new research centres connected to RENATA through the ICTPlan gathered in Bogotá to learn about the services and potential of the country's advanced technology network infrastructure.

During two days, those who attended the event learnt about the R+D initiatives led by the Ministry of Information and Communication Technologies and RENATA, as well as about the experience in the use of advanced technology networks in the research centres of CIAT and CENICAFÉ.

Patricia Asmar, representative of the ICTPlan by the Ministry of Information and Communication Technologies; Luis Núñez, physicist specialised in academic networks from the University of the Andes de Méridain Venezuela and from the Industrial University of Santander; Martha Giraldo, RENATA's Executive Director; Luis Ignacio Estrada from CENICAFÉ and Arturo Franco from CIAT, shared with the representatives from the new centres connected to RENATA the potential, services and importance of the use of advanced technology networks for the development of science in the country.

The representatives from the research centres agreed to organise a series of videoconferences in order to disseminate the experiences and actions undertaken by each institution.

The new centres linked to RENATA are: Pharmaceutical Science and Research Centre –CECIF; Technological Centre for Footwear Leather and related Industries; South Colombian Acuapez Fish Farming Technological Development Centre Corporation; Centre for Research and Technological Development of the Electrical Sector Corporation (CIDET); Colombian Research Corporation – Corpoica; Corporation for Biological Research; Esicenter Sinertic Andino Corporation; Colombian Institute of Geology and Mining – Ingeominas; Institute of Hydrology, Meteorology and Environmental Studies – Ideam, and the Observatory of the Colombian Caribbean.

CLARA community promotes Access to scientific production

The Latin American Community of Digital Libraries and Repositories, CoLaBoRa, promotes the creation of an online repository which gathers all the academic, cultural and scientific production of the region and which provides users with free access.

Ixchel Pérez

"I saw, only a few days ago, a magnetic plier which grabs a globular protein that's incredibly small and stretches it. One can perfectly see it. It's incredible", says Dr Benjamín Marticorena, CLARA's Academic Relations Manager. This observation is possible with electronic microscopy, but with this phrase he is referring to a video which is part of a digital repository that can be accessed free of charge by users. "The video shows how a protein –which is a food- enters the cell, drilling a membrane without breaking it", he adds.

It is precisely this kind of videos, as well as documents and pictures are produced everyday in Latin America, but they are sometimes not disseminated for lack of spaces or because of high costs. The report called "The State of Science 2009" shows that although the number of scientific publications increased by 90% in Latin America between 1998 and 2007, the region concentrates only 3,4 of the global production.

Furthermore, the high cost of subscriptions to scientific journals prevents many universities from having access to this information and researchers also have problems to publish their papers and sometimes they even have to pay for their information to be disseminated.

Digital repositories were opened as a free and high-quality alternative source of information since the beginning of the 21st century, hand in hand with the foundation of the Open Access movement. But the DOAR (Directory of Open Access Repositories) records that of the 1,790 digital repositories existing in the world, only 91 are in South America and barely 8 in Central America. In total, Latin America has only 5% of the world's repositories.

In order to provide more visibility and access to scientific production, eight countries that are pioneers in the creation of repositories in the region have constituted the "Latin American Community of Digital Libraries and Repositories, CoLaBoRa", which –supported as of the present year by CLARA- is consolidated and disseminated through advanced networks.

Its vision is to have, in the long term, one single repository with online access to the region's academic, cultural and research production, so that "through repositories, the dissemination of scientific production becomes widely spread, and Latin American researchers can give free of charge visibility to their work and users have access to data", explains CoLaBoRa's main organisers, Malgorzata Lisowska.

The creation of digital libraries and repositories in the region has been linked to isolated initiatives, and so there wasn't any formally constituted community until CoLaBoRa was born. It features the participation of 10 institutions which promote the creation and dissemination of policies on free access to documents.

The initiative has been put forward by Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela, which are countries with previous experience in libraries and repositories that today amount to over 50,000 documents.

CoLaBoRa aims to work on common policies, standards and tools, training and updating activities, exchange of experiences with other regions and the search for funding and resources. "The time schedule is divided into four work groups: The first will work on the issue of operability and metadata standards in the region; the second will work on a diagnosis; the third on a management and sustainability model for a community of this kind; and the fourth on disseminating and promoting the project", explains Lisowska.

The long-term goal is that the region has one single digital repository. "The fundamental idea of CoLaBoRa is that all repositories existing in isolated environments across the region and where research is based, are merged into one single site and are easily retrievable through one single search engine, a meta search engine", points out Milton Larrea, coordinator of the initiative.

