

In Ecuador:

The academic heart of Cuenca hosted the 8th ALICE2-RedCLARA meeting



Now that's mobility!

ELCIRA fosters eduroam implementation in Latin America



RedCLARA virtual days:

Successful experiences of scientific collaboration in Latin America





December 2012 - n°33, year 8







This Project is funded by the European Union

European Commission
EuropeAid Cooperation Office
Directorate B2 - Latin America
@LIS Programme
Rue Joseph II, 54 J54 4/13
B-1049 Brussels
BELGIUM



A project implemented by RedCLARA

Press Contact:
María José López Pourailly
PR & Communications Manager - CLARA
maria-jose.lopez@redclara.net
(+56) 2 584 86 18, extension 504
Avenida del Parque 4680-A
Edifico Europa, oficina 505
Ciudad Empresarial
Huechuraba
Santiago
CHILE

«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

4	Editorial TCarlos Filippi, President of ARANDU Network, Paraguay
6	In Ecuador: The academic heart of Cuenca hosted the 8th ALICE2-RedCLARA meeting
12	Initiates regional change: Joint work for open access
14	Now that's mobility! ELCIRA fosters eduroam implementation in Latin America
15	Brook Schofield: "eduroam unleashes the power of campus based identity management systems"
18	Interview with José Luis Quiroz In eduroam, you are the only one who's missing!
20	RNP launched eduroam-Brazil
21	RedCLARA virtual days: Successful experiences of scientific collaboration in Latin America
23	CMM and REUNA implement the fastest Science and Education network in Chile
25	Advances and outcomes of the NREN in Mexico: CUDI autumn meeting 2012
28	400 ICT experts from universities and research centres participated in the RedIRIS Technical Meetings in Bilbao
29	UbuntuNet, the high-speed data network for research and education in Southern and Eastern Africa

Editorial



It was only 50 years ago that Peter Drucker told about his perception on the advent of a new era in human history, an era named the "Knowledge Society", in which information and communication technologies would radically transform economies, products, services, politics and society as a whole.

In this short period of time, we have had the accidental privilege of witnessing the greatest and most accelerated transformation ever known by the human race. A revolution with a new vocabulary featuring key words like: Science, Technology, Innovation, Education.

The changes we are undergoing are so deep that, regardless of our condition or activity, we are still trying to figure out the functioning and consequences of the new Knowledge Society.

Carlos Filippi,
President of the ARANDU Network,
Paraguay

What nobody argues anymore, however, is that traditional paradigms from the industrial era have stopped being suitable to properly plan our future or even to explain some of the emerging phenomena.

Thus, for instance, the construction of communication roads, crucial for the production and exchange of the goods which made the industrial model succeed, today must necessarily and peremptorily be adapted to the growth and expansion of computer networks, thanks to which the intangible products that are the most valuable goods in the new economy are developed, distributed and exchanged.

But these realities, which in the face of events today seem clear and evident, were not so over a decade ago when the Arandu network's project was born at the National Computing Centre of the Universidad Nacional de Asunción, choosing its name from the aboriginal language of Guaraní natives to mean "the network of wisdom": a high-capacity computer network to join universities and research centres, putting in contact members of the Paraguayan scientific community between themselves and with their peers across the globe.

The project was submitted and presented in various fields, aiming at getting the necessary resources to make it happen, but the idea seemed to be too innovative or even too difficult to understand for the untrained ear.

Years went by and Arandu had to wait until the moment when the unerring phrase by Victor Hugo

could be applied: "Nothing is more powerful than an idea whose time has come".

Undoubtedly, the experience of living in the Knowledge Society, with its phenomenal technological advances available to everyone, makes it easier to appreciate in its real dimension the importance of telematics networks.

Once its time had come, the Arandu Network was founded in 2011 under the name "Academic Network for Science, Education and Technology", with the involvement of four universities: the Universidad Nacional de Asunción, the Universidad Nacional del Este, the Universidad Católica and the Universidad Autónoma de Asunción; plus two strategic members, the Itaipu Technological Park and the Paraguayan Communications Company.

The purchase of Arandu's initial infrastructure was made possible thanks to the work done by Paraguay's National Council for Science and Technology, within the context of the Mercosur Digital project, an international cooperation initiative between the European Union and the MERCOSUR.

RedCLARA, which features Paraguay among its initial promoters, has provided priceless support in the process of designing and implementing this network, by contributing with technical knowledge and making it possible to capitalise on the experience of academic networks in neighbouring countries.

Even in its current state of adjustments and initial configurations, Arandu is showing its great potential, thus attracting the interest of the national and international scientific community, which has been materialised through participation in RedCLARA meetings; the creation of virtual research communities

on Computer Applied Mathematics, Mechanics and Energy and Telehealth; the support to the participation of Paraguayan scientists in research projects such as: the DAMIC experiment with the Fermilab Laboratory in Chicago – USA; the study on meteorological conditions according to the WORF model; the study on transport and sedimentation in rivers with La Ecole Centrale in Paris – France, and the participation in the experiment called "Compact Muon Solenoid" by the European Council for Nuclear Research, as part of the Large Hadron Collider project, built to search for the Higgs Boson.

International indicators place Paraguay under the recommended average in terms of investment on science and technology, thus reflecting what we have done, or stopped to do, in the past.

According to the 2012 Global Innovation Index, published by the World Organisation for Intellectual Property, Paraguay is in the sixth place in the rate of efficiency in technological innovation. That is to say, at a world level it is one of the countries which get the most results from the economical resources invested. This shows us what we can do in the future.

The Arandu network represents an open door towards the Knowledge Society.

We are determined to walk through it!



In Ecuador:

The academic heart of Cuenca hosted the 8th ALICE2-RedCLARA meeting

From November 12 to 16, in the city of Santa Ana de los Ríos de Cuenca –whose historical centre was declared World Heritage Site in 1999- the Ecuadorian Consortium for the Development of Advanced Internet, CEDIA, hosted the last meeting of the Latin America Interconnected with Europe 2 project (ALICE2).

María José López Pourailly

With the beautiful University of Cuenca as the venue, and the support of the CEDIA team, the meeting regarded as the last general meeting of the ALICE2 project members (a project that will be completed at the end of January 2013) was held during the second week in November 2012.

