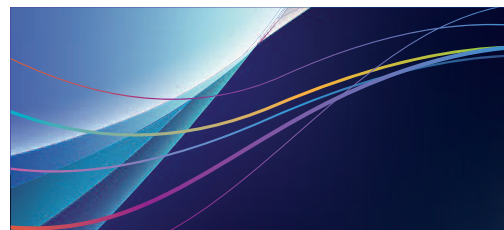# De CLARA

Invitation - Call

Shall we talk seriously about natural disasters and the end of the world?

Rafael Ibarra, RAICES president

"RedCLARA went from being an illusion to become a mature institution"

MERCOSUR's Virtual School was launched

«The European Union is constituted by 27 member states which have decided to progressively join their practical knowledge, their resources and their destinies. Over an expansion period of 50 years, together they have built a stability, democracy and sustainable development zone, and have also preserved cultural diversity, tolerance and individual liberties. The European Union is committed to sharing its achievements and values with countries and peoples which are beyond its borders».

The European Commission is the executive body of the European Union.

Contents

Editorial

Luis Núñez

Manager of Academic Relations, RedCLARA

Carlos Montiel, a researcher from the Chama station at the south of the Maracaibo Lake has a cup of coffee. He has several days thinking about how to predict the incidence of Black Sigatoka on the neighboring plantations to the station. Producers fumigate every 15 days and the levels of chemicals in rivers that run into the Lake are rising alarmingly. From his portal the researcher connects to the intelligent search engine of data repository. He discovers a relationship between increased-humidity/absolute-humidity quotient with the density of Sigatoka spores in the environment during the last months. He searches in the information of the last ten years and the results are amazing. There are several producers connected to the Website and Carlos writes a note. He includes graphs of the temporary series and proposes to change the fumigation pattern in the area. He calculates the savings on flights in planes, fuel and chemicals. He is surprised. Through the Portal four producers answer that they will try out his suggestion the next months.

Ángel Muñiz, vulcanologist of the Chimborazo University suspects that the variation of the local geomagnetic field may be associated with telluric events. In the researcher's portal, in the 'Collective Intelligence' option hi presents his doubt. Is there any other ways to measure the local geomagnetism? In the Observatorio Continental de Andino Meridional (OCAM) in the Argentinean Patagonia, Misael Barros reviews the help requests that receives daily. The new service 'Collective Intelligence' automatically sends the request according to the Internet search profile of the subscriber. Misael covers the top ten. He highlights the one from Muñiz. As he hurries the last sip and refills the mate, he imagines the possibility of detecting these fields with cosmic ray showers. From his tablet, he does a couple of simulations and realizes that "abnormal deflections" can be detected from particles in vertical drop. He answers to Muñiz and together they begin to delve into the details of the new OCAM service and the data of the Observatory of Telluric Extraordinary Events. They find a weak correlation that must be followed by tracking and researching.

Elia Osorio from the epidemiology unit of Tamaulipas receives an alert on the phone. The reports of symptoms of influenza in the region have increase. Users report directly and rural outpatient medical clinics confirm this information. The outbreak appears to begin 150km east of the city, near to some agro-industrial facilities. She checks the maps generated by the Citizen Science Service in the researcher Portal. Occur every 4 hours. Elia can watch how something that seems

to be an epidemic is coming to town. How long will it take? She decides to start vaccinating the most vulnerable population: children and elderly people from the east of the city.

It seems to be fiction, but several of the scenes start to happen in our Latin America. RedCLARA through its Portal http://www.redclara.net/, kept informed about a thousand researchers in the region and enables collaboration of dozens of communities. Through this Portal, communities have access to funding information for their projects, look for partners to develop them, exchange ideas using desktop video conferencing, schedule seminars in videoconference rooms and begin to collaborate on research projects that only recognize the borders of the ideas and the realities they address.

We invite you to join this new group of researchers and together build the collective intelligence that the problems of our region need.

Imagen: Carlos Sala / PromPerú

Open Call to present papers for TICAL 2012 Conference

On July 2nd and 3rd, 2012, Lima will host the Second Conference of Information and Communication Technologies Directors from higher education institutions. People involved in ICT management in Latin American universities are invited to submit proposals related to this topic. The deadline to submit the material is April 15th, 2012

Building on the success obtained by TICAL 2011, held in Panama City on 20-21 June 2011, TICAL 2012 invites to engage in a new space for reflection, exchange of knowledge and good practices which address these issues, with the purpose of contributing to the improvement and optimisation of the region's universities' management and work.

Topics (these topics do not exclude others that you can propose):

1. CT management and governance for research development: Role and positioning of ICT management units; strategic planning to support research.

2. Knowledge management. Applications for the creation, storage and distribution of knowledge: distance learning platforms, digital repositories.

3. Services to support e-Science: Massive/ distributed storage, transmission of large files, Visualisation, etc.

4. Cooperative Procurement: Commercial Internet Bandwidth, Cloud Services, Software as Service, etc.

5. Federated Services: Authentication, EduRoam, Digital Newspaper Libraries, IP Telephony, High-Quality Videoconference/ Telepresence, Web Conference, among others.

All people involved in ICT management in Latin American universities will be allowed to submit papers, preferably on the topics mentioned above, by sending their proposals to: tical_2012@ redclara.net. The deadline to submit material is April 15th, 2012.

