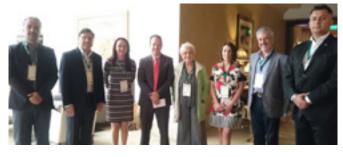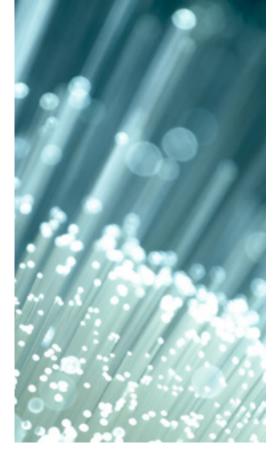# DeCLARA

Bulletin

Year 13

Pura vida! The 7th edition of TICAL successfully concluded at Costa Rica

Luis Eliécer Cadenas, new Executive Director of RedCLARA: "We want to create a synthesis of the academic and corporate worlds to strengthen CLARA"

Florencio Utreras, Executive Director of RedCLARA between January 2005 and June 2017: "What defines our essence is to collaborate"

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August 2017

RedCLARA:

A clear path for your data

We empower your research and developments

Contents

Editorial

Paola Arellano Toro

Executive Director of REUNA, she was the Interim Director of RedCLARA during July 2017.

The 7th version of TICAL was carried out this 2017. About 2,000 people have shared, devised and reinvented this space for discussion and creation, increasingly tying the fabric of relationships in our beloved region.

It seems incredible that for those of us who work in the communications or telecommunications world, it is so difficult to communicate with our communities. This is a persistent diagnosis between the IT and the academic areas, but … What happens? Do we speak a different language? Do we understand their needs and their priorities? Do they understand ours? Do they inform us about the challenges they have and how can we work together to address them?

To face it, TICAL, which started as a space for Information Technology Directors, has formalized, thanks to the BELLA project, the invitation to unite the world of science, through the Latin American e-Science Meeting, establishing a place for reflection on the complex scenario of the higher education and research before the rapid digital transformation of many of its processes.

In this convulsive and fertile scenario, the young CLARA begins to mature, not without the pain and fear of seeing one of her founding fathers going away; Florencio Utreras, co-creator, promoter and director of this institution for more than 15 years.

Just in July we remembered the signing of the Agreement of Toledo that gave life to this dream of several visionaries of the region, Florencio among them, that with integrity, conviction and a hard work have given shape to an increasingly beautiful CLARA

Changes are always processes that have a degree of pain, but are full of hopes and opportunities; they are like the fresh breeze, that awakens you, then you remember that you are responsible for what you have created. You, more than anyone else, cannot let dreams be destroyed and disappear; you have to look forward generously, responsibly and work so that, in this new phase in which CLARA enters, the Corporation counts on the commitment of its partners to build a common vision that makes us all work for it.

I would like to express my deepest and sincere commitment to the new Executive Director, Luis Eliécer Cadenas, the RedCLARA team and the Networks of the region to build this new vision with you, and uniting our forces, bring CLARA to its maturity and consolidation.
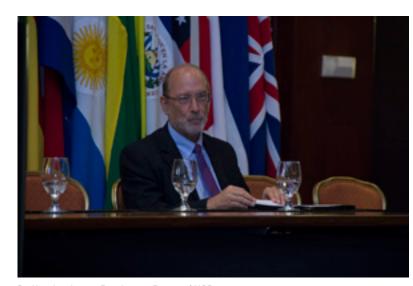
The 7ᵗʰ edition of TICAL successfully concluded at Costa Rica

The event, which is the only one driven to its public in the region, was held between July 3 and 5, at the facilities of the Hotel InterContinental in San José, Costa Rica, bringing together more than 300 participants from different parts of Latin America, North America and Europe.

Luiz Alberto Rasseli

The TICAL2017 Conference, held in conjunction with the first edition of the Latin American e-Science Meeting and the ION Conference, organized by the Internet Society, included 54 papers presentations, business presentations, discussion tables, workshops and key presentations of the about the current moment and the trends of ICT in the institutions of higher education of the region; there were three intense days of "pure life", science and technology.

In the opinion of Mariano Bontempo, Executive Director of TICAL2017's host network, RedCONARE, all the effort made to held the event was worth. "We started working to bring TICAL to our country soon after TICAL 2016, in Argentina. I can say that everything was worth. The event has been successful for everyone.

It strikes me to see how TICAL enhances collaboration. I have approached many other directors and representatives of national networks and I see good possibilities for new joint developments. In our region, no other conference does this as TICAL. RedCONARE was specifically benefited from these three days."

During its first day, TICALgave great moments to its assistants. With the participation of approximately 300 attendees from the different Latin American countries, the event started in the morning with the opening of its Business Fair. The ION Costa Rica Conference began simultaneously, bringing together network engineers and industry leaders in a half-day program to cover topics such as IPv6, DNSSEC, Securing BGP and TLS for Applications. In charge of the discussions were experts like Kevin Meynell, Fred Baker and Guillermo Cicileo, of Internet Society and LACNIC.

For Christian O'Flaherty, ISOC's director of development for Latin America and the Caribbean, the event allowed network operators to go ahead of the curve in order to understand and implement emerging Internet technologies. "ION presented a unique opportunity to discuss the future of the Internet with people who help to create it. More than a simple series of lectures, it provided hands-on interaction with our panelists, so attendees got the answers they were looking after to implement new standards and technologies in their own networks", he said.

The opening ceremony, which marked the official opening of TICAL, was held in the afternoon and was attended by various authorities from the ICT universe of the region. The session was chaired by the president of the Board of Directors of RedCLARA, Carlos Casasús, the TICAL General Coordinator, Carmen Gloria Labbé, the Rector of the University of Costa Rica, Henning Jensen, the Minister of Science, Technology and Telecommunications of Costa Rica, Carolina Vásquez Soto, representatives of CONARE and the recently elected new director of the regional network, the Venezuelan, Luis Eliécer Cadenas Marín. Through videoconference, the former director of RedCLARA, Florencio Utreras, also participated at the session, talking about his experience in the network over the last years and wishing success to the new director.