While the directors of the National Research and Education Networks (NREN) that are members of RedCLARA worked on the structure of the new strategic plan which will rule the institution, on November 12 and 13, the engineers from the same NRENs participated in the meeting of the

technical forum called CLARA-TEC, in order to analyse in depth the results of the work groups and to structure the new action plan for the coming period.

The important advances shown by the CLARA-TEC work groups (WG) were actually presented by the president of this forum, lara Machado, at the ALICE2 project meeting held on Thursday November 15, where it became one of the most praised and commented presentations. This is because the results of the technical groups deserve a big applause.



The history of the CLARA-TEC meetings began in November 2004, in Rio de Janeiro, when RedCLARA had its official premiere. Since then there have been 17 meetings, the last in Cuenca; each of these meetings has met the two main guidelines: to serve as a platform to plan and discuss actions for the development of RedCLARA – basically through GW-, and to provide technical training through tutorials, seminars and talks.

This version held at the University of Cuenca featured, as part of the activities that RNP and REUNA (NRENs from Brazil and Chile, respectively) are conducting in association with the research and development projects FIBRE (RNP) and Virtual Networks (REUNA), the organisation of the introductory course on networks based on OpenFlow software. The course was jointly organised by both NRENs and delivered by Leandro Bertholdo (professor from the Universidad Federal de Rio Grande do Sul, technical coordinator of the RNP's PoP in Rio Grande do Sul and in its Metropolitan Network and leader of the WG-OFM on Open Flow Mobility) and Albert Astudillo (network engineer at REUNA).

Provable results

What was it that the NRENs' directors praised so much during the presentation delivered by the Technical Commission's president? Obviously! The results of the Work Groups; each one is reviewed below.

Category: "Deployment of a new technology pilot":

WG-SCIFI – Intelligent control system for wireless networks

Objective: Development of an open platform for the centralised control of points of access.

Coordinator: Luiz Claudio Schara Magalhães, UFF, Universidad Federal Fluminense (RNP).

Result: Application ready to be used by universities.

WG-PIT VOIP – Point of Exchange of Voice over IP Traffic

Objective: To model and implement a point of exchange of VoIP traffic in RedCLARA, through the interconnection of the telephone networks of national networks.

Coordinator: Alex Galhano Robertson (RNP).

Result:

- · The PIT-VOIP system is installed and working.
- Strong incentive for the NRENs to actually crate their national services of telephone interconnection.
- · Incentive to install VoIP in their offices.
- · Dissemination activities.

Strategic Planning meeting.

WG - Measurements

Objective: Development of a monitoring infrastructure based on perfSONAR ((PERFormance Service Oriented Network monitoring Architecture).

Coordinator: José Augusto Suruagy Monteiro, UFPE - Universidade Federal de Pernambuco (RNP).

Results:

- The pilot is ready in RAAP, RAGIE, RAU, REUNA, RNP and CEDIA (the aim today is to get more people involved for the use of measurements)
- · Participation in PERT initiative

WG-CSIRT - Computer Security Incident Response Team

Objectives: To implement a monitoring infrastructure for RedCLARA, with sensors, which makes it possible to obtain data on malicious activity and thus generate security incidents notifications. To promote the response to security incidents in a prompt and coordinated manner. To create and disseminate best practices in security focused on academic environments.

Coordinator: Liliana Solha, RNP

Results:

- CEDIA is working on the deployment of its CSIRT
- Today the group is working to motivate other NRENs

Category: "Technological prospection / prototype development":

WG-OFM - Open Flow Mobility

Objective: To promote research and the development of a solution capable of offering mobility to users of a Wi-Fi network using technologies such as OpenFlow Wireless and IPv6.

Coordinator: Liane Margarida Rockenbach Tarouco/ Leandro Bertholdo, UFRGS -Universidade Federal do Rio Grande do Sul (RNP)

Result: Training on Open Flow

WG-DEIM-IPV6

Objectives: The coordination and implementation of activities – projects which enable the design, planning and, finally, the enabling and implementation of IPv6 in network segments of RedCLARA's services and applications, and of the NRENs that are part of it.

Coordinator: Azael Fernández Alcántara, UNAM – Universidad Nacional Autónoma de México (CUDI)

Result: Project is at a dissemination stage.

Category: "Development of new applications which promote networked collaboration":

WG – MCONF – Multconference system for web interoperable access and mobile devices

Objective: To make available a web conference system that is easy to use, to be integrated with mobile devices, through the creation of an Android application and the development of an integrated management system on the Web.

Coordinator: Valter Roesler, UFRGS - Universidade Federal do Rio Grande do Sul. RNP.

Results:

- · The application is ready to be used
- The coordinator made a proposal for the creation of a world collaborative network – its model of use and collaboration needs to be defined
- The academic network BELNET (Belgium) adopted the MCONF service

WG-IPTV

Objetive: To implement and produce an IPTV transmission platform in NRENs, which makes

it possible to offer multichannel IP-TV through RedCLARA with support for Multicast and IPv6.

Coordinator: Jaime Leonardo Martínez Rodríguez, Unicauca - Universidad del Cauca, **RENATA**

Results:

- · Application ready and tested needs to be disseminated and a model for use and collaboration between NRENs has to be created in order to create the channel
- · A training session for the NREN was organised - 103 people registered!
- · What remains to be done is the transfer towards RedCLARA and the creation of its IPTV channel

WG-Mobility

Objective: To apply mobile technologies and network middleware to provide itinerancy services in secure architectures in RedCLARA.

Coordinator: José Luis Quiroz Arroyo, INICTEL-UNI/RAAP

Results: (Note: learn more about the results of this group in the interview with José Luis Quiroz, published in the following pages of this edition of DeCLARA):

- · Deployment continued to be coordinated together with other NRENs
- RNP and RAAP are part of the eduroam global community
- · Working on the transfer to RedCLARA of the global service operation



In March 2013 RedCLARA's Technical Commission will open the new call to submit Work Groups for CLARA-TEC. Additionally, the group is revising its statutes in order to find a way to contribute more strongly to the development of RedCLARA and the NRENs across he region.