Important dates

• April 15th, 2012: papers to be submitted

• May 15th, 2012: notification to authors

• July 2nd and 3rd: TICAL Conference – Lima

More information at:
http://tical_2012.redclara.net

Register and participate in the First Virtual Day of Culture

Organized by RedCLARA, RNP and CUDI, the first Day Virtual Culture will be held in March 28, from 18:00 to 20:00 GMT / UTC. The online registration is already open.

This activity is the first of four thematic experiences, and it aims to join the worlds of Arts and Culture and Advanced Networks, by means of the organization of meeting cycles of dissemination and discussion between researchers, artists, cultural managers and representatives of ministerial level in the field of culture in the region, all remotely gathered through the high quality videoconferencing system that is provided by RedCLARA.

Dates:

First test: Monday 26 March, between 18.00 and 20.00 GMT (open only to those who have registered correctly in the Events Manager)

Second Test: Tuesday 27 March between 18.00 and 20.00 GMT (open only to those who have registered correctly in the Events Manager)

First Day Virtual Culture: Wednesday 28 March, between 18.00 and 20.00 GMT (open only to those who have registered correctly in the Events Manager)

All the information about the event and the registration is available at the following link: http://www.redclara.net/indico/evento/diasdecultura1

Fernando Liello, ELLA Project Coordinator

"Latin America needs the new submarine connection to Europe because it cannot rely only on connectivity to North America for its development"

ELLA - Europe Link with Latin America - is a feasibility study of the integration of Latin America (LA) and Europe (EU) by means of a transatlantic submarine cable. ELLA seeks to examine the feasibility of improving current network connectivity between EU and LA by the creation of a new direct submarine link across the Atlantic Ocean. That is precisely the subject of this conversation that we held with Fernando Liello, the leader of the study.

María José López Pourailly

The lack of competition amongst providers has made extremely expensive the communications between EU and LA. ELLA's objective is to promote greater competition amongst those providers in order to reduce the connections cost and achieve the creation of a new direct submarine link between EU and Latin America. After almost a year with ELLA running, how has

been developed that approach with the providers and what has been the results?

The providers (at least a large number of them) are extremely interested in the project.

There is a wide recognition that the idea of deploying a new cable between LA and EU is technically feasible and economically attractive. If there is a problem, is that there are a number of different initiatives in competition.

Would you say that competition between them has been fostered by ELLA or do ELLA face a different scenario than the one expected when the proposal was presented to the FP7?

More than fostering direct competition, ELLA is making plainly visible that the paradigm of the "closed consortia", that has dominated the transatlantic communication scenario, has reached its limits. More and more providers are attracted by the idea of "open access" to transatlantic facilities. In this respect I would say that ELLA has already helped to make a big step

forward towards open competition in the LA to EU connectivity services.

If the importance of communications between EU and LA is so big, why would you say the Industry did not take care of it? Why didn't the providers see the market and business opportunity in this connection? Is it because the cost of its implementation seems to be much higher than the investment return?

In a market in which the prices charged to the customers are so big compared to the actual costs, and in which the infrastructures are owned by consortia in which every provider has his share, there is little incentive to make investments. The situation is changing because there are providers who have been kept at the margin of the business who would like to have a larger share of the market, and can have it only favouring the creation of new infrastructures managed with different principles.

You have been involved in the development of RedCLARA and its connection (the connection of Latin America) to GÉANT (EU) from the very beginning or even before. In 2004 it was established the first connection; early this year the 622Mbps link was doubled and in in a short time the link will be changed to one of 2.5Gb. This improved capacity should serve to increase research development between EU and Latin America. Given that scenario and from the R&D perspective, why do we need that new submarine cable? For example, given your experience in the EVALSO project, would you say that European and Latin-American astronomers need that cable? Who else needs that cable within the R&D community?

Taking into account the rate of growth of the RedCLARA infrastructure, the foreseeable capacity commercially available to connect EU and LA will be always a bottleneck. Moreover to assume that all the research connectivity were through USA is strategically and technically a huge mistake.

A new cable is a unique opportunity for the research community to make at the intercontinental level what has proved to be a winner at the national and continental level: to be the owner (or at least to have direct access to) the basic communication infrastructure, the fibre.

In the same cord of the previous question and given your knowledge of European NRENs and R&D community: Does EU needs a better connection to Latin America, why?

EU, or at least a fraction of it, has not yet fully realized that a single centred global research network cannot last for long: it has to become multi centred. The collaboration between EU and LA is developing at an extremely high pace. Beyond this the cultural and social heritage that links the European Latin countries with LA demand stronger bounds at the technical level.

In this framework a seamless integration of the services provided respectively by GÉANT and RedCLARA could be considered as a natural development of both infrastructures: this requires the removal of the bottleneck of the data flow between LA and EU, that cannot be achieved simply upgrading the connectivity between LA and North America.

From a political point of view, why should Latin-American governments support RedCLARA and the European Commission continue supporting the advanced Latin-American network development?

It has been historically demonstrated, both in North America and in EU, that research networks are not a COST for the society, but an INVESTMENT, and a very good one. Research to be competitive requires communication, and cooperative research is the paradigm of our times. Latin-American research community, up to now, has get less than its fair share in this. This is not because of the researchers in LA are less innovative or because researchers in other continents are better prepared. It is because

mobility costs are a huge barrier: research networks are a way (and comparatively a cheap one) to overcome this handicap.

Which would be the social impact of the establishment of a new submarine cable to connect LA and EU?