The keynote speech was given by Dr. Henning Jensen Pennington, who stressed the importance of incorporating ICT in universities and that these should become a transversal axis in all areas of knowledge and university work. "The technology is one of the most urgent issues to be discussed in our universities. I think they are not the end, but one of the most powerful means we have to achieve higher goals", said the Rector, who also told what actions is UCR developing to promote the use of ICT, such as the Computer Committee in which he participates.

Christian O'Flaherty, ISOC's director of development for Latin America and the Caribbean

Encounter of Generations

The second day of activities at the Conference was marked by good discussions had by the Rectors of important universities of the region on the use of ICT in the academic work, as well as the development of young people using these technologies in favor of their campus.

The Rectors Discussion Table, moderated by David Julien, Executive General Secretary of the Inter-American University Organization (OUI), brought together leaders of some Latin American universities to discuss how to promote the use of ICT with new generations of students. "The idea is

Dr. Henning Jensen Pennington, Rector of UCR.

Rectors Table

to create a bridge between experts and rectors to discuss a bit about how big data, for example, impacts university management, teaching and research", explained the Secretary.

But whoever thinks that only the most experienced are discussing the future of technology is being fooled. As in previous years, TICAL opened space for young innovators to contribute with their ideas for the development of ICT in the region.

Selected among 11 young people who applied for TICAL, Andrés Massigoge, from the University of Buenos Aires, Yolanda Aucapiña, from the University of Cuenca (Ecuador) and Manuel Alberto Luna, from the University of Guadalajara (Mexico) presented their developments to an attentive public in the second plenary session of the day, receiving compliments from those who were present. "Seeing these young people presenting their papers with such confidence is truly inspiring. They point to the future and are

the future of our networks", said Eduardo Grizendi, Director of Engineering and Operations at the Brazilian advanced network, RNP.

The event also included the launch of the second edition of the book "Empowering the University of the XXI Century: ICT solutions to think about the universities of the future", organized by Ernesto Chinkes, General ICT Coordinator of the University of Buenos Aires and Honorary President of TICAL. Printed versions of the publication were distributed to the attendees and a digital version is already available at RedCLARA's and TICAL's websites.

The six workshops scheduled for this edition of TICAL were also Conference's highlights, where subjects were taught in topics such as the use of the Colaboratorio platform, IPv6, Development Methodologies and the role of the manager in projects managed through Scrum. The workshops were attended by more than 100 people.

For Juan Pablo Carballo, Executive Director of Ecuador's national academic network, the worskhop and TICAL2017 as a whole were "formidable": "From the technical point of view, it's been the best edition I've ever been to. The technical talks were very interesting and all the ICT directors I talked to are very happy." Carballo's opinion is shared by the new Executive Director of RedCLARA, Luis Eliécer Cadenas Marín. Participating for the first time in the Conference, Cadenas Marín also highlighted the e-Science track as fundamental for the success of the event. "I think the e-Science meeting allowed us to better understand the needs and work of the scientific communities. It's a very important approach", he said. A full analysis of the e-Science Meeting can be found within the next pages.

The Conference had live transmission of its main sessions, records that are available on the Conference website (http://tical2017.redclara.net), as well as the presentations of the parallel sessions, photos of the event and many other information on what was TICAL2017.

The seventh edition of TICAL is organized by RedCLARA, RedCONARE and CONARE, under the sponsorship of Microsoft, Google, LACNIC, Internet Society Latin America and the Caribbean, Padtec S/A, Alcatel-Lucent Enterprise Latam, Ruckus Wireless, Brocade, Nokia, Level3, Telefonica, OnBase by Hiland, Grupo Binário/Coriant, Grammata Educación, Ufinet, Cisco and Consultoría Organizacional.

For more information on TICAL2017 and its program, please visit http://tical2017.redclara.net

Juan Pablo Carvallo, Executive Director of RedCEDIA, Ecuador.

TICAL2017:

http://tical2017.redclara.net/index.php

ION Costa Rica:

http://www.internetsociety.org/deploy360/ion/costarica2017/

Latin American e-Science Meeting:

https://eventos.redclara.net/indico/event/788/

ICT in research

Results of the 1st Latin American e-Science Meeting

For the first time since its inception TICAL has shared its program and headquarters with another event: the 1st Latin American e-Science Meeting, organized by the BELLA-T Project. The initiative sought to offer a new space for the exchange of knowledge and good practices in the use of Information and Communication Technologies (ICT) in research work, aiming to contribute to the improvement and optimization of the management and work of the scientific communities in the region.

Luiz Alberto Rasseli

It was with this objective that the Meeting had an open call for Latin American researchers to present papers exposing their experiences in the development of collaborative initiatives involving the use of ICTs in the areas of Biodiversity, eHealth, Environment, Astronomy, Networked Art andCulture, and High Energy Physics. The call was successful and paved the way for the development of the event that took place between July 3 and 5, in San José, Costa Rica.

"We got 93 proposals from 14 countries, and we chose 18 works. During the sessions, the discussion spaces were fruitful and we are now working on the outcome of those interactions. The groups proposed carrying out informative days, systematizing experiences and a discussion that we are planning for November. In addition, in the evaluations of the conference the responses reflected the perception of the activity where rated 51% as Excellent, 30% as Very good and 9% as good", says Tania Altamirano, General Coordinator of Communities of RedCLARA and one of the organizers of the event.

For Altamirano, the meeting met the expected objective, allowing the interaction of scientists from the selected areas with their peers and with researchers of other areas. "That is one of the most important results, because it allowed us to identify

transversal lines of work for future activities", she said.