ALICE2

With the participation of the European Commission's project officer (DG Development and Cooperation – EuropeAid, B2 Unit Centralised Operations for Latin America), Elisabeth Hundhammer, the representative from Nicaragua, César Rodríguez, the representatives from CKLN (NREN from the Caribbean), Colleen Wint-Smith and Eriko Porto, and the institutional representatives of RedCLARA's and ALICE2's member NRENs, the project's last biannual face to face meeting was held on Thursday and Friday 15 and 16 November.

The meeting was preceded by a welcome cocktail party offered by ALICE2, where typical hats from Cuenca with the project's image were handed out; this was the opening of what turned out to be an evening full of smiles and merriment. In fact, we should say of happy memories, because memories were summoned by the slideshow prepared by RedCLARA's Communications team to summarise the history of ALICE2 from the project's onset to the meeting in Lima (July 2012).

The project's meeting confirmed what has it has shown since its beginnings: collaboration makes us infinitely stronger and ALICE2 and RedCLARA are the indisputable proof of this.



All the ALICE2 and CLARA-TEC presentations can be downloaded from:

http://www.redclara.net/indico/ evento/193

ALICE2



Initiates regional change:

Joint work for open access

Argentina's Minister of Science, Technology and Productive Innovation, Lino Barañao, endorsed the agreement to develop regional strategies on the subject of Institutional Repositories, as a first step in the deep change that Latin America and the Caribbean must face in the coordination of scientific and technological policies.

Ysabel Briceño, LAReferencia

The declarations were made at the meeting that brought nine countries in the region together in Buenos Aires in order to sign the agreement for the constitution of the Network called LAReferencia, with the aim of facilitating the visibility of the scientific production that has been produced with public funding, by developing strategies in the subject of Open Access and by applying a pilot experience which defines common policies and standards to share documentation in the sector.

Argentina's highest authority in scientific and technological management said that the agreement is a first step to recover the intellectual property of the countries in the region. "It is an event to be celebrated", highlighted Barañao while pointing out the challenges that this new road

entails. The agreement was signed by Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Venezuela and El Salvador.

The Latin American Federated Network of Scientific Documentation Repositories was officially constituted during the meeting. This initiative was funded by the Inter-American Development Bank (IADB), as part of the effort to consolidate the regional public asset. In this regard, the IADB representative in Argentina, Pablo Rondón, acknowledged the agreement signed as an important achievement.

Through this agreement, common strategies will be developed in order to build a Latin American collector of scientific production, which will initially incorporate the national nodes of the nine Latin American countries that are members of the LAReferencia Project, under the coordination of the Latin American Cooperation of Advanced Networks –RedCLARA. This way, the region joins the world effort to organise the joint work on Open Access.

Florencio Utreras, RedCLARA's executive director, highlighted the interest of this institution in promoting collaborative work in projects which favour scientific and technological development in the region. "We have developed a work based on trust and common objectives", he commented when talking about the advances generated across the region.



Argentina's government highlights signature of agreement for the development of LAReferencia project on access to information

On November 29, in Buenos Aires, Argentina, the scientific authorities from Brazil, Colombia, Mexico, Chile, Ecuador, Peru, Venezuela and El Salvador signed the creation of LAReferencia, a project for the development of a federated network of institutional repositories of scientific publications, aimed at storing, sharing and giving visibility to Latin America's scientific production.

Tania Altamirano López

The regional cooperation agreement was signed by the Minister of Science, Lino Barañao; the Brazilian ambassador in Argentina, Enio Cordeiro; the president of Venezuela's National Centre for Technological Innovation, José Sosa; the general secretary of Peru's National Council for Science, Technology and Innovation, José Ángel Valdivia; and Ecuador's undersecretary of Innovation and Technological Transfer, Mateo Villalba.

The presidents of Mexico's National Council for Science and Technology, Enrique Villa, of Chile's National Council for Scientific and Technological Research, José Miguel Aguilera; the deputy Minister of Science and Technology from El Salvador, Herlinda Handal; and the head of Colombia's Department for Science, Technology and Innovation, Carlos Fonseca Zárate, also sent their signatures.

The activity was highlighted on the website of Argentina's Ministry of Science, Technology and Productive Innovation, in the article called "Scientific authorities from Latin America sign historical agreement on access to information", featuring information which includes an image gallery and a video with comments by participants. Access this piece of news



here: http://www.mincyt.gov.ar/noticias/noticias_detalles.php?id_noticia=1219, and access the video here: http://www.youtube.com/watch?feature=player_embedded&v=sxCyfsVrWNU).

Likewise, the Public Communication Secretariat, highlighted the information on the press release called "Scientific authorities from Latin America sign agreement for access to information", also accompanied by an image gallery (check http://www.prensa.argentina.ar/2012/11/29/36450-autoridadescientificas-de-latinoamerica-firmanacuerdo-de-acceso-a-la-informacion.php).

Now that's mobility!

ELCIRA fosters eduroam implementation in Latin America





Launched in June 1, 2012, the Europe Latin America Collaborative e-Infrastructure for Research Activities, ELCIRA, among other actions it will devote its efforts to promote and deploy the eduroam service in those countries that within the region are connected to RedCLARA. This will revolutionize how we understand the academic and student mobility between campuses and research centres, because as the servie name implies eduroam is roaming for education, which means that anyone who belongs to an institution that has implemented eduroam, will not only have free wireless access to the Internet provided by his/her institution, but through it to every institution in the world that is providing the service... and they are many!

In the following pages we will analyze what is eduroam, which countries already have the service implemented and how it's original idea emerged, finally we will reveal its situation in Latin America, and all this information will come to you through the voice of Brook Schofield (TERENA, Australia / Netherlands) and José Luis Quiroz (INICTEL - RAAP, Peru).

María José López Pourailly

eduroam (education roaming) is the secure, world-wide roaming access service developed for the international research and education community. The service allows students, researchers and staff from participating institutions to obtain Internet connectivity across campus and when visiting other participating institutions by simply opening their laptop.

Lithuania, Luxembourg, Macau, Macedonia, Malta, Moldova, Montenegro, Morocco, The Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Romania, Russia, Serbia, Slovenia, Slovakia, South Africa, Spain, Sweden, Switzerland, Republic of China, Thailand, Turkey, United Kingdom, United States of America.

Where can you eduroam?