It is a fact that a large fraction of the world data are produced in EU; and it is even more true if we take into account all kind of data, not only the scientific and technical ones. Despite the fact that this situation is rapidly changing, it must be recognized that for some time to come the cost of access to data from LA will largely depend on intercontinental infrastructure costs. Today the cost for a given capacity between LA and North America or EU with respect to the same capacity between EU and North America is larger by a factor much bigger than 10. To reduce this factor will have a direct impact on the cost of the services to the Internet users at large, that in due time will also reach the final user.

In its proposal ELLA refers to the benefits that a new submarine optical infrastructure between EU and LA could take to the West African cost countries. Could you please explain those benefits?

The point is purely geographical: there are about 7000 km from Brazil to the Peninsula Iberica and about 4000 km from Brazil to Angola. Both, Islas Canarias and Cape Verde lay exactly on the paths of this future cables. A coordinated effort would lead to: lower infrastructure costs, the availability of direct paths at no extra cost, and lower maintenance costs.

From your perspective and given the current results of ELLA, do you think that that new submarine cable between EU and LA is going to be established?

Definitely yes.

Would you dare to give an estimate date for that?

In order to be attractive for the commercial providers, the new cable should be ready for service before 2014 (football world cup in Brazil) or at latest 2016 (Olympic Games in Brazil). This is technically feasible. The real difficulty is the fund raising. We are working on this .

Please, complete the following sentences:

LA needs the new submarine connection to EU because
it cannot rely only on connectivity to North America for its development.

EU could win
a more robust and balanced worldwide communication infrastructure
thanks to the establishment of a new submarine cable that unites the continent with Latin America.

The private market should invest in the creation of a new submarine cable between EU and LA because
it is a very good investment with a very attractive Investment Return Time.

R&D will
make a huge step forward toward the service integration of GEANT and RedCLARA
thanks to the new cable.

Without the establishment of the connection that ELLA is promoting
we will remain in XX century instead of moving to XXI.

Shall we talk seriously about natural disasters and the end of the world?

Participate through videoconference in the First Global Virtual Day called "2012, end or substantial change of the world?" on March 22nd at 15.00 GMT.

María José López Pourailly

Tuesday February 7th, 2012, 19:53 GMT: In 0.17 seconds, after typing the phrase 2012 end of the world Mayas, without inverted commas, Google (in Spanish) gives you 3.020.000 results. With the phrase December 21st, 2012 the same search engine yields 31.800.000 results in 0.25 seconds. If the announcements and predictions about the end of the world (whether with a grip on reality or not) are not the big issue every single human being on the planet talks about, they must surely be within the top five. Can or should academic networks address these conversations which at first glance seem to be far from the serious formality and scientific rigour? The LA NREN PR group (the event's organisers) will not answer this question; they will simply invite you to participate in the First Global Virtual Day where specialists from various scientific areas and countries will address the topic "2012, end or substantial change of the world?" from their individual fields of research.

Who will these experts be and what will they talk about?

The programme for the first Global Virtual Day is still under construction, but the participation of the following specialists has already been confirmed:

Topic	Specialist
Maya Apocalypses in 2012? What pre-Hispanic Mayas and the skies are telling us	Dr. Jesús Galindo, Institute of Aesthetics Research from the UNAM
	Dr. Alfredo Santillán, General Directorate of Computing and Information and Communication Technologies from the UNAM
Natural risks and their perception	Mtro. Carlos Suarez, University of Guadalajara (UDG)
	Dr. Mabel Padlog, University of Guadalajara (UDG)
	Dr. Bertha Márquez Azúa, Centre for Strategic Studies for Development at the UDG
Risk scenarios due to big earthquakes and tsunamis in Chile, Japan and Mexico	Dr. Marcelo Lagos López, specialist in extreme natural processes and their interaction with human settlements. He teaches undergraduate and postgraduate courses on subjects related to natural risks, geomatic Technologies and coordinates seminars on environmental research. School of History, Geography and Political Science, Pontificia Universidad Católica de Chile (http://www.geo.puc.cl/html/mlagos.html)
The El Hierro Case, formation of a volcano	Jesus Rivera, Olvido Tello, Nuria Hermida and Baetriz Arrese – geology team working in El Hierro, and Juan Acosta, geologist and coordinator of the volcanic cartography and monitoring work in El Hierro

When, how and where?

The appointment is scheduled for March 22nd, 2012 at 15.00 GMT through an H.323 videoconference over the advanced academic networks in Latin America (RedCLARA), the Caribbean (C@ribNet), Europe (GÉANT) and Sub-Saharan Africa (UbuntuNet Alliance). If you belong to an institution that is part of a national research and education network (NREN) which is part of one of these regional networks and wish to participate through videoconference, please book the space for your room by Monday March 5th at 15.00 GMT by sending an email to 2012global_day@redclara.net indicating the following information:

- Name of the institution
- NREN to which it is associated
- Country
- IP of the videoconference equipment to be connected
- Name of the technical coordinator (who manages the videoconference equipment)
- Technical coordinator's email address
- Technical coordinator's Skype ID
- Technical coordinator's' MSN ID

Please remember, spaces are limited!

But if you are not connected to advanced academic networks or do not have access to a videoconference room and still wish to be able to participate in the meeting, do not worry. We will offer live transmission through the internet and will open a conversation channel via Skype so that you can send your questions to the speakers.

Don't forget it; we will be waiting for you on March 22nd! By the way, have you thought about it, about the end of the world?

Website:
http://2012globalday.redclara.net

2012, ¿fin o cambio sustancial en el mundo?
2012, fim ou mudança substancial no mundo?
2012, end or substantial change of the world?