A good example of such interaction is the creation of new communities such as "eScience + eArts". "It is a multidisciplinary and transnational group that is already working and has very promising initiatives", says Delma Rodriguez, representative of Anilla Cultural Latin America-Europe in Uruguay, who presented "Red Amigos del CERN Latinoamérica y El Caribe". For her, having the e-Science Meeting in parallel with TICAL2017 was very clever. "My participation is already generating a lot of synergies. In particular, the proposal I presented constituted an important legitimation, along with the opening to new and wide horizons for the network of friends, with the aim of scientific dissemination and specially in particle physics", she explains.

A second edition of the Meeting is not ruled out, but according to Tania Altamirano, the idea now is to continue with the activities planned by the groups. "Of course there could be a next edition, but we are currently focused in strengthening the presented initiatives."

For more information and to download all the presentations of the 1st Latin American e-Science Meeting visit https://eventos.redclara.net/indico/event/788/.

The BELLA (Building Europe Link to Latin America) project aims to achieve a significant long-term improvement of the network in South America - RedCLARA -, allowing the national networks of Latin America and the research groups that integrate them, direct and high speed access to the capacities offered by the submarine cable that will be installed between Europe and the region.

Synergy between sectors:

The important business contribution

An event such as TICAL, as well as the entire ICT universe, is built not only by researchers and directors, but also by other important actors who play key roles in the development of science, research and collaboration around the world. The companies of the sector are one of them. And as in previous years, in TICAL2017 they had an outstanding participation at the commercial fair, which, combined with the demonstration sessions of products and presentations, allowed not only to bring their offer to the target audience, but to know in firsthand the needs of higher education institutions in the region.

Luiz Alberto Rasseli

In its Costa Rican version, TICAL has been supported by Microsoft, Google, LACNIC, Internet Society Latin America and the Caribbean, Padtec S/A, Alcatel-Lucent Enterprise Latam, Brocade/Ruckus, Nokia, Level3, Telefonica, OnBase by Hyland, Grupo Binário/Coriant, Grammata Educación, Ufinet, Cisco and Consultoría Organizacional, who were able to present their products and services in the stands of the Fair or in talks during the event.

"It is very timely to be exchanging ideas with technology decision makers in higher education institutions in Latin America in an event like TICAL. Digital transformation is happening in all countries of the region and HEIs must be at the forefront not only of changes in technologies and products but also in the role of ICT managers today and throughout this process", said Hyland Industry Manager, Valerie Drews.

For Carmen Gloria Labbé, General Coordinator of TICAL, the support of the organizations was fundamental for the success of the seventh edition of the Conference. "Without the involvement of the companies, TICAL would not be such an enriching experience. We were able to see by the Fair and the presentations, which were very interesting. We hope that from this presence concrete projects of collaboration between companies and universities will emerge to promote research and teaching in the region". According to the Executive, the idea is to work for the alliance between TICAL and its sponsors to expand: "We want to go beyond the Conference, so that everyone benefits before, during and after TICAL. We are working on this project.".

Youth Innovating to Improve their Universities:

"Many see a problem and just do nothing; we saw the problem and thought how to solve it"

In any area, the emergence of innovative ideas is what "moves the wheel", promoting the development of sectors, attracting investment and benefiting society. ICT are not different. The innovation in technologies extend the possibilities of the academic work, from the development of the research and the individual study, to the possibilities of collaboration. That is why TICAL opened a space for the presentation of outstanding initiatives of young innovators seeking to improve their universities. Now, the three winners tell us the value that had for them to be part of the Conference and share some of their future steps.

Luiz Alberto Rasseli

Yolanda Aucapiña, University of Cuenca

Hi Yolanda! Tell us a little about yourself and about the project you presented in TICAL.

Hello! I am Ecuadorian, student of the University of Cuenca - Faculty of Engineering - Systems Engineering. The project presented at the TICAL conference is a Semantic University search engine that aims to integrate the various sources of data existing in a university. For this it is proposed to develop an ontological model that describes the various areas existing at the university domain, then, with the application of mapping rules, a RDF (Resouce Description Framework) is generated to integrate the data.

Having the data integrated in a single model allows the queries to be performed in a simple and fast way, and, due to the process of data cleaning, ensures that the results obtained are correct since it eliminates the inconsistencies that usually exist in the databases.

Was your conference experience positive?

Yes. For me, presenting the project was a test of acceptance of it, and I noticed that several of the attendees showed interest as they came to ask me questions on the subject, which was very satisfactory. In addition, the questions asked by the members of the board of directors helped to consider aspects that should be well defined within the project.

What will be the next steps in relation to the initiative you presented in TICAL?

The Semantic University search engine is under development and it has been considered as a case of initial use to the University of Cuenca. We are currently working on the ontological model, corresponding to the organizational and academic structure of the university. In this first stage it is proposed to obtain as a result a prototype of the semantic search engine for data related to the aforementioned areas.

In future stages, an ontological modeling process can be performed for the areas that have not yet been considered, as well as the integration of the obtained model to the general ontology.

Would you recommend other young people in your situation to participate in future editions of TICAL?

Of course, I recommend it, and moreover, I invite them to send their proposals to future editions of TICAL, since it is a great opportunity to share ideas and show that young people can contribute to improve our universities.

Manuel Alberto Luna Alcalá, University of Guadalajara

Hello Manuel! Tell us a little about yourself and about the project you presented in TICAL.

I am a student of the 8th semester of Engineering in Electronics and Computing at the Campus "CUNorte" of the University of Guadalajara. My project is to create a mobile application to carry out school procedures and to consult the academic information, all at any time. The main benefit or expected result is to create a mobile portal that will help the entire university community, also benefiting the administrative areas, streamlining the processes and improving the services that are conducted in the school center areas.