Andorra, Armenia, Australia, Austria, Azerbajan, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Kenya, Korea, Kyrgyzstan, Latvia,

For more information, please visit:

- ELCIRA: http://www.elcira.eu/
- eduroam: htp://www.eduroam.es/

Brook Schofield:

"eduroam unleashes the power of campus based identity management systems"

Within the Trans-European Research and Education Networking Association (TERENA), Brook Schofield is responsible for a porfolio of middleware activities that includes his participation as secretary for both the Task Forces on Mobility and Network Middleware and the one on European Middleware Coordination and Collaboration (EMC2); in the GN3 (GÉANT) Project he is the task leader for the eduGAIN interfederation service and member of the operational team for eduroam, activity pretty similar at the one that he carries at the ELCIRA project. In this interview we benefited from Brook's knowledge about eduroam in order to better understand why is this such a relevant service.

María José López Pourailly

Some people refers to you as eduroam's God father. Could you share with us your personal story with eduroam?

eduroam has had lots of parents in its lifetime and many more people will influence its development as it gets older.

I first heard about eduroam when I was working in the UK for a support group. It was there that I first met James Sankar who was working within the TERENA taskforce on Mobility (now Mobility and Network Middleware) and specifically encouraging deployment in the UK.

When I returned to Australia and had the opportunity to chair the eduroam Project Group coordinated by AARNet (the Australian Academic and Research Network) once again my path crossed with James' and along with a great bunch of committed individuals we increased the deployment and visibility of eduroam Down Under.

In September 2008 I met Klaas Wierenga the



Brook Schofield (left) works with César Quiroz from Perú.



The AARNET team.

chair of TF-Mobility at a conference in Melbourne, Australia. Klaas famously shared an idea on a mailing list – see: https://www.terena.org/mailarchives/mobility/msg00062.html - which became eduroam.

In May 2009 I joined TERENA and became the Secretary of TF-Mobility. My first TERENA conference allowed me to put faces to the names that have appeared on the mobility mailing list over the years and hear 1st hand the developments surrounding eduroam.

Since then I've been part of the Operational Team for eduroam and worked on boosting the number of deployments and quality of the service.

In brief, what is eduroam and who or whom is/ are its main beneficiaries?

eduroam is a secure wireless roaming service for research and education. What this means in practice is that once you've configured your device, whether it is a phone, a tablet or laptop, you'll automatically be connected to the wireless network of an eduroam participating site without the need to get a guest account or reconfigure your device. eduroam isn't a splash screen authentication system like hotels and cafés use so it is perfectly suited to small screen devices

and ensures that your authentication for network access is secure.

This has benefits for staff, students and researchers as they move around campus, around town or travel abroad. They'll have internet access without needing to do anything extra and without expensive roaming charges. eduroam is free at point of use for staff, students and researchers alike.

The IT Support staff also benefit because once a users devices is configured - it will continue to work on eduroam no matter where they travel. When visitor come to their site, IT don't have to issue guest accounts and they are safe in the knowledge that these visitors are from an eduroam participant organisation and haven't found a shared wireless key to gain access to / your/ network.

How many countries and NRENs have already implemented eduroam?

eduroam is growing all the time. In November we welcomed the 59th territory to eduroam (Chile).

This explosive growth over the past few years necessitated the creation of the formation of the Global eduroam Governance Committee (GeGC). TERENA has always been active in the governance of eduroam but the GeGC gave a voice to the continents that are actually doing the deployment. The GeGC started only representing Europe, Asia and North America but with its expansion in Latin America (now supported by the ELCIRA project) and in Africa those two continents were invited to provide representatives for the governance of eduroam.

eduroam is now 10 years old. Could you refer to the three most relevant eduroam's milestones during it's lifetime?

#1 - the initial concept

Klaas Wierenga shared an idea on a mailing

list https://www.terena.org/mail-archives/mobility/msg00062.html which became eduroam.

#2 - 10 years of growth (you can read the full story here: http://www.terena.org/news/3162/fullstory).

#3 - It hasn't happened yet.

eduroam continues to be exciting and there are many more locations we can expand to and improvements to be made that as a community there is still interest and developments that will continue to make the service relevant and easy to use for a wide range of users.

Which is the importance of having eduroam as part of the ELCIRA development objectives and why do the Latin American NRENs have to "seriously mess" (as eduroam promotional video says) with eduroam?

The ELCIRA project is proving an important catalyst for eduroam adoption and its deployment at the TICAL 2012 conference shows that the community is able to offer a high quality service rapidly.

The usage statistics from TICAL will help target specific NRENs and institutions so that even more people can take advantage of eduroam at TICAL 2013.

Latin American NRENs should mess with eduroam, seriously, because the research and education community need to be offered services that are relevant for the entire spectrum of the community. High speed internet links and access to research infrastructures are an important component of the business of an NREN, but eduroam unleashes the power of campus based identity management systems. It allows a campus account to offer services off campus, including around the world and in a great introduction in to federated services.

The investment in campus services is then further enhanced with federated web single sign on (WebSSO). So the initial investment in eduroam can be reused for a broader range of services.

In June you visit Peru, in September, Chile and in August RNP launched eduroam in Brazil. What is your personal perception of what is going on with eduroam in Latin America?

eduroam in Latin America is in great hands. We've found new parents to look after eduroam with José Luis Quiroz and Leandro Marcos de Oliveira Guimares and their commitment, passion and engagement with the community is exactly what is needed to ensure that as wide as possible an audience knows and implements this service.



Klaas Wierenga, who had the wonderful initial idea.

In eduroam, you are the only one who's missing!

In Latin America the implementation of eduroam is firmly moving forward, and one of the people who have promoted this service by putting all his faith in it, is José Luis Quiroz (INICEL and RAAP, Peru), the leader of RedCLARA's Technical Group for Mobility. In this conversation, we can understand why he is passionate about mobility and his strong commitment to the implementation of eduroam in the region.

María José López Pourailly



José Luis Quiroz working with Brook Schofield.

As leader of the WG for Mobility (2011-2012) and deputy coordinator of the eduroam WG (2009-2010), you have been working for quite a while in order to bring eduroam's benefits into Latin America, what made you set out on this journey and why do you think that establishing eduroam in our region is relevant?