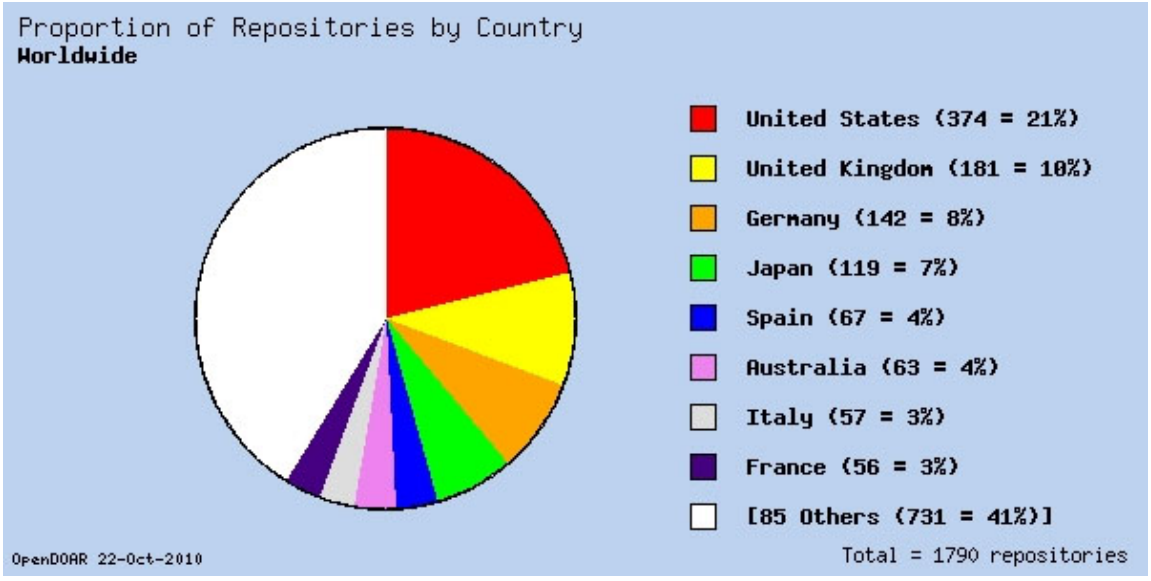
Although there are other repositories, the CLARA community aims at the quality of information and at specialisation. "In fact, there is also a very large repository, which is Google, but the difference between that one and the one we are going to create is that we want CLARA to provide it with a quality seal and we want it to be highly reliable. It is something very specific; it isn't common, since there are very few similar experiences in the world. It seems to me that, in the future, it will fit in very well with the experiences in other parts of the globe", states Marticorena.

More information

Wiki CoLaBoRa:
http://comunidades.redclara.net/wiki/colabora/index.php/P%C3%A1gina_Principal

CoLaBoRa's Technical Factsheet:
http://www.redclara.net/images/stories/comunidades/comclara2010_comunidad_colabora.pdf

CoLaBoRa Project:
https://sites.google.com/site/redlatrep1/



Malgorzata Lisowska, main organiser of CoLaBoRa:

"Repositories contribute to bridging the digital divide"

How was the idea of creating this community born?
It was originated by CLARA's call to regularise communities on digital libraries and repositories. Before that we had informal work groups and we were in contact; but thanks to CLARA's call, what we did was to consolidate this group and make the links official.

How long have you been doing this job?
The repositories issue in nothing new in the world. It began at the beginning of the 21st century with the birth of the Open Access movement between 2002 and 2003, and became popular in 2005. In Latin America, things started moving forward in 2007. The issue of collaboration between countries is something new.

What is the actual situation of Repositories in Latin America?
It is not the best; according to the International Directory of Institutional Repositories, only 5% are located in Latin America. It is a good step forward, but it is not enough to make Latin American scientific production popular and provide it with visibility. In these repositories there are all kinds of production; what we want to achieve is access to scientific production.

How many channels or how much coverage does the region's scientific production have?
The problem of disseminating scientific production through the traditional channels is that it has a high cost; since they are the databases of major international publishing companies. Sometimes, there are researchers who have to pay to have an article published. With this open access movement and the implementation of repositories, what we want to do is to make Latin American authors more popular and give them opportunities to publish their work for free and give visibility to their work and knowledge across the world without the need to pay a lot of money. Users receive access in the same way: free of charge and without the need to invest large sums of money in purchasing databases.