Was your conference experience positive?

Yes! I was able to know the projects that are carried out in other Latin American universities, not only carried out by ICT managers, but also by young people like me. It broadened my vision for the creation of IT projects to improve education as well as the experience of students in their universities.

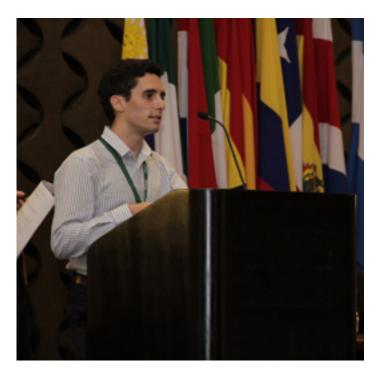**What will be the next steps in relation to the initiative you presented in TICAL?**

There were several contributions to strengthen the project, there is interest from my institution and other institutions that see the project as something that will benefit the university community. What started as an idea, will become something real thanks to the support and interest of my institution. We hope to create a prototype to later introduce and implement a trial period.

Would you recommend other young people in your situation to participate in future editions of TICAL?

Of course, it is a great experience for a young man to present his ideas to people who are experts in the subject, who can help you to grow the idea and share experiences. It enriches you to participate in an event like TICAL, in which several institutions of Latin America participate. Many see a problem and just do nothing, we saw the problem and we thought how to solve it. We need digital universities; institutions do their jobs, but students must also contribute to building them in the best way.

Andrés Massigoge, University of Buenos Aires

Hello Andres! Tell us a little about yourself and the project presented in TICAL.

Hello! I am from Argentina, and I am finishing the degrees in Information Systems and Administration at the University of Buenos Aires (UBA). In my faculty we are thirty thousand students with more than a thousand courses to choose and we inform precariously about them among us. I always knew I wanted to do something to improve our enrollment, so when I saw how companies were implementing its automatic referral systems, I started to work. The project is about recommending to the students the future teachers that best match their learning styles, inferred from the evidence that has emerged from the obligatory end-of-course surveys.

Was your conference experience positive?

I took advantage of the Conference in many ways. I was able to see how people are innovating in other universities, such as UDELAR in Uruguay, I had conversations with undergraduate and graduate students from Costa Rica, and students and teachers from other Latin American countries, as well as with representatives of companies, who made me see everything that can happen in a university. I see the importance of an annual meeting to spread both the innovative spirit and the technical part. I left TICAL with more desire of improving my university!

What will be the next steps in relation to the initiative you presented in TICAL?

A proposal to modify the surveys that the students fill about teachers will be submitted to the Board of Directors, in order to create the profiles of the students who will be users of the system.

Would you recommend other young people in your situation to participate in future editions of TICAL?

Yes, of course! I liked it from the beginning: sending a project to a call is an experience that, if done for the first time, is transformative; so the first thing to do is to encourage and grow in the process.

About the trip: I had never traveled by plane and, of course, I did not know Central America; then, in addition to what I lived in TICAL, I was encouraged to go on my own to know the cultures and idiosyncrasies of Costa Rica, Nicaragua and Panama, which to my surprise turned out to be totally different worlds! I hope many more students can access an experience TICAL, to discover everything that is being done and everything there is to do, and to meet beautiful countries and wonderful people.

Luis Eliécer Cadenas in the Executive Directorate of RedCLARA

Borned in Venezuela and with a vast experience in academic networks and the Latin American ICT scene, the nomination of Luis Eliécer Cadenas as the new Executive Director of RedCLARA was announced during the opening of the TICAL2017 Conference in San Jose, Costa Rica, at the beginning of last June. The executive began his duties in the advanced Latin American network on August 1st.

María José López Pourailly

Computer engineer with postgraduate studies in economics, telematics, networking and computer science, with almost 30 years of experience in information technologies and telecommunications field both in the private and public domains, in his professional career the Venezuelan Luis Eliécer Cadenas has sought to be an agent of change, growth and development of people and organizations through information and communication technologies. In this line, his role as co-founder, President and member of the Board of Directors of the National Academic Network of Venezuela, REACCIUN, in which he had a central participation between 1996 and 2000 was fundamental. As President of REACCIUN, Cadenas sought to align the organization, infrastructure and resources to the needs of the universities and research and academics centers of his country, achieving the development of the first national physical network (financed with funds from the Inter-American Development Bank), connecting 17 public universities, increasing the availability of bandwidth for the scientific and academic communitties and making it a stable and reliable service.

In the same line of motivation and personal development, Cadenas was President of the Latin American Research Network Association (Enredo 1998-1999), member of the board of the National Supercomputing Center of Venezuela (Cecalcula, 1997-1999) and of the Technological Park of Sartenejas (1997-1999). When he decided to move to the private sector, he stayed related to the academic spectrum while leading the strategy for Cisco's Academic Network Program (2000-2006), then, motivated by adding new knowledge to his expertise, Cadenas moved within Cisco to the commercial arena, serving as Account Manager for the public sector of Venezuela (2006-2009), then for service providers (2009-2013), until 2014 when he moved with his family to Guatemala to lead the business strategy of the company with America Movil in Central America. Until becoming CEO of RedCLARA on August 1, 2017, Luis Eliécer Cadenas held the position of Account Manager for Claro Central in Cisco.

"RedCLARA has developed several projects that have positively impacted its members and communities. The deployment of optic fiber, increasing speeds and reducing operating costs of the infrastructure, the creation of services and tools such as Colaboratorio, the TICAL Conference and the successful management of several projects funded by the European Commission are very clear examples of this" , states showing his appreciation for the history of the network and the work carried out by his predecessor, Florencio Utreras, and by the team he leads.