It was at a CLARA-TEC meeting in Brazil that the creation of the WG for Mobility was proposed, and the work plan activities included eduroam. At that time the Coordinator was Johnny Laura, and I was the deputy Coordinator; it was what we could call an "introductory" period and few people dared follow us. When I took over the Coordination, I realised the job was not that simple... we had to "move things up", to create interest and to do so I had to be convinced of what I was doing and, I was! A great contribution in the beginnings was the enthusiasm of Eric López, from the Universidad de El Salvador, Javier Richard Quinto, from INICTEL-UNI, with whom we, together with José Manuel Macías, from RedIRIS, set out on the great adventure of eduroam in Latin America, this was a great motivation for me! Three countries struggling to get eduroam's pilot for Latin America; in order to make the group larger we created a discussion list which allowed us to incorporate friends from the other NRENs. I admit that at the beginning I added most technical representatives from the NRENs so they could at least see "what we were doing", and feel motivated by reading our comments on the list, which were many... and that had its desired effect!

When we got the validation of the RADIUS server confederated from LA towards the (ETLR) server in Europe, it was a great joy! We felt linked to Europe; it was April 20th, 2011, the beginning of community integration, the bridge had already been built...

The implementation of eduroam in Latin America is one of the key components of the ELCIRA

project; how do you evaluate the fact that ELCIRA included this component and how do you relate to this project from your position as leader of the WG within CLARA-TEC which is struggling for the implementation of eduroam in our region?

The inclusion of eduroam in ELCIRA is very pertinent, because it coincides with the initiative of the Mobility WG for the implementation and deployment of eduroam in the region. One of the objectives of the WG was the implementation and recognition of the RADIUS server confederated in LA; we accomplished the implementation, and recognition can be obtained with the help of ELCIRA.

Here ELCIRA comes into play, in order to strengthen the coordination with Europe, and between Europe and the NRENs. The initiatives of both the Mobility WG and ELCIRA have the same goal, the deployment and consolidation of eduroam in Latin America and what could be better that to do so together.

As the leader of the Mobility-WG I collaborate with RNP that leads ELCIRA's Work Package 4, which is devoted to this subject.

What is the current state of eduroam in Latin America?

Since April 2012 we have Brazil and Peru as Roaming Operators (RO) for eduroam; and recently at the 11th meeting of the GeCC (eduroam's Global Governance Committee) the eduroam Compliance Statement signed by Chile to become an RO was endorsed. This month, Chile became the 59th RO in the world.

I could affirm that the next candidates to become RO are Costa Rica, Uruguay and Argentina; countries that have satisfactorily completed the authentication configuration and testing of their Federated Servers (RADIUS Proxy Servers). Costa Rica has already begun deployment at national level, followed by El Salvador, which is undergoing a process of updating its servers; I'm

positive that it can easily join eduroam in the first months of 2013, since it already has experience with the configuration of its federated RADIUS server.

Ecuador is performing configuration tasks in order to get its federated server, and it is very likely that Colombia joins in early 2013. It would be a great way to begin the new year... by the end of 2013 we would have six (06) more countries.

Back in September this year, thanks to the coordination of RedIRIS, we exchanged emails with staff from the UNAN-León in Nicaragua so they could join eduroam. The training proposed was not carried out, but it is a good start, considering Nicaragua does not have an NREN.

I think we can begin with the "evangelisation" towards the countries that do not have an NREN; this way, all or most of them would be part of the future eduroam-LA.

If you were told that the immediate implementation of eduroam in all countries across the regions depends solely on your words, what would you say to the leaders from those countries in order to convince them of eduroam's implementation?

Well, it's not easy... to convince them I would begin by showing them the benefits of having eduroam, to have my eduroam 'showcase' for everyone to look at, and then I'd say: Not convinced yet? You are the only one who's missing!



José Luis Quiroz (INICTEL-RAAP), Brook Schofield (TERENA) and Leandro Guimarães (RNP).

RNP launched eduroam-Brazil

The wireless service will benefit more than 1 million users, allowing free access at any research and education institution in Brazil client of eduroam.

RNP

14 de agosto, durante el Foro de RNP, la red brasileña lanzó eduroam, el servicio de conexión inalámbrica que permitirá el acceso gratuito a Internet, en cualquier institución de educación e investigación de Brasil participante en el proyecto. RNP es la organización responsable de la gestión y explotación del servicio en el país, lo que beneficiará a más de un millón de usuarios en estas instituciones.

El lanzamiento se llevó a cabo en el Hotel Kubitschek Plaza, con la participación de Brook Schofield de TERENA (Trans Europea Research and Educación Network Association), José Luis Quiroz Arroyo de INICTEL (Instituto Nacional de Investigación y Capacitación de Telecomunicaciones), Luiz Claudio Schara Magalhaes de la UFF (Universidad Federal Fluminense) y Leandro Guimarães de RNP.

Revise esta nota in extenso en RNP: http://portal.rnp.br/web/rnp/noticias/-/rutelistaconteudo/RNP-lanca-eduroam-na-proxima-tercafeira-durante-o-Forum-RNP/686144_080B

Successful experiences of scientific collaboration in Latin America

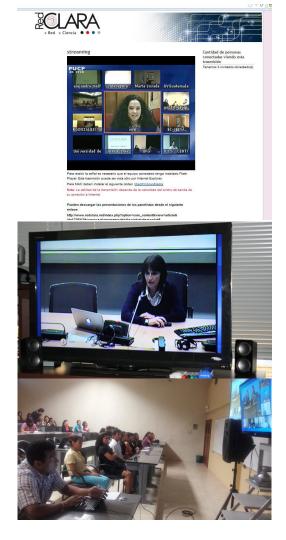
Videoconference rooms connected to advanced networks, participants invited in each of these rooms, virtual participants on the internet and renowned Latin American scientists and academics are the ingredients that come together every month to carry out the RedCLARA Virtual Days, an initiative which to date has addressed topics like culture, infrastructure, health and communication in light of the new role of technology in the world.

Tania Altamirano L.

"Virtual Days are an initiative undertaken from RedCLARA in order to bring researchers together so they can see the potential of academic networks", states Luis Núñez, RedCLARA's Academic Relations Manager, who has been responsible so far for putting these thematic and remote meetings together.

According to Núñez, during 2012 six Virtual Days were carried out, addressing various topics ranging from infrastructure to health and digital communication. These six meetings brought together more than 80 videoconference rooms, mostly in Latin America, and a few in Europe (France, Portugal, Italy and Spain), and featured the participation of more than 300 people through videoconference and another one hundred via streaming.