22/04/2012 - 15:00 GMT

Día - Día Virtual
GLOBAL Virtual Day

CYTED 2012 Call is now open

The Ibero-American Science and Technology for Development Programme has opened its annual public call for CYTED Actions.

The call will be open from February 1st until April 3rd at 17h (local time in Madrid, Spain) and will be referr to the action lines defined in the Annex 1 of the Basis of the Call (www.cyted. org). That document specifies the participation instruments that are supported on each line (Thematic Networks or Actions of technological transference to the business sector) of the 7 scientific and technological areas in which the CYTED Programme develops (Feeding and Agriculture, Health, Promotion of Industrial Development, Sustainable Development, Global Change and Ecosystems, Information Technologies and Communications, Science and Society and Energy).

To present a proposal the on-line form must be completed (please go to www.cyted.org). Also, all documents relating to the call are available on the Programme website (under "Research CYTED Call 2012" – only in Spanish and Portuguese).

PROGRAMA IBEROAMERICANO

CYTED

CIENCIA Y TECNOLOGÍA PARA EL DESARROLLO

For more information, please visit:

http://www.cyted.org/cyted_investigacion/participa.php

"RedCLARA went from being an illusion to become a mature institution"

Rafael Ibarra is not only the president for Salvadorean Advanced Network of Research, Science and Education, RAICES, he is a member of the group of dreamers who gave birth to RedCLARA almost a decade ago. 10 years down the road, Ibarra reflects on the batles won and those that are still unconcluded.

Ixchel Pérez Santamaría

¿Since the foundation of RedCLARA, which are the most significant points of its evolution?

RedCLARA has matured a lot as an organisation. It's like when you get married, you start with a great illussion and then go to a much more real situation. What we hoped when we created RedCLARA is still there: a united Latin America, conected and collaborating through information technologies. This dream was fullfilled with the signing of the agreement in Valle de Bravo, Mexico. It marked the definitive moment for RedCLARA to be borned. Nowadays is more mature entity, a solid institution; there are still a lot of room for growth, but we've had a very positive evolution. Today we're facing the finishing of the ALICE project and we might want to go on with our goals using different ways.

In that range from illusion to reality, what are the three main achievements of RedCLARA?

First, to establish the friendly network of institutions and people developing empathy with each other, that bonds unite everyone who's part of RedCLARA, sharing effort, joy, documents and the operational side.

Second, the physical network, the improvements in infrastructure. How it all evolved from bandwidth to dark fibers and other technologies that aim sustainability and permanence of what we're building. And finally third, the solid reputation RedCLARA has build not only regionally but globally. We've got as Latin America's network devoted to science, technology and research, an institution's group seeking development for their own countries.

What are the three main realities challenging RedCLARA?

The first one is the need for human and financial resources. That goes back between illusion and reality. It's very easy to get carried away and think everyone in the world is willing to give their time and effort for free. You get to understand reality is not like that.

The second, the region's development situation. We're clearly ahead of the times our countries live in science, technology, research, patents, etc. We're pushing the envelope and setting regional leadership.

Third, the countries' goverment position on science and technology. It ain't clearly an economic factor, so the gamble on it is very poor or non-existent. The inmediate difficulties besetting the countries leaders get the major investments and attention. The more strategic subjects are left aside.