But what is the vision of Cadenas regarding the future of our advanced network? "RedCLARA must play a leading role: by guiding and helping to create the conditions for more solid Academic Networks, contributing to the design of public policies that support them, increasing and expanding the sources of income, catalyzing regional projects to help increase the use and relevance of the Academic Networks and RedCLARA itself, and evangelizing its own community to build the bases of researchers who take advantage of these networks existence. In this way, increasing the relevance of RedCLARA for Academic Networks and their countries, RedCLARA sows the seeds of its sustainability and development."

With regard to the route that Cadenas will follow during the beginning of its mandate, he recently presented to the Board of Directors a strategy based on trends and environmental variables, structured into four main lines of action: improving finances, increasing the relevance and evolution of the infrastructure, increasing the use of data. These will be the strength lines of the first months of its management.

Motivated by promoting the creation of an appropriate environment to foster innovation and social appropriation of scientific knowledge, the incoming Executive Director will seek to increase open access to the resources of the scientific community, favoring the support to the Academic Networks to

From left to right: Juan Pablo Carvallo, RedCEDIA Executive Director, Ecuador, José Palacios, President of REUNA's Board of Directors, Chile, Eliana Marcela Alonso, RedCLARA's network engineer for the BELLA-T Project, Luis Eliécer Cadenas, Executive Director of RedCLARA, Ida Holz, honorary member of RedCLARA's Board, Uruguay, Paola Arellano, Executive Director of REUNA, Chile, Eduardo Grizendi, Director of Engineering and Operations at RNP, Brazil, and Leonardo Rodríguez, Executive Director of RENATA, Colombia (Photograph: RedCEDIA)..

achieve their mission by fostering the growth of the research community that uses the infrastructure, to train and educate the scientific communities in the use of the resources of the Academic Networks and RedCLARA, promoting and coordinating regional research projects that use the services of RedCLARA and its partner networks; and increasing the dialogue with the research communities. All this, of course, on a state-of-the-art technology infrastructure, with maximum capabilities, stable and reliable.

The challenges that Cadenas will face are big and complex, but at RedCLARA this has never been a barrier. During these days, the

Executive Director met with his work team, members of the Board of Directors and representatives of the academic networks that are part of RedCLARA as well as of those institutions with which the regional network carries out joint initiatives in order to start the actions that will lead to the achievement of these goals

Luis Eliécer Cadenas, new Executive Director of RedCLARA:

"We want to create a synthesis of the academic and corporate worlds to strengthen CLARA"

Let's do an imagination exercise. You are a consolidated professional in the corporate world and now you have before you a challenge in an area that is quite different from the one where you spent almost 20 years of your life. Would you accept it? Most people would probably say no. Better to stay where you are, in the comfort of an activity that is already handled with some ease. The Venezuelan Luis Eliécer Cadenas, however, said yes, and after a selection process that lasted nearly four months, he was elected Executive Director of the Latin American Cooperation of Advanced Networks, CLARA, after nearly 17 years working in the industry . In this interview, Cadenas tells us a little about his history, plans and reasons for which he has accepted to lead the next steps of the regional network. "I think my work history fits very well with what is required at CLARA."

Luiz Alberto Rasseli

In short, who is the new CEO of RedCLARA?

I like to think that my most positive aspects are my honesty, transparency, ability to work and commitment. Despite my corporate history, I have a great love for the academic world and I believe strongly in the primary role played by CLARA and its partners in the development of this sector. That in the end is a key component for national development and that of the region.

With a consolidated career in the corporate world, why did you decide to apply to become the new director of CLARA? How do you evaluate that challenge and what plans do you have for the development of the network?

Mainly because I see great potential in the organization. The corporate world is a world without soul, the opposite of what CLARA and the NREN represent. I think my work history fits very well with what is required at CLARA. I know the world of Academic Networks and its dynamics very well, and having spent 17 years in

the corporate world, I think I can help to create a synthesis of both that are beneficial to strengthen CLARA.

There are many important tasks, but I think the main thing is to rekindle our partners, allies and workers with the vision of the organization. For that we have, first of all, to have a shared strategy, we must communicate it clearly to whoever is the interlocutor, we need to create enthusiasm and passion, and that strategy must be achievable. Words do create realities and we need to find the speach that we can turn into guide of our action.

How do you assess the current moment of university ICT in Latin America? How can CLARA enhance its development, mainly through the advanced national networks?

ICTs in the region are in very different stages, reflecting the strength and level of development of each country. Undoubtedly, the initial task of giving very high bandwidths at a very low cost is a fundamental value, but besides that, I believe that CLARA's

main strength is its partners, with their strengths and weaknesses. If we can assemble a joint plan with them and carry it out, there is much we can achieve.

RedCLARA has worked on many collaborative projects with different regions, such as MAGIC and ELCIRA. How do you see that line of work in your mandate?

I hope to continue and strengthen it. MAGIC is a fantastic example of what can be done cooperatively. These agreements, in general, have been mostly with Europe. I would like us to expand that spectrum, and we can develop projects with support from other sources and with the participation of various sectors. I think it is a matter of designing cooperation spaces well and creating the right incentives.

About the BELLA project, what benefits do you see for RedCLARA and its partners, beyond connectivity?

The possibility to build on its results and infrastructure something that is paramount: the ability to store, process and distribute data in a massive way. The data and content are something that we have to work with, to ensure that the investment in Science and Technology of the region is not sub-used. This work ranges from technical aspects to aspects of policy in Science and Technology, to ensure that appropriate incentives exist to promote this goal.

How do you expect CLARA to be at the end of your mandate?

A strong organization with great regional leadership; constantly providing new projects and ideas that support the development of our Latin American countries.