"The idea of virtual days is to incorporate researchers and, above all, to show other researchers the potential of the advanced network. Why an advanced network? Because actually, if we want to make innovations in our continent, if we want to create new information products, we need a platform which allows us to experiment, which allows us to develop new products over the high capacity and stability of a network like RedCLARA and its member networks throughout the continent", indicated Núñez.



According to Ariel Vercelli, Researcher from Argentina's National Council for Scientific and Technical Research (CONICET) and founder and president of Bienes Comunes S.A., who participated as panellist during the Virtual Day on e-Communication, the initiative is so valuable that more meetings have to be organised to discuss and analyse all these issues.

"To think and rethink public policies on communication and management of scientifictechnological knowledge in the digital era, an era with clear contradictions and paradoxes" is for Vercelli the main outcome of this joint deployment of ideas and experiences.

Reference material

After each Virtual Day, all people interested have the opportunity to consult and download free of charge the event's materials (presentations and videos of each speaker) through the links published on the website of each meeting.



Virtual Days carried out

Virtual Day on Culture: March 28

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

Virtual Day on -Infrastructure: May 8

http://www.redclara.net/indico/evento/ diase-infraestructura

Virtual Day on e-Health: September12

http://www.redclara.net/indico/evento/ diase-salud

Virtual Day on High-Energy Physics: October24

http://www.redclara.net/indico/evento/ DiaVirtualFisicaAltasEnergias

Virtual Day on e-Communication: November21

http://www.redclara.net/indico/evento/ DiaVirtualeComunicacion

Second Virtual Day on e-Culture: December05

http://www.redclara.net/indico/evento/ DiaVirtualEArteECultura

CMM and REUNA implement the fastest Science and Education network in Chile

Santiago, November 22^{nd,} 2012. With the presence of the Minister of Transport and Telecommunications, Pedro Pablo Errázuriz and the Undersecretary of Telecommunications, Jorge Atton Palma, the fastest network for science and education in the country began to operate. This scientific-technological landmark, led by the Mathematical Modelling Centre (CMM) of the Universidad de Chile and the National University Network (REUNA), is part of the project called National Laboratory of High Performance Computing.

Comunicaciones REUNA

Thanks to this joint effort, supported by CONICYT's Associative Research Programme (PIA in Spanish), the main university scientific centres in the country will have a platform for the collaborative development of science and education, enabled for the transmission and analysis in real time of data obtained from various areas of research, such as astronomy, genomics, mining, climate change, and monitoring of natural phenomena, among many others. The photonic network, which is part of the National Laboratory of High Performance Computing Project, will allow local scientific centres to exchange massive amounts of data and develop collaborative research, thus strengthening competitiveness and innovation in the country.

The Photonic Network –called this way because of its fully optical management of information which physically directs light beams of different colours between multiple points- features in its initial stage a capacity of 30 Gigabits per second, distributed in a high-speed digital motorway with a potential for reaching in an aggregated way up to 1.28 Tera-bits (1.28 milliom Megabits), which equals more than eighty-five thousand average home connections of the local offer (15 Megabits per second).



The project is implemented today in the Metropolitan Region, where 5 nodes have been installed and which are connected to the Universidad de Chile, the Pontificia Universidad Católica, the Universidad de Santiago and REUNA, which incorporates this infrastructure, through a central photonic node, into the national network, where other 16 university and astronomical centres participate.

One the connection is made, the centres associated to the NLPHC project will be able to get connected trough REUNA to the CMM's high performance computing cluster, one of the super computers with greater capacity in Latin America, aimed at meeting the local demand for the processing of scientific and industrial data, which is crucial to sustain the global competitiveness of research.

Minister Pedro Pablo Errázuriz highlighted this landmark as "a fundamental effort for society" and an exemplary display of how the transition between the academia, research and industry in increasingly faster.

"With the impressive progress of development and the information society, we realise that in many aspects we are not growing in a curve, but at leaps" - indicated the Minister, inviting the leaders of the NLHPC project to "continue running at full speed and incorporate many more actors into the race".

In this sense, REUNA's director, Paola Arellano, highlighted the fact that to be at the frontier of science it is crucial to have advanced connectivity which supports the transmission of massive data in real time: "Not having this platform means being left out and limiting local and international collaboration, and as a consequence, to halter innovation. In this new reality, the photonic network is one more step ahead to face the present and future challenges of Chilean researchers", she explained.

In the same way, the Director of the NLHPC Project, Eduardo Vera, emphasised that "the widespread deployment of networks of sensors connected through photonic networks to our supercomputing cluster will make it possible to transmit massive amounts of data to model highcomplexity phenomena in real time or near real time, with a big impact not only on research, but also on the operation of large-scale industrial processes".

The DWDM (Dense Wavelenght Division Multiplexing) technology, used for the construction of the Photonic Network, provides the high levels of connectivity required for scientific purposes. An example of the use of this technology for scientific purposes in Chile is the EVALSO Project (Enabling Virtual Access to Latin-American Southern Observatories), implemented by REUNA and the project's partners in the middle of the Atacama desert to connect astronomical observatories from northern Europe. This was the first experience in the use of this technology to strengthen the infrastructure of the national academic network.

The technological solutions used to implement the photonic network include the Ciena DWDM switches, represented in Chile by the Adexus company, and the photonic router developed by the NTT company, represented in Chile by the Micomo company.



Advances and outcomes of the NREN in Mexico:

CUDI autumn meeting 2012

This twenty-sixth half-yearly meeting further deepened the consolidation of the collaboration spirit between the 264 institutions which are part of the CUDI community, and featured the participation of academics, researchers, technicians and authorities from the institutions which take part in our community.

Martha Ávila, Comunicaciones CUDI

This new autumn meeting featured the participation of 332 people from 64 different educational and research institutions and companies interested in promoting projects which make use of the National Research and Education Network, NREN.