How did you make the decision of creating the community?
It is an alternative that was originated in Colombia; we have a community since 2007 and one experience called Colombian Digital Library. We wanted to internationalise this project, strengthen the links with our neighbour countries and exchange experiences, apply development and innovation on this kind of issues. Therefore, we invited the people whom we have informally met and with whom we have worked on these topics, and they responded enthusiastically. This is how the community was constituted.

The idea is to create a network and the idea is that, if somebody does not have a repository and wants to participate, he or she can do it. However, it is really important to learn about the subject, because when you have an implementation experience you face real problems and it is here where one can contribute with better results to a community like this one.

Do you have an estimate number of how many people from participating institutions can benefit from this community in terms of repositories?
Global statistics indicate that tools like these are being increasingly created, because they help reduce the digital divide. Any person who has access to internet can access a piece of information. The same does not happen with a library's catalogue, where you have to go and see if they let you in. Here with only one click you can access straight away the full text of the document. That is the idea, that those institutions which are available and are willing to share their texts in their entirety and for free.

This opens up a door for the scientists to disseminate their work...
This has to do with the famous concept of visibility. They could ask what benefit authors obtain for publishing for free something they could sell. The concept is precisely that one, visibility: if they publish that material and anyone can access it from anywhere in the world, people will know who the author is and learn about his/her research and strong points. This is what opens up for this author the doors to sources of funding, to scientists networks, to international cooperation, etc. the benefits are not financial or tangible, and this also implies a cultural change.

GÉANT

up to 10 Gbps dedicated capacity
40 million users
over 8,000 institutions
40 countries

10 Years of the GÉANT Network!

RedCLARA greets GÉANT on its 10th aniversary

RedCLARA makes itself known across the region

Members of the CLRA board participated in a series of events to disseminate the work done within the Cooperation, as well as to continue promoting the advantages of advanced networks throughout the region.

Ixchel Pérez

Regional Dialogue on the costs of international links and their impact on broadband rates (photograph, courtesy of ECLAC)

The impact on the cost of broadband, the use of advanced networks in regional research and participation in innovation congresses are some of the topics that over the last month have stood out in the agenda of the board members of the Latin American Cooperation of Advanced Networks (CLARA). They have participated in events of regional scope, together with authorities from different countries.

One of the most significant meetings in which CLARA participated was the second meeting of the "Regional Dialogue on the costs of international links and their impact on broadband rates", organised by the Economic Commission for Latin America and the Caribbean (ECLAC), and held on November 19-20 in Lima, Peru.

CLARA's Executive Director, Florencio Utreras, participated in the round table of leaders who discussed the impact on the cost of broadband of factors such as the lack of infrastructure and geographical problems that are typical of the countries in the region.

Utreras was part of a large group of specialists, authorities from governments across the region and internet provider companies at a regional scale, who encouraged ECLAC to acquire the commitment of creating a broadband observatory in Latin America, with the aim of providing decision-makers from each country with insights to develop public policies which make it possible to reduce the cost of this service.

"Apart from the constitution of the observatory, the ECLAC received the mandate of organising and managing work groups which analyse the points agreed upon at the meeting, such as the coordination of regulatory policies for the landing points of submarine telecommunication cables and the generation of policies to encourage the installation of content distribution centres and networks", explains the entity's website.

Networks and research

Another relevant event in which CLARA was present was the 3rd meeting of Vice-Chancellors and Heads of Research from the Peruvian Network of Universities (RPU), whose core topic was the "Use of advanced research networks". The meeting was held in Huancayo, Peru on November 12.

The meeting featured the presence of the following CLARA representatives: Dr Rafael Ibarra, President of El Salvador's Advanced Research, Science and Education Network (RAICES) and Dr Benjamín

Marticorena, Academic Relations Manager.

Ibarra made a presentation on "RedCLARA and Research in Latin America", in which he highlighted the huge impact of the Latin America Interconnected to Europe (ALICE2) project on the regional work. Apart from speaking about its general guidelines, Ibarra explained how the project aims to increasingly incorporate more countries to the infrastructure of advanced networks: "A cutting-edge infrastructure with low maintenance costs, RedCLARA2, which should become the base infrastructure for the development of collaboration in science and technology in Latin America and with Europe and the rest of the world".

The specialist also mentioned the different regional projects which are part of the work and goals of ALICE2. One of the most relevant moments of his presentation was the support given by CLARA to regional research communities, especially those working together to solve problems related to the Millennium and FP7 Goals and which submit proposals to FP7 and ALFA, among others.

This topics was reinforced by Marticorena, who made a presentation on "The Creation of Research Communities based on the use of advanced networks" for an audience of more than 20 people, including authorities from Peru's Pontifical Catholic University, the University of Central Peru, Cusco's San Antonio Abad University, the National University of Trujillo and the National University of Cajamarca, among others.