(Photograph: Carolina Muñoz, REUNA)

Florencio Utreras, Executive Director of RedCLARA between January 2005 and June 2017:

"What defines our essence is to collaborate"

Born in the island of Ancud (Chile), Mathematical Engineer at the University of Chile, PhD in Engineering at the University of Grenoble, father of three daughters whom he saw grew up with his beloved Pachita, proud grandfather of a little girl that illuminates his eyes whenever he speaks of, Florencio Ignacio Utreras Días was for twelve years the leader of RedCLARA and all its initiatives. Passionate about the collaborative work in network, he left on June 30 the institution of which he was co-creator to take new directions and to have more time to enjoy with his beloved family.

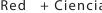Luiz Alberto Rasseli y María José López Pourailly

When talking about Florencio Utreras, the first thing that any person linked to the world of networks thinks of is RedCLARA and REUNA, two networks, one regional and the other national, in which he contributed as ideologist and co-creator; two networks that he directed and through which promoted great initiatives of national, regional and global cooperation. Visionary, serious, responsible, and full of enviable tenacity, are some of the characteristics that this man formed in his childhood in the South of Chile (he lived in Ancud until he turned one year, and in Puerto Montt until the earthquake of 1960) has shown and demonstrated throughout his career in these networks where he knew to be fast and go about without fear. The great amount of prizes that he has received in his trajectory do demonstrate this.

Educated in Santiago from the age of 8, then at the University of Chile, "with a tradition of fiscal high school and public university, which was a deeply rooted and strong tradition in Chile until after the military coup", as he likes to point out, Florencio studied Engineering in the University of Chile, and between 76 and 79 he did his doctorate in France and devoted himself to research in Mathematics and teaching until 1990. In that year, after being a visiting professor in Italy and France, after the beginning of the democratic government in his country, the University of Chile named Utreras as Director of Informatics of its Central House. "In the '87 I began to get interest in academic networks; as director of the Computing Center I had to be one of the participants in the process of connecting Chile to the academic networks, first with the Binet network, in '87, and with the Internet connection

in January of '92, with the NSFnet. I came to this world because of my research in Mathematics and my interest in working and interacting with other people in the world, using e-mail, which led me to get more and more involved, until I ended up dedicating myself to this."

Florencio became the Director of the National University Network of Chile and his arrival to it also keeps a story: "I got to the email network in 1986 , when, as a mathematician of the School of Engineering of the University of Chile, the University named me Director of the Computer Center to give a more academic approach to its services; one of the first things I did was to join the email network initiative because I saw the need to interact quickly with my colleagues from other parts of the world. Later I was fortunate enough to be able to participate in the first connection of Chile to the Internet, because I had been participating with Bitnet and the connection of the different universities within Chile, until in 1990, with the support of the president of CONICYT, we formed REUNA and we formally connected to the Internet on January 2, 1990, first as University of Chile and later as National University Network. I was Director of Information Technologies at the University of Chile and began to dedicate part time to the formation of the National University Network, which was finally achieved with the support of CONICYT and the Council of Rectors in the year '93. In 1994, the network got its legal personality. I left the University of Chile to dedicate to REUNA in September of 1995, and I was its director until December of 2004, when I changed to RedCLARA to work at Latin American level.

How did you become Executive Director of RedCLARA?

"When we created CLARA we felt that it was important to have an Executive Directorate to carry out the policies that we were working as an academic network. So we called for a competition and some people told me to participate; I evaluated it and it seemed to me that after ten years in REUNA it would be a good time for a change in the institution and at the same time a good opportunity to work in this Latin American network that I was passionate from the beginning, to form this Latin American network of cooperation. Since 1990 we have been working on bringing together the region, we have managed to get together, formed EnRed, an institution that promoted networks in Latin America, participated in meetings with Europe, worked from the very beginning of its creation with Internet Society - of which I was one of the first partners. Then, with all this interest in the development of regional and global collaboration networks, I found it very interesting to work on, together with all the colleagues in the region, and at the same time to give a new growth, a new way of work to REUNA."

2005 was a year of connection and networking, but Florencio recognizes 2008 as "the maturity test of RedCLARA", when the financing of the European Commission ended with the end of the ALICE project: "We had a network that was able to propose a project to the European Commission, and it was not only accepted but the EC gave us the administration of the funds of that project", says, referring to ALICE2. "The direct management of the funds of ALICE2 was very important and gave us the base of support of the relationship of confidence of RedCLARA with the European Commission; we demonstrate that we are able to have an institution and network that works, that fulfills the commitments in the projects, that executes them correctly, using the financial rules of the European Commission, that does it with seriousness and honesty. That is a very important asset of this organization."

What are other outstanding milestones of your years in charge of RedCLARA?

Previously, at the 2006 Lisbon Summit, RedCLARA was highlighted by the European Commission's Information Society Commissioner as the most relevant information society project that was being done at that time between Europe and Latin America. That recognition made us feel that we were doing well, were meeting the goals, were connecting networks, started academic projects. This confidence and verification that we were building for the academic world, and the reaction of the European Commission made us feel that we would have the possibility to continue and access other projects, as it happened in 2008.

A very important milestone is in 2013 when we started the ELCIRA project, in which RedCLARA was the only non-European body that received direct funding from the European Commission

to develop an initiative. ELCIRA was the first FP7 project to receive funds that were not administered by a non-European body. Its good evaluation led us to win MAGIC, which is already finished, and is a worldwide project that has been recognized as a contribution to the networks around the world, which is a great star for RedCLARA.

If you could define your 12 years in RedCLARA in a word, what would that word be?

Cooperation, of course, because the essence of RedCLARA is the cooperation between academic networks in Latin America with the networks of the world, is the cooperation and collaboration to provide academic services to universities, to national academic networks. What defines our essence is to collaborate, to work together with colleagues in Latin America to build infrastructure, projects, courses, forms of human development, to improve the way we work in science, technology, education, within the region. That is what it is about, cooperation to improve through

technology, with what we know how to do, the way in which Latin America works in this information society.