The first day featured a session devoted to disseminating the advances of the communities in the Applications Committee. What was highlighted was the importance of the National Research and Education Network (NREN) to promote the projects on human-computer, on the teaching of mathematics and engineering and on airspace issues. There were presentations on the use of distance electronic microscopes and their importance to take advantage of this infrastructure in a shared way. There were talks on astrophysics, and on how to make science basic for

children by using high-performance and also talks on community outreach on environmental issues. There were also comments on experiences with collaborative research in accountancy and there was also a presentation on how the NREN is an opportunity to face the challenges related to health problems, the application of ICT in the monitoring and supervision of earth sciences and to efficiently support the high-performance computing network through the grid project. We were very pleased to see that with the incorporation of CONACULTA into CUDI art-related projects will be initiated through the NREN.

In parallel to this, there were sessions of the Network Development committee, featuring presentations to inform students, researchers and network managers from Universities on CUDI's activities and technical-administrative

structure. These presentations were called: What is CUDI?, What is the CUDI NOC?, what is the CUDI VNOC? and What's new on IPv6? A remarkable aspect in these presentations was the interest of participants on the operation and connection to the RED NIBA (NIBA NETWORK).

We continued with presentations on the "City of Knowledge"; an overview on the educational transformation of the State of Sonora, and the application of Multicast in the programme, Ópera Oberta, with a videoconference directly from the Liceo theatre in Barcelona. The Universidad de Sonora presented a tool for the processing and search for topics on the internet through a semantic web.

To conclude this session, there were eight presentations with technological topics delivered by different manufacturers of technologies for systems, software and telecommunications: Silicon Graphics with Data Storage Techniques. Vidyo, CISCO, Life Size and EVOX with topics related to videoconferencing and cloud collaboration. CISCO dealt with the topic of unified access in university networks. Finally, IT Complements presented a software for applications at the National Council for Accountancy Harmonisation (CONAC).

Additionally, there members of the Digital Libraries group had a work session with the aim of reviewing and resuming the work done on the open Network of Digital Libraries (RABID) and the and the Mexican Network of Institutional Repositories (ReMeRi), among other projects. At the campus of the Universidad Autónoma de Chihuahua there was a presentation related to earth sciences to promote collaboration projects among students, professors and researchers from the UACH.

On the second day, the event was opened by M.A. Liliana Álvarez Loya, Secretary of the Government Accountability Office, on behalf of Mr. César Duarte Jáouez, Constitutional Governor of the State of Chihuahua. The event also featured the participation of relevant officials from different

state departments.

The Vice-Chancellor of the Universidad Autónoma de Chihuahua (UACH), M.C. Jesús Enrioue Seáñez Saenz, presented the Great Challenges of Information Technologies in Universities: The case of the Universidad Autónoma de Chihuahua. He said that the effective use of information technologies has enabled the UACH to place it in a leading position, with projects which include students academic management, a private social network, its 10Gb link to internet, virtual education as support for students in the mountains and language education through the web.

Mr Jorge Preciado, President of the Directing Council, presented the important advances accomplished in CUDI during the last six months. He highlighted the fact that 264 higher education and research institutions are part of CUDI's membership, the progress made in applications and the procedure to support universities to get connected to the NIBA Network.

The CUDI community thanks the committee coordinators, Ms Elizabeth Velázquez in Applications, Mr. Raúl Rivera in Network Development and Mr. Fabián Basabe in Membership, for their significant contributions and enthusiast participation.

Lourdes Velázquez Pastrana from the Computing and Information and Communication Technologies Department (UNAM) talked about the proposal of a project for the creation of a National Videoconference Network supported by the SEP-UNAM Trust. The advances will be disseminated on CUDI's website over the next few weeks. This project is a great opportunity to modernise CUDI's operations.

Ricardo Martínez Garza, on behalf of Mónica Aspe, Coordinator of the Information and Knowledge Society (SCT) presented the advances of the Urban NIBA Network to support the CUDI community. This project will be materialised in the following weeks.

Margarita Ontiveros presented the benefits of the National Consortium of Scientific and Technological Information (CONRICyT) for CUDI and she mentioned the important progress accomplished in the access to regular publications and the programme for next year.

Juan Segura, from National Geographic Learning-Cengage, talked about the challenges of educational innovation in an environment which evolves at great speed and which requires constant innovation.

Arturo García Torres, Director and Instructor of Innestec, talked about a University-Enterprise Innovation Model. The challenge of universities to address the problems of enterprises and governments through a strong relationship.

Carlos Casasús, General Director of CUDI, talked about CUDI's evolution perspectives.

The community expresses its gratitude to the Universidad Autónoma de Chihuahua for the important support for this event, to its Vice-Chancellor, Jesús Enrique Seáñez Sáenz, to Carlos Castañeda, to Armando González, and to its entire team of enthusiast young people from UACH, who supported us in assisting speakers, conducting interviews, registration, connectivity and videoconferences.

All the event's sessions were transmitted through videoconference and there were 320 people registered for the live transmission.

We want to express our gratitude to the Vidyo and Life Size companies, which supported us with their sponsorship.

We also thank the technical group from the Universidad Nacional Autónoma de México (UNAM) for the important support for transmissions and videoconference recording, and to the Universidad Autónoma de Ciudad Juárez for its support to have internet service available during the event.

We think that during these two days we had a very productive meeting. The presentations are available on the website of the CUDI Autumn Meeting 2012 (http://www.cudi.edu.mx/otono_2012). Over the next week, it will be possible to consult the presentations from CUDI's video collection. We would appreciate it if you could disseminate these materials among the communities in your institutions.

With the aim of enriching the organisation of future meetings, we would like you to complete the survey available on the Meeting's website, in order to learn about your comments and suggestions. Thanks a lot.



400 ICT experts from universities and research centres participated in the **RedIRIS Technical Meetings in Bilbao**

Sessions could be followed via streaming..

Comunicaciones RedIRIS

The Bizkaia Aretoa building of the University of the Basque Country in Bilbao hosted the 23rd RedIRIS Technical Meetings on November 28 and 29. This edition brought together 400 experts and network and computer service managers from RedIRIS' member institutions -mainly universities, research centres and autonomous networks- with the aim of exchange information and experiences.

The opening ceremony, held at 10:00 on November 28, was led by the Coordination vice-chancellor of the University of the Basque Country, Juan José Unzilla. The ceremony also featured the participation of the general deputy director of Scientific and Technological Infrastructure Planning of the Ministry of Economy and Competitiveness, José Doncel; the general director of Red.es, Borja Adsuara; the deputy minister of Universities and Research of the Basque Government, Pedro Luis Arias Erqueta: and the general director of Bilbao's Municipal Informatics Centre, Teresa Alba.