"There are many state universities in RPU, and none of them is a member of the Peruvian Advanced Academic Network (RAAP). Many university Vice-Chancellors and heads of research indicated that they wanted to get connected to advanced networks; the benefits are in their minds. I hope RAAP increases its membership", remarked Ibarra.

Ibarra explained that universities have the support of the Government to purchase infrastructure; they only have to work on the connectivity issue to become part of RAAP.

Future vision

CLARA's permanent participation in major events at a regional scale is fundamental to promote the benefits of advanced networks. This is why the calendar for 2011 is already being planned.

One of the major meetings where CLARA will be present is the Innovation Congress, which will be organised by the OECD and Mexico's CONACyT for March 2011.

Carmen Gloria Labbé, CLARA's Director of Innovation and Development, had a series of private meetings with the representatives from these entities to define the scope and forms of participation for CLARA in this congress.

Furthermore, the Director of Innovation participated in the FIBECYT seminar on Science and Technology insights for Latin America, which was held on November 24-26 in the Maya Riviera.

Rafael Ibarra in the 3rd meeting of Vice-Chancellors and Heads of Research from the Peruvian Network of Universities (RPU).

Through the ALICE2 project:

RedCLARA develops online course on Videoconference Management

On November 15th it started the training led by the experts Alejandra Stolk and Javier Contreras. Its target audience is the technical staff from RedCLARA's National Research and Education Networks and from its member universities and institutions.

María José López Pourailly

The course is made up of six modules that will be delivered between mid November 2010 and the beginning of May 2011, and will be developed over the Moodle platform which RedCLARA uses for the training activities it develops.

To be part of the technical staff of RedCLARA's National Research and Education Networks and/or of its member universities and institutions, to be familiar with academic networks and identify the potential to operate and organise videoconference resources in different countries across the region, to have general knowledge about networks and informatics, to have a personal computer with internet access and multimedia resources (webcam, microphone and speakers), and to have access to the videoconference platform in their institution (rooms, audiovisual equipment, videoconferencing equipment), are just some of the requirements that met the students that are currently participating in the course led by Alejandra Stolk (Systems Engineer, MSc in Safety and Critical Systems, with eight years experiences in network management and computer security) and Javier Contreras (Electrical Engineer with ten years experience in TCP/IP networks administration, installation and management).

RedCLARA in eLAC2015 priorities

The "Proposal for a Plan of Action for the Information and Knowledge Society in Latin America and the Caribbean (eLAC2015)", signed at the Third Ministerial Conference on Information Society of Latin America and the Caribbean, held in Lima, Peru, from 21 to 23 November 2010, highlights the relevance of RedCLARA in its 23rd Goal.

María José López Pourailly

"Goal 23: To provide broadband connection for all educational institutions, increasing the density of computers, as well as the use of converging educational resources. In this context, to promote public policies which support collaborative teaching and research activities through the use of national and regional research and education networks. In particular, to promote support for the Latin American Cooperation of Advanced Networks (CLARA) and CARIBnet in the management and procurement of passive infrastructure, thus strengthening the regional science, technology, research and innovation network."

The inclusion of RedCLARA in the eLAC2015 priorities is a sign not only of the necessary political support required by the future sustainability of the regional advanced networking infrastructure, but also a promise for scientific and academic development and progress across the continent.

Download the document at: http://www.cepal.org/socinfo/noticias/documentosdetrabajo/0/41770/PlanDeAccion.pdf

More information about eLAC:
http://www.cepal.org/socinfo/elac/

Mexico:

CONACYT and RedCLARA signed a cooperation agreement

The arrangement, which involves the development of three thematic workshops on priority areas for the region with the participation of leading experts from Mexico and other Latin American countries related to CLARA, aims to link the work of Mexican researchers with their counterparts in other countries in Latin America and the world in order to establish collaborative networks.

Tania Altamirano

"Red CLARA is a highway and both, researchers and projects, are the vehicles traveling on that main road; together we can collaborate on the development of Latin America, we want to support the growth of the research community and to enhance the knowledge sharing," stated the Chairman of CLARA, Luis Roberto Furlán, during the signing ceremony of cooperation agreement between the Mexican National Council of Science and Technology (CONACYT) and the Latin American Cooperation of Advanced Networks (CLARA), that took place on November 26th 2010.

According to CONACYT, this initiative is part of a strategy to articulate the work of Mexican researchers with their counterparts in other countries in Latin America and the world, in order to to establish collaborative networks in areas of common interest.