The given reality affects countries in different ways, what keeps you motivated?
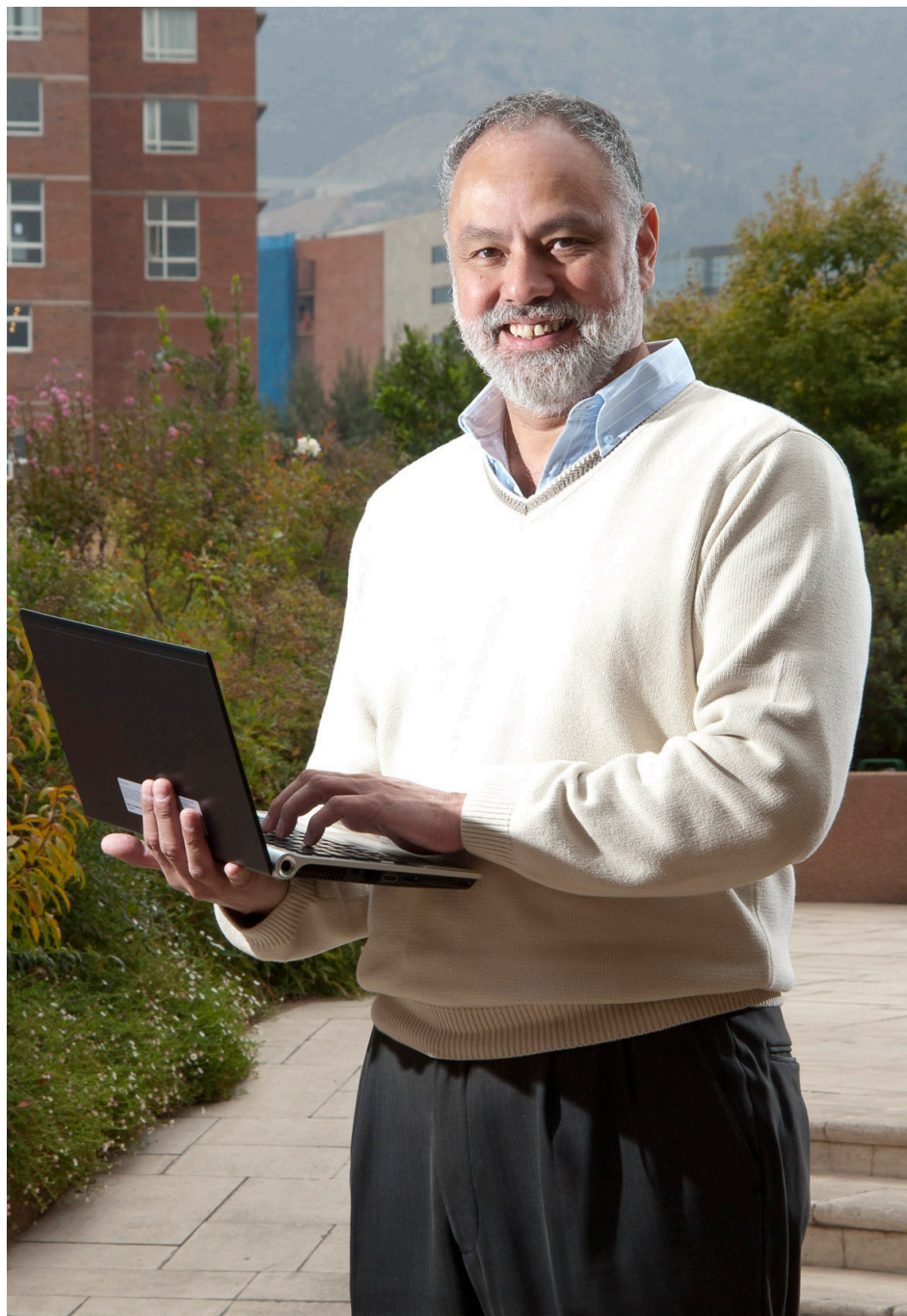
First, commitment. Several of us take this very seriously and though there are moments when you feel like giving up, we keep it up encouraging that very first commitment made, which still stands firmly, eventhough results are not as big as we'd like to. On the other hand, it's logic to think that in such a complex project, having so many people, with different ways of thinking and countries, things can't be done overnight. It's only hammering and persevering that you can make something happen. The hope that some day, our countries can take advantage on the written promise of science an innovation encourage us. We don't know if we'll still be around when this happens.

One of the most important changes in RedCLARA's life it's to develop an image from an physical infrastructure to a scientific collaboration network. What kind of envolvement have scientists and researchers had in the different countries?

That has been one of the major milestones. To be perceived not only as a phisycal network but as a network that allows the existence of scientific and research communities in Latin America. It's not been easy, because originally the approach was trying to connect to the networks. But that assumption was made from the fact that those networks would grow by themselves, under their own momentum, and that hasn't happened in many countries, because there hasn't been a significant change in the way people thinks. Visualize ourselves as the meeting point of scientist and researschers will be more fruitful than the former idea. It's easier to transmit the approach of a colaboration network than simply a set of highspeed networks and bandwith.

What kind of work are you doing for the countries that still are not connected do not stay isolated?

We've made some specific efforts to reach out and keep the flame burning in countries that still are not connected.In some cases, the local researchers and universities networks aren't formed, mainly because of the lack of financial resources. Those countries connected are possible thanks to the ALICE project. Eventhough, the major component to stablish the connection is yet absent: national commitment. By RedCLARA we haven't give up hope that there countries will get connected. We're working to include them.

What do countries miss for being outside RedCLARA?

They miss the chance of walking together through the same path, those matters are not easy or a priority in many nation's agenda. We're all onboard the same ship and we support each other. That solidarity and fraternity we live inside RedCLARA is what they miss.

What has El Salvador won by being connected to RedCLARA?

In first place, it's won a larger internal knowledge of RAICES' member, and a succesful approach of all those conforming institutions in the country. In second place, the chance to get to know what are other countries doing, universities and regional research entities, where alike realities are lived. That's how you learn from examples and experiencies.

Finally, you can develop joint work. For instance, we're working on voice over IP. The plan it's to create a central federated server where all these services can be concentrated. That's only one of several projects.

What are RedCLARA's perspectives for the future?

We're going through tough times. The project ALICE2 is reaching its final stages and we are making every effort to keep financial resources coming besides all those we get by ourselves. We've got a B Plan to keep the project going, perhaps slow down the execution in some areas, but we wouldn't like to face a shutdown. Yes, there are major concerns because science and technology are not yet a priority in many goverments plans. That takes the government's and entities resources to different projects different from science and technology development

From left to right: Marta Pessoa, Director of the MERCOSUR Digital Project; Ronaldo Mota, Coordinator of RECyT Brazil; Ana Paula Zacarias, ambassador of the European Eunion in Brazil; Aloizio Mercadante, Brazilian Minister of Science, Technology and Innovation; Nelson Simões, Director of RNP, and the ambassador from Itamaraty Brazil, Benedicto Fonseca Filho.

MERCOSUR's Virtual School was launched

By MERCOSUR Digital

On Tuesday, December 6, in the auditorium of the National Library of Brasilia (Brazil), it was launched the Virtual School of MERCOSUR, a virtual training and education network integrated by specialists and institutions with international recognition and representation in the four countries of MERCOSUR, that aims to develop the digital economy and to promote the economic integration within the block.

Besides the Brazilian Minister of Science, Technology and Innovation, Aloizio Mercadante, and the Ambassador of the European Union Delegation in Brazil, Ana Paula Zacarias, the ceremony was attended by official authorities, experts and professional from those institutions that act at different levels of the Brazilian government and private sector related to MERCOSUR.