What did you think of the nomination of Luis Eliécer Cadenas as the new Executive Director?

I met Luis Eliécer years ago. He participated in the first attempts to build a Latin American community, back in the '90s; was one of the founders of the Venezuelan network and together with several of us participated in the first meetings of the Latin American community that sought to build the way to connect our networks, which at the time was very difficult due to infrastructure issues and costs. Luis Eliécer was part of the EnRed group that is at the base of the creation of LACNIC. Then he went to work at CISCO's network academy, that is, in the private world but always linked to the academy. The truth is that it seems to me an extremely wise decision of the Directing Council. He is a person who knows both the academic and the business world, therefore he should be able to propose and carry out initiatives that help us to build a stronger organization, also with a strong linkage not only within the academic world, but within the business world and innovation. Luis Eliécer has a great chance to develop new products, new services, new forms of financing, and, of course, new relationships, both within the region, with more networks connected - soon, we hope - but also with the business world that we have already developed in part with TICAL, but that we must continue strengthening.

How do you see the future of RedCLARA?

I believe that RedCLARA should continue to strengthen its physical network. There are economies of scale and technological developments that make that tremendously important for all regional networks; we have to find ways to strengthen regional networks and smaller academic networks to make the capillarity real and with the quality that all the universities in the region deserve, and of course also the creation of new services, either in a cooperative way between the national networks or between them, RedCLARA and the private companies. I think that it is necessary to seek balance in all these relations with the business world, this seems absolutely necessary to me.

Any history that you remember with special affection in these years?

At that Summit of Information Society in 2006 in Lisbon, it was very curious how everyone who came to us asked us how we had done for everyone to speak on RedCLARA work; they said that it seemed like an event organized by us. That was a very powerful signal of the credibility we had gained and that we have built all these years. I believe that today our partners may not perceive the breadth of prestige that RedCLARA has at regional and global level, we have a great prestige with the organisms of Science and Technology, with the international organisms, we are considered a serious organization, with which they can do things and work in Latin America. That's very important.

I also remember my first visit to Brussels, where Elena Vilar Pascual, the ALICE project officer, organized a high-level meeting with the European Commission's General Directors. Cathrin Stover, who was in charge of ALICE in DANTE, told me "it looks

like they are organizing a kind of presidential visit". These are very important things, and I believe that the BELLA project is going to have that importance; it is an absolutely innovative initiative, we will be one of the first global organizations that are going to own a relevant fraction of an intercontinental submarine cable, which is of tremendous importance for the sustainability of all academic networks in Latin America and, in particular, for the connection with Europe. But also the construction of this infrastructure that we have called BELLA-T, is a project of enormous relevance and I think it will effectively change the face of communications within the region, and it will have influence and impact on what is going to happen in the academic world and in the cost of telecommunications and Internet services for the private and personal world in the future; therefore, it is a project of tremendous impact. I think we have to be proud that the European Commission is relying on us, together with the European partners, to carry out this project that breaks with a lot of unwritten rules: there is a huge cooperation between different agencies of the European Commission, we're involving the national networks and its infrastructure… the truth is that I think we have not measured the importance that will have and its international impact.

What message do you leave to the people you worked with all these years at RedCLARA?

It has been an honor to work with everyone; it has been a privilege to share so many years with some people since I was in REUNA, like Nelson Simoes, Ida Holz… There were many years in which we have shared a dream, many people with whom we have already worked directly as part of RedCLARA's core team, which has been able to take ownership of this dream and work together, not as a mere job, but as a way of life, and I think we should thank all those who have worked in this project. I think the message is that we have to carry on and do it much better, we have all what is needed, we have to integrate the rest of the region, participate in global initiatives, where we have something very seriously to say, from our experience, where we are considered not only for Europe, North America and Asia, but for Africa and the Caribbean, and I believe we have a certain obligation to continue working with all of them to build this global community, and within RedCLARA there is the conviction that this is the way. I am glad to have worked on this and to have contributed in this and I am available for everything you need in the future.

International Collaboration

Transforming the reality of collaboration around the globe, MAGIC successfully completed its second year of activities

Luiz Alberto Rasseli

"To establish a set of agreements for the participating regions of the world to consolidate/complete the necessary middleware for a market of services and applications in real time to benefit global scientific communities." The goal sought by the MAGIC project is not small, but with the participation of 19 NRENs and RENs from all around the world, and the great commitment of its representatives, the results of the project certainly show that the only way to grow together is through collaboration.

Between May 2016 and 2017, during the second year of activities of the project coordinated by RedCLARA, important advances were achieved in three specific areas, namely eduroam, eduGAIN and Global Science Communities (GSC).

As for the latter, for example, the initial vision of the project was to establish a small set of user communities (meaning: three) working in areas of interest in a significant number of regions of the world. MAGIC, however, ended its journey with four: e-Health, Biodiversity, Environment and Remote Instrumentation. Efforts were also directed at the sustainability of these Communities, what was done through face-to-face interactions and virtual events with them. There were 24 activities around the world during the two years of work, with different formats, objectives and results. The meetings were recorded and the video and slides are available for viewing at the website of each event.

In addition, the activities included training on the use of collaborative tools with community members and participants in the various international conferences in which MAGIC participated, and information days to improve the use of the collaborative platform and strengthen the appropriation of it.

eduroam and eduGAIN were other reasons for great effort and good results during the final stretch of MAGIC. In June 2015, when MAGIC began, there were 74 countries using eduroam, and a total of 13,390 hotspots. Two years later, in May 2017, MAGIC and the global efforts changed those numbers in 89 countries and about 18,000 hotspots. Much of the new countries are in Africa, such as Zimbabwe, Somalia, Ghana, Malawi, Nigeria, South Africa,

Zambia, Algeria. There are also some in deployment, such as Senegal, Egypt, Sudan, Tanzania and Tunisia.