The agreement envisages the development of three thematic workshops referred to priority areas for the region, with the participation of leading experts from Mexico and other Latin American countries which are members of RedCLARA, in order to define joint research projects in areas such as health, natural disasters, culture, education, physics, grids, chemistry, astronomy and biotechnology.

José Antonio de la Peña, Deputy Director of Scientific Development of CONACYT, indicated that the development of these workshops will be the beginning of new projects aimed at enhancing the growth of interconnectivity and sharing of scientific knowledge among the Latin-American countries, where Mexico is called upon to play a leading role in the region.

In this regard, Furlan said that linking regional networks must not adhere to the institutions, but rather to form networks of individuals, particularly scientists and researchers.

The initiative also seeks to lay the foundations for future collaborative actions between research groups, institutions or research centers from Mexico and from CLARA member countries, which consider the training of human resources at a post grade level, as high-level teaching and research.

Synergy with RedCLARA and its partners, the National Research and Education Networks (NRENs) of Latin America, such as CUDI -the Mexican network-, allows the promotion of regional collaboration in high-impact issues to solve the needs for the development of Science and Technology, through innovative mechanisms related to the NRENs.

"The way to quickly solve some of the problems that affect the quality of life in the Latin-American countries increasingly depends on telecommunications infrastructure, as well as information technologies, which, for example, allows us to see a Hurricane since its begging, predict its course and to develop the logistics of rescue," said Carlos Casasús Lopez, Director of CUDI.

Finally, using the infrastructure of connectivity, linking the strategy outlined by CONACYT seeks to share knowledge, technology and information generated through scientific research and technical development, so one of the main objectives of such agreements is to promote the use of advanced networks in the development and strengthening of joint research projects.

Participate:

RedCLARA has new spaces of communication

Do you like to read extended information? Or do you prefer short and concise texts? Are you part of some social network? Would you like to receive information in your mailbox? If your answeres are YES, then this news is for you. CLARA it's enhancing its voice and now it is possible to subscribe to its news channel, to be a RedCLARA Facebook fan and take the chance to comment and share your opinions with the CLARA community, or just be a quick follower of all the information about events, meetings, services and projects of national networks in Latin America and Europe on Twitter.

Tania Altamirano

After a couple of months of intense analysis, programming and content modification, in November 24 RedCLARA finished the RSS implementation and its synchronization with the previously created RedCLARA's Twitter and Facebook pages.

This update process, responds to the constant search for improving and empowering the information of RedCLARA, ALICE2, and it's member NRENs, through a content management system that offers the possibility to upload information from one modern and easy platform.

Follow RedCLARA at:

Facebook:
http://www.facebook.com/pages/RedCLARA/177402962275923
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RSS:
http://www.redclara.net/index.php?option=com_rd_rss&id=2

Agenda

JANUARY 2011

09 - 13 | Africa 5 2011 - Joint CHAIN/EUMEDGRID-Support/EPIKH School for Grid Site Administrators
Tunis, Tunisia
http://agenda.ct.infn.it/conferenceDisplay.py?confId=344

15 - 26 | Africa 5 2011 - Joint CHAIN/EUMEDGRID-Support/EPIKH School for Application Porting
Tunis, Tunisia
http://agenda.ct.infn.it/conferenceDisplay.py?confId=345

18 | Emeriging Technologies for on-line learning
California, United States of America
http://sloanconsortium.org/ET4online

21-23 | International seminar on Obesity “Mexico-France”
Tlalpan, Mexico,
http://www.cudi.edu.mx/

22 | ALENEX11: Workshop on Algorithm Engineering & Experiments
San Francisco, California, USA
http://www.siam.org/meetings/alenex11/

January 30 –February 3 | Winter 2011 ESCC/Internet2 Joint Techs
Clemson, South California, USA
http://events.internet2.edu/2011/jt-clemson/index.cfm

FEBRUARY 2011

1 – 4 | GlobusWorld 2011
Illinois, USA
www.globusworld.org/about

09 | PDP 2011 - The 19th Euromicro International Conference on Parallel, Distributed and Network-Based Computing
Ayia Napa, Cyprus
http://www.pdp2011.org/

15 -1 6| Path to Cloudscape III
Brussels, Belgium
http://www.sienainitiative.eu/StaticPage/Cloudscape.aspx

MARCH 2011

21 – 25 | International Symposium on Grids and Clouds (ISGC 2011) + Open Grid Forum (OGF 31)
Taipei, China
http://event.twgrid.org/isgc2011/