MERCOSUR's Virtual School is an innovative initiative to exchange experiences and knowledge and learning. It is consider as a reference centre because of its quality training, high level and impact of their methodologies applied to strategic areas of the Information Society and the e-Commerce.

The Virtual School consists of online training courses, information services and communities of practice, devoted to micro, small and medium companies, research centres and organizations, private and public sectors, at federal, state and municipal areas as well as civil society actors.

Among the offered products there are practical training courses, with the participation of specialized tutors, workshops, conferences, seminars and online forums, with high quality content, written by experts in the area. The primarily developed themes are in the area of Electronic Commerce (e-Commerce) and Business Topics such as Internet security and digital signature, social networking and search engine optimization; legal, regulatory, tax and customs aspects of the e-Commerce.

MERCOSUR's Virtual School is one of the main results of the Mercosur Digital project, an international cooperation initiative between the European Union and MERCOSUR. Designed with the aim of being sustainable, it is promoting the intensive use of new media and Information and Communication Technologies, the online education service was designed with the proposal of becoming a model of an effective knowledge management.

Some benefits that can be identified for the MERCOSUR bloc are: reducing the asymmetries in access to and use of Electronic Commerce Technologies and of Information and Communication Technologies (ICTs); the promotion of business on the Internet, within Mercosur and Latin America; the economic growth of the block, and - through increased training - the development and consolidation of the Information Society in the MERCOSUR countries.

For more information, please visit:

www.escuelavirtualmercosur.org

Engineer Carlos Filippi, President of Red Arandu

"The support from the RedCLARA community has been very important for the birth of Arandu"

At the ALICE2-RedCLARA meeting held in November 2011 in Montevideo, the Directors and Engineers from the Latin American National Research and Education Networks (NREN) met the new President of the Paraguayan NREN, Red Arandu. In this interview we found out about the next steps for the network of Guaraní wisdom, its desires and the state it is in today.

María José López Pourailly

In Guaraní Arandu means 'wisdom'. The road Arandu has gone through since its creation has been long and winding. How much of that wisdom contained in your name have you required in Paraguay in order to attain the signature of Red Arandu's Foundational Act in 2011?

In order to explain how we achieved the signature of the Foundational Act, it is necessary to make a little history:

In 2002, put forward by the National Computing Centre (CNC in Spanish) of the National University of Asuncion (UNA), the Red Arandu Project was initiated.

From this moment onwards, local and international universities and institutions became key actors in order to achieve the availability of infrastructure and the implementation of the Paraguayan Academic Network.

In 2009, RedCLARA's biannual meeting was held at the UNA Campus. The event enabled RedCLARA's Executive Director, Florencio Utreras, the Director of RNP, Nelson Simoes, representatives from local universities and representatives from the National Council for Science and Technology (CONACyT) to get together and agree to constitute CONACyT as the coordinating entity for Red Arandu's implementation.

Thanks to this coordination we obtained the support from the Mercosur Digital Project through the following actions:

• Network infrastructure design

• Provision of computing, networking and communication equipment

• Writing down Security Policies and Contingency Plan

For the infrastructure design we had the valuable collaboration of engineers Gustavo García and Alex Moura from the RedCLARA staff.

What are the next steps for Red Arandu in 2012?

We decided to establish short-term goals without losing sight of long-term objectives.

The short-term challenges are: to consolidate the Statutes, the physical implementation of the Network's NOC, the physical connection of member institutions, the creation of research communities and the beginning of the network's operations through these communities, the exchange of information, as well as the socialization of the network's services to other institutions.

We also wish to prepare, present and, if possible, start the construction of the Red Arandu's offices in the Campus premises.

What are the main challenges faced today by Red Arandu?

One of the biggest challenges has to do with the Network's sustainability.

At the moment we have the support of a consultancy facilitated by RedCLARA for the writing of Red Arandu's Business Plan. This work will make it possible to identify sources of funding, as well as the strategies to attract more partners and provide better services.

What do the four member universities and the two strategic partners expect from Red Arandu in the short and mid term?

In the short term, the four universities expect the Network's functioning; to go through the pilot stage in order to start using the new platform.

In the midterm, we expect to get connected to RedCLARA, so as to make use of this connection's benefits.

Red Arandu's backbone will have 10 Gbps and the institutional connections will have 1 Gbps. This is patently a modern network. When will this network be fully implemented and when will it start to provide connectivity services to universities?

It is very important to clarify some concepts.

Currently, Arandu has equipment with capacity for 10 Gbps links.

10 Gbps will feature the interconnection to be established with RedCLARA, by means of which we intend to implement, through the RedCLARA-RNP-COPACO agreement, a 10 Gbps transmission network, which would be split into 1 Gbps capacities to connect the nodes that will emerge in the Asuncion-Ciudad del Este segment.

To date, we are working on a new work timescale, restructuring the stages and redefining the objectives for each of them.

What do you think the main benefits of this network's implementation will be?

We have a purpose: the integration of universities and research centres through the creation of scientific cooperation networks and the exchange of academic content.

The opportunity to consolidate the new technological infrastructures as tools for the development of research work and joint projects with local and international peers.

These technological resources constitute the support to give life to the actual network, the target network, constituted by academics, researchers, students and other actors who make up the national academic and scientific community.

In terms of connection, how does Red Arandu operate today?

Through VPN over COPACO S.A.'s IP/MPLS network.