As for edugain, when MAGIC started there were 34 federations in production and 22 in world-wide pilot. In 2017, the work done by MAGIC's WP2 has changed these numbers into 49 federations in production and 16 in pilot (Zambia, Romania, Serbia, Macedonia, Bulgaria, among others). This progress is the result of many training sessions, speeches at conferences and in some regions including consultancy. This shows that when a project is being implemented with feasible goals it is possible to motivate the partners to reach them. In the MAGIC project, although the objectives were difficult, the project team has motivated its partners to implement the desired progress. This means that a specific project helps creating an effort to improve, in a very short time, the level of maturity in some areas, in this case, Identity Management.

Although the final evaluation is still in progress, the evaluators highlighted the tremendous contribution of MAGIC to the world of academic networks and to scientific communities globally at the Brussels evaluation meeting, held in June, and thanked the Project team for its commitment to perpetuate the benefits of MAGIC even after its completion.

Open Access in Latin America

New version of LA Referencia's Search Engine is presented at a important open Access meeting in Australia

The characteristics of the new LA Referencia harvest software were described at one of the most important global meetings on repositories, the Open Repositories 2017 Conference, that took place from June 26 to 30 in Brisbane, Australia.

Luiz Alberto Rasseli

Represented by its Technical Manager Lautaro Matas and Washington Ribeiro, Technician of IBICT (Brazilian Institute of Information in Science and Technology), the regional network participated in the session "Open knowledge infrastructures", moderated by Kathleen Shearer, of COAR. The presentation highlighted the problems faced by the Brazilian Portal of Open Access Scientific Publications (oasisbr) for the harvesting of its repositories and how the installation of LA Referencia technology helped to boost the results of the Brazilian network.

Adaptable to the OpenAIRE guidelines, which is the open access platform for the European Commission's Horizon2020 program, LA Referencia's technology is a platform for gathering information (metadata) that, in addition to supporting the network's central node, serves as an aggregator service and national portal for member countries. The technological solution originated in the pilot phase from March to September 2013. In mid-2014, with the economic resources of the Science and Technology agencies of the region that forms LA Referencia's Directive Council, the need for a new transferable solution and a set of technological improvements was determined.

The presentation illustrated that 8 years after the creation of oasisbr, the system had added just a Little part of the brazilian collection in terms of open access scientific documents, with 440 thousand records. At the end of 2014, the IBICT team started a technological upgrade project, replacing its harvester, metadata validator, transformer, supplier and meta-browser. That project ended in July 2015 and the result was

a new website, based on a platform provided by LA Referencia. The new software brought a seamless metadata transformation and a validation user interface and collection statistics. After the technological update, the number of open access sources collected have added more than 1 million and 700 thousand documents between articles, theses, dissertations and other scientific documents.

"Our harvester is an efficient result that shows how LA Referencia, as a regional public good, responds to Open Access issues and aligns with the development of an open science ecosystem in Latin America. This allows us to cooperate from a technological and political point of view, which implies enormous economies of scope and scale", celebrates the president of LA Referencia, Patricia Muñoz Palma.

In turn, the executive secretary of the network, Alberto Cabezas, says that the new version facilitates the work of professionals involved with open access throughout the region. "The new version allows a greater control by the librarians on the transformations and operates with different guidelines, and the diagnostic tools will allow to give relevant feedback to the repositories connected to each national node. We're achieving, thanks to the participation of IBICT, the possibility of generating a community of work around these tools".

Since 2015, LA Referencia technology has been installed in Brazil (IBICT) Colombia (Renata, Colciencias, Ministry of Education), Costa Rica (CONARE), Chile (CONICYT), Ecuador (CEDIA, SENECYT) and Peru (CONCYTEC). It is being installed in Argentina (MINCYT) and El Salvador (CBUES, Vice Ministry of S & T).

For more information on the harvester, visit: http://www.lareferencia.info. To download the presentation, click here.

See the summary at https://www.conftool.net/or2017/index.php?page=browseSessions&form_session=244#paperID186

AGENDA 2017

September

6 - 8 | Open Science Fair 2017
Athens, Greece
https://www.openaire.eu

10 – 13 | Workshop on Models, Algorithms and Methodologies for Hybrid Parallelism in new HPC Systems
Lublin, Poland
http://www.dma.unina.it/mamhyp/

19 - 21 | 10th RDA Plenary (Research Data Alliance)
Montreal, Canada
https://www.rd-alliance.org/plenary-meetings/future-plenaries

21 - 23| 16th RoEduNet Conference
Târgu Mure , Romania
https://conference.roedu.net/index.php/roedunetconf/2017

25 - 27 | 17th Annual Global LambdaGrid Workshop
Sidney, Australia
https://www.glif.is/meetings/2017/

27 - 28 | EaPEC 2017 - 2nd Eastern Partnership E-infrastructure Conference
Minsk, Belarus
https://eventr.geant.org/events/2590

27 - 29 | Second International Open Research Cloud Congress
Amsterdam, Netherlands
https://indico.egi.eu/indico/event/3414/

October

9 – 13 | SDN NFV World Congress 2017
The Hague, Países Bajos
https://www.layer123.com/sdn

10 – 12 | 2nd International Symposium of Information and Internet Technology (SYMINTECH)
Phuket, Tailandia
https://symintech.com/

15 - 18 | Internet2 2017 Technology Exchange
San Francisco, EE.UU.
https://www.internet2.edu/news-events/events/technology-exchange/

17 - 19 | hack.lu conference
Luxemburgo
https://2017.hack.lu/

22 – 26 | RIPE 75
Dubái, Emiratos Árabes
https://ripe75.ripe.net/

25 - 26 | GEO-XIV Plenary
Washington, EE.UU.
https://www.earthobservations.org/article.php?id=202