The opening conference was delivered by the director of DenokInn and coordinator of the Hiriko project, Carlos Fernández Isoird, who talked about integral innovation.

During the two days in which this meeting was held, there were various parallel sessions on different topics, including: intelligent spaces, outsourcing and integration of public and private clouds, IPv6 deployment, e-Administration, services for virtual communities and multigigabit networks, applications and services.

In the same way, the Bilbao Municipality actively participated in the 23rd RedIRIS Technical Meetings by becoming the first city in the state and the second in Europe to connect its local Wi-Fi to the eduroam global network, which will facilitate connectivity for students, professors and researchers from anywhere in the globe, under the same conditions they enjoy in their usual environment.

The closing ceremony was held on November 29 at 17:00 with the conference called "From stars to the Network", delivered from the Teide Observatory in Tenerife by the doctors in Astrophysics from the Canarias Astrophysics Institute, Alex Oscoz Abad and Alfred Rosemberg; after this, the director of RedIRIS, Tomás de Miguel, closed the event.

The RedIRIS Technical Meetings featured the collaboration of nineteen enterprises in the sector, of which we can highlight the special sponsors Alcatel-Lucent and Teltek, which participated in the meeting by delivering presentations in the technical sessions and showcasing their products in an exhibition area.

The meeting, as usual, was preceded by the RedIRIS Work Groups, which were held in the same venue on November 26 and 27.

About RedIRIS

RedIRIS is the advanced communication network of the Spanish academic and scientific community and was founded in 1988. It has over 450 academic and research institutions in its membership, which comprise over 150.000 researchers and nearly two million potential users. It is funded by the Ministry of Economy and Competitiveness and it is included in this Ministry's map of Singular Scientific Technological Facilities. Its management is led by the public-entrepreneurial entity Red.es of the Ministry of Industry, Energy and Tourism.

For more information, visit

http://www.red.es & http://www.rediris.es and/or contact difusion@rediris.es

UbuntuNet, the high-speed data network for research and education in Southern and Eastern Africa

UbuntuNet, the high-speed data network for research and education in Southern and Eastern Africa.

GÉANT

Lisbon, Portugal, 28 November 2012: DANTE, the operator of GÉANT, the pan-European research and education network; and UbuntuNet Alliance, the regional research and education network for Southern and Eastern Africa, announced the launch of the UbuntuNet network, a high-speed Internet network connecting scientists and academics throughout Southern and Eastern Africa to peers in the region and to Europe, the first network of its kind in Africa.

UbuntuNet was launched in Europe at the 2012 Africa-EU Cooperation Forum on ICT (November 28-29, 2012), organised by EuroAfrica-P8 at the Centro Cultural de Belém (CCB) in Lisbon, Portugal. This followed a similar launch event in Africa held in Dar es Salaam at the UbuntuNet-Connect 2012, which featured dancing, drumming, speeches and a launch video featuring the types of advanced research that the network will facilitate. The video, which was also shown in Lisbon, is available at http://www.africaconnect.eu/MediaCentre/Pages/Launch-Event-Video.aspx

The initiative is being financed under the AfricaConnect project, which is co-funded by the European Commission and beneficiary countries. The network will dramatically accelerate the development of the Information Society in Africa, providing advanced data communications infrastructure and enabling African researchers to collaborate more easily in advanced international research projects.



The Honourable Eunice Kazembe, Malawi's Minister of Education, Science and Technology said of the new network, "With the opportunities offered by the AfricaConnect project, this unique regional network will transform our higher education and research, with collaboration being at its core. Access to higher education will be expanded. Participation in high level scientific projects and teams will be so much easier. Medical research and healthcare delivery will be enhanced."

AfricaConnect expands the existing network managed by the UbuntuNet Alliance, which initially connected Kenya, South Africa, Sudan, Tanzania and Zambia to Europe. The network has now been extended to offer connectivity to many more countries in the Southern and Eastern African region. This expanded, more resilient and secure high-speed network offers greater connectivity between African countries, as well as high-speed links to the pan-European GÉANT network, providing access to 40 million users in 8,000 institutions. GÉANT is cofunded by the Directorate General CONNECT (Communications, Networks, Contents and Technology) of the European Commission under the EU's 7th Research and Development Framework Programme.

"We are delighted to see the UbuntuNet network in place," said Cathrin Stöver, DANTE's Chief International Relations and Communication Officer. "DANTE continues to develop connectivity in regions around the world, and we have built on our experience to support research and education networks as together they transform the research environment in Africa. We are fortunate to be working with the UbuntuNet Alliance, the African and European NRENs on this important initiative."

Read the complete article at:: http://www.geant. net/Media Centre/News/Pages/New-high-speedinternet-for-African-research-cooperationunveiled.aspx

Para obtener más información, visite:

www.dante.net www.africaconnect.eu www.ubuntunet.net

Agenda 2013

JANUARY

13-18 | APAN 35 conference and the Winter 2013 ESCC/ Internet2 Joint Techs meeting

Honolulu, Hawaii, United States http://events.internet2.edu/2013/tip/

17-19 | RoEduNet 11th International Conference: Networking in Education and Research

Sinaia, Romania http://conference.roedu.net/index.php/roedunet2012/ roedunet11

FEBRUARY

2-3 | FOSDEM

Brussels, Belgium https://fosdem.org/2013/

19 - 01 March | APRICOT 2013

Singapore

http://www.apricot2013.net/

27-28 | Cloudscape V

Brussels, Belgium

http://www.cloudscapeseries.eu/Pages/Home.aspx

MARZO

10-15 | 86th IETF Meeting

Orlando, Florida, United States http://www.ietf.org/meeting/upcoming.html

17 – 23 | International Symposium on Grids & Clouds (ISGC) 2013

Taipei, China

http://indico3.twgrid.org/indico/conferenceDisplay.py?confld=357











The contents of this publication are the sole responsibility of CLARA and can in no way be taken to reflect the views of the European Union.

The Editor wishes to make it clear that the statements made or opinions expressed in this publication are the sole responsibility of the contributors and cannot be taken to ref lect the views of CLARA