Currently, Arandu has border equipment which will be used to connect RedCLARA.

The idea is to logically and physically join Arandu's border equipment to COPACO's network. This way, we will have our Red Arandu by means of which all member institutions will be connected.

After the RedCLARA and ALICE2 meeting held in November 2011 in Montevideo, what is your view regarding the work of national networks and RedCLARA?

I think initiatives like RedCLARA constitute a vital complement to strengthen the work of National Networks. Its integrating mission puts into perspective the current reality of an interconnected world enriched by the exchange of knowledge and skills without limitations and frontiers.

At the same time, we envision great challenges for the future and we will have to find together intelligent and timely solutions which guarantee our organisation's sustainability and strengthening.

What does Red Arandu expect from RedCLARA today?

Our interest in this first stage is focused mainly on the materialisation of the Arandu-RedCLARA-COPACO agreements in order to implement the transport network which connects COPACO directly to RedCLARA.

We wish to maintain and increase our participation in the work of RedCLARA in order to feed ourselves on the experiences and knowledge of our peers and thus consolidate Red Arandu's development process. The support we receive from the RedCLARA community has been a highly important element for the birth of Arandu and we are certain that it will continue to be so in the future.

Researchers of the "Open Educational Resources and Training Mobile Educational Research" project, CUDI-CONACYT 2009, publish an e-Book

The e-book "Transformando Ambientes de Aprendizaje en la Educación Básica con Recursos Educativos Abiertos" ("Transforming Learning Environments in Primary Education with Open Educational Resources") is the product of the experiences of the educational practice of a group of researchers from CUDI (Mexican NREN) member institutions who developed a collaborative project which aimed to add knowledge both to the fields of educational innovation and of information and communications technologies (ICT) through the incorporation of Open Educational Resources (OER) in the academic practice.

The chapters that are part of the work describe the process followed by the research project "Knowledge hub (Khubar-K12) for basic education" to:

- (a) enhance a classified and indexed collection of open educational resources for teachers in primary education (through a search engine academic site) for Mexico, Latin America and the rest of the world within the field of educational innovation, and

- (b) integrate OER in the educational practices of the primary education teachers, in order to support the improvement of the face-to-face and at distance learning processes, professional development of teachers, helping to reduce the educational delay through access to more equitable educational resources, analyzing and documenting the processes of integration and contrasts on their application to improve education.

Reference of the book:

Ramírez, M. S. y Burgos, J. V. (2011) (Coords.). Transformando ambientes de aprendizaje en educación básica con recursos educativos abiertos. México: Lulú editorial digital. Available in free digital format at www.lulu.com, direct URL of the e-Book: http://tinyurl.com/bookcudi2009 and URL for printed version: http://tinyurl.com/printbookcudi2009

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Building a research community is still a hard and complex task in Latin America.

Funding and joint efforts between several countries are crucial to build an educational and research community. This is still a great challenge according to an investigation developed at the end of 2011.

Ixchel Pérez

A deep regional survey about the reality faced by universities in the region revealed that the lack of resources and incentives, low use of technology, limited staff and an inadequate training, are among the main obstacles to the formation of an education and research community.

The survey "Issues and challenges in the creation of a Latin American research and investigation community" was applied in 13 universities members of the Urdimbre community (spread in seven countries), to analyzed the management, development and the context of the technology for the investigation.

According to the leader of the Urdimbre community, Clemencia Camacho, the research came as result of a "technological communicative disagreement of social research". Camacho explains that once the community was chosen to receive the support of the COMCLARA project in 2010, they tried to follow a teaching model in several institutions at the time; however, many drawbacks came along in timing and procedures matters.

"We needed a strong support for research and technology direction to have connection with the NRENs and all their services, but we ran in to many obstacles, like timing and procedures in the research work of several institutions, plus, a lack of awareness of the benefits and technological tools being paid for, so we decided to find out how to solve all the inconvenient" said Camacho.

From that on, three researchers from the community began a survey, Clemencia Camacho, from the Politecnico Gran Colombiano, Colombia, Blanca Orantes from the Universidad Tecnológica, El Salvador and Dora Luz Gonzales, from the Instituto Tecnológico de Durango, México.

"Semi structured interviews were applied using email for data collection. One of the results was that in most of the institutions, the research's management is executed by research and post grade directors as well" explained Blanca Orantes, research director of the Universidad Tecnológica from El Salvador (UTEC).

For Orantes, one of the main findings was the weak leadership of the communities. Most of them have little sustainability in time due to the inexistent support from the institutions, and the lack of capability and guidance to present the projects to the financial organizations.

"Research in the institution is basically oriented by education ministries requirements and not for a real interest for knowledge production. Research is mostly formative and barely applied. One of the reasons for this is that investigation is financed using the organization's own resources, supported with money from national entities looking for it in the best of cases" added Camacho.

Another setback for the researcher's work, according to those participating in the survey, is that training programs are not enough to form researchers. "Teachers don't do any research

because of too little motivation or vocation, and despite post grade should be a great promoter for research, in some entities this area is not considered a strategic axle, affirmed Orantes.

"Summing up, is necessary a research culture that overcomes the paradigm to consider research as something hard and complex. The management and leadership of any researcher community should be done by members of different nationalities, this builds up a sense of belonging and commitment in researchers. You have to add a proper management and the skills to face any requirement in order to present any project to any of the cooperating entities. That's key to find sustainability for the academic community" explained the Salvadorian researcher.

RedCLARA has been essential

Regional communities have still a long way to go to overcome these challenges. Although, researchers from Colombia, Mexico and El Salvador recognized that RedCLARA is working to support them.

"RedCLARA has been working on several fronts to consolidate researcher communities, providing services and training in investigation and technological knowledge among others. However, pressure is on NRENs, they should offer proper stimulus to the institutions in charge of using and creating innovative ways to use and develop knowledge, besides, social benefits with these tools must be constant" reflects Camacho.

Through advanced network, declares Orantes, many research supporting activities can be done, such as videoconferences, fund alerts and the networking conformation", and she adds "RedCLARA can keep influencing with the formation of many researchers networks with the capacity to strengthen the scientist's formation for better researcher capabilities at a larger scale, as well as researcher's group all throughout Latin America" concluded Orantes.

RAGIE with a new boost

Guatemalan Advanced Research and Education Network (RAGIE) has changed its logo and renewed its website as part of a refreshing effort to strengthen its relationship with their members and audience.

Ixchel Pérez

Guatemalan National Research and Education Network (NREN) changed the image and content of its logo and website. The effort is part of a project to enhance the dissemination of its advantages and work.

"Our former logo was made on 2003, when RAGIE was starting. It illustrated a Guatemalan map with five points of connections, representing the original five universities members of the NREN. We sought for something more eyecatching and with a different meaning" explained Luis Furlán, President of RAGIE.

The logo was redesigned not only because of the change in the number of associated universities, but also for the interest to emphasis instead of the physical infrastructure, the collaborative work offered by the advances networks.

Creating the new logo included several meetings between the executive direction and the communications unit, the result were three graphic proposals. Then, the director boards elected the option that they considered that represents in a better way the NREN.

The new logo preserves the original color palette and the main icon, which is Guatemala's map. However, it uses clearer tones, a more modern graphic line and transmits the idea of teamwork between researchers and academics, the actual ultimate goal of advances networks.

The graphic restyling comes hand to hand with a website redesign that also got an edgier and more modern touch, in concordance with the new logo's colors and shapes. Plus, a more dynamic menu is included, with different sections and several multimedia features, including photos and video.

"We've got some very positive feedback regarding the graphic upbeat, in order to measure more accurately the impact, we'll install in visitors counter in the website in the next few days" said Furlán.

Strategic promotion

Through its new image, RAGIE is trying to stay on top of its six conforming members (three of them very active). At the same time, is looking for a stronger placement in the mind of students, teachers and researchers.

In order to promote advanced network's benefits, a number of events were held during 2011.

"On August we had an event with a lot of researchers that allowed us to show them

what advanced Internet offers to their projects" said Furlán, and then added "There are several benefits. Not all universities have been able to get the best out this, but those doing it have achieved successful collaboration and for the education part, the use of high definition videoconferences has been very important".

For 2012 on of the major challenges for RAGIE is to get more researchers and scientist to know about advanced networks, by doing this they can reach their Latin American partners and from all over the world. Besides, it will be essential to get new entities as members of the NREN.

"All scientific technological and scientific development worldwide is going toward advanced Internet, specially developing countries like ours truly urge to have it, sadly they don't know they need it" declared Furlán, and he declared "Problems such as starvation, health issues and lack of education can be corrected in a large measure using these technologies, but governments do not see it this ways as neither does the industry".

It is for that reason that RAGIE's executive direction keeps lobbying and participating in many important technological events in Guatemala.

Agenda

MARCH

14-16| Third International Congress on Supercomputing in Mexico (ISUM 2012)

Guanajuato, Mexico
http://datos.langebio.cinvestav.mx/~isum/index.php

28 | First Virtual Day of Culture

By Videoconference
http://www.redclara.net/indico/evento/diasdecultura1

20-22 | perfSONAR MDM deployment training

Berlin, Germany
https://www.terena.org/events/details.php?event_id=2221

22 | First Global Virtual Day "2012, end or substantial change of the world?"

By Videoconference
http://2012globalday.redclara.net/

25 -30 | 83rd IETF Meeting

Paris, France
http://www.ietf.org/meeting/upcoming.html

26-30 | EGI Community Forum 2012

Munich, Germany
http://cf2012.egi.eu/

APRIL

17 - 20 | EDUCON 2012 - IEEE Global Engineering Education Conference

Marrakech, Morocco
http://www.educon-conference.org/educon2012/index.htm

16-18 | CSEDU 2012 – 4th International Conference on Computer Supported Education

Porto, Portugal
http://www.csedu.org/

20-27 | Spring 2012 Internet2 Member Meeting

Virginia, United States
http://events.internet2.edu/2012/spring-mm/

MAY

9-11 | IST-Africa 2012 Conference & Exhibition

Tanzania, Africa
http://www.ist-africa.org/Conference2012/

21-24 | TERENA Networking Conference (TNC)

Reykjavík, Iceland
https://tnc2012.terena.org/

21 -23 | HealthGrid 2012 – Tenth HealthGrid Conference

Amsterdam, Netherlands
http://amsterdam2012.healthgrid.org/

21-25 | Networking 2012

Prague, Czech Republic
http://networking2012.cvut.cz/index.php?p=home

JUNE

17-21 | ISC'12 –Internacional Supercomputing Conference

Hamburg, Germany
http://www.isc-events.com/isc12/

20-22 | 18th EUNIS Congress: A 360° perspective on IT/IS in Higher Education

Vila Real, Portugal
http://www.eunis.pt/

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