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Deliverable D2.1

Roadmap for the delivery and deployment of National AAIs in Latin America

Periodical Progress Report

ELCIRA Deliverable: D2.1 – Roadmap for the delivery and deployment of
National AAIs in Latin America

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Abstract: This deliverable provides a roadmap for the deployment of AAIs in the countries concerned, including the list of best suited candidates to develop a Federation and join EduGAIN within the timeframe of the project. It also includes an assessment of the work plan for the entire project with identified risks and the mitigations to be applied.

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DELIVERABLE ROUTE

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TABLE OF CONTENTS

1.- INTRODUCTION

Taking advantage of Brazilian experience in the implementation of the identity federation CAFe (The Federated Academic Community) - service in operation since the second half of 2010, that gathers research and education institutions in Brazil - RNP will coordinate WP2, with the aim of promoting and consolidating the foundations for creating a framework for authentication and authorisation in Latin America, including academic services and processes. The WP will be structured with the scope of RedCLARA, allowing other NRENs to establish their own regional federation's initiatives.

This Work Package will also facilitate the integration with the European initiatives under TERENA activities such as TF-EMC2 and REFEDS, and will make the necessary arrangements to join the GÉANT service eduGAIN.

The kick-off meeting for ELCIRA was aligned with TICAL 2012, and in this meeting the ELCIRA project was presented by its Project Manager, Florencio Utreras (RedClara) and each work package were presented by their project manager. This presentation was very important to give the opportunity of all members of all work packages to know how they would contribute to reach the goal of the ELCIRA Project.

2.- OBJECTIVES:

- To promote, coordinate and support the effort of a critical Latin American authorization and authentication infrastructure (AAI) for academic services and processes;

- To create pilot identity federations in two countries as a basis for further extension to the rest of the members of RedCLARA;

- To create virtual courses to enable technical teams of Latin American NRENs to provide local training in their own constituency;

- To define the technical and policy requirements to integrate a federated AAI in Latin American and Europe;

- To implement AAI interoperability and interoperation with Latin American federations and their European counterparts;

- To provide a roadmap for future strategies and decision-making regarding collaboration with other world regions regarding identity authorization and authentication processes.

3.- DEPLOYMENT PHASES

In order to reach the work package objectives it was developed the following roadmap strategy:

Phase 1
- Identify LA NRENs that will deploy AAI in short term
- Verify the bussiness model of these NRENs
- Align Brazilian AAI best practices' with the AAI TERENA Study *

Phase 2
- Develop the online training (IdP and SP)
- Provide the courses

Phase 3
- Provide support to develop and implement a federation
- Support the NREN to join the eduGAIN

Phase 4
- Provide the knowledge to operate a federation (technical and governance)
- Discuss with all LA NRENs the availability to create a Latin america Confederation

There is a study in development in TERENA aiming provide recommendations for the development and deployment of a Scientific Data e-Infrastructure (SDI) that would enable access to heterogeneous data for researchers and citizens alike. The SDI should be delivered integrating as much as possible existing AAA platforms (such as those used by the research and education community, or those used by the eScience community). The study will therefore will identify use-cases for the SDI; it will assess existing AAA-infrastructures as well as the ability for the existing AAA-infrastructures to address these use-cases; the study will also examine the gaps in providing the necessary infrastructure to support the use-cases and explore the work that is being done in the existing AAA-infrastructures to address those needs.

4.- COUNTRIES IDENTIFIED

During the kickoff meeting in Lima, Peru in July, 5th, three countries were identified as federation startups: Chile, Peru and Colombia.

Here below some information about these three NRENs.

4.1 CHILE (REUNA - WWW.REUNA.CL)

With a mission to connect and foster collaboration among all universities, libraries and research centers in Chile and the dream of becoming, in the future, foreign institutions of similar vocation in 1986 emerges as REUNA university cooperative interconnection; in 1990 the National Commission for Scientific and Technological Research, CONICYT, given its support to the entity in 1991, is established as private corporation nonprofit. On January 2, 1992, by authorization of the National Science Foundation (NSF)-United States- and the contribution of CONICYT, Fundación Andes and the Organization of American States (OAS), Chile REUNA connects to the Internet through NSFNet network.

Since then and until 1997, REUNA is Chile's number one provider in Internet Service Provider (ISP), but to satisfy the needs of innovation and national and international connections of the academic community, before long the business of selling connectivity to the CTC Internet SA to create, in 1998, REUNA2, a broadband network connecting all member institutions of the Corporation, from Arica to Osorno, 155 Mbps is the first high-speed network in Latin America.

The Corporation maintains its quality of precursor to reach the new millennium, when in July 2000 Chile established the first permanent connection to Latin American Academic Networks Advanced; the link REUNA2 joins with the U.S. network Internet2. Four years later, REUNA Academic Network is the first of the continent to connect to RedCLARA, which belongs to the Latin American Cooperation of Advanced Networks, allows the academic community member of the Corporation, directly accessible to scientific institutions and university members Advanced Academic Network GÉANT pan.

In November 2006, implements and deploys G-REUNA network outperforms REUNA2 by increasing and improving the capabilities in the last mile connections to the national backbone, which enables the Corporation to better serve to member institutions.

G-REUNA infrastructure is not just art, is, above all, an environment designed to enhance human capabilities, fostering collaboration and experimentation in the sciences, humanities and arts, and a bridge between policy makers, managers, academics, researchers and students, throughout the country to address the diverse issues and problems of the university and scientist. Consistent with the mission imposed on him as the only and exclusive national academic network, today REUNA focuses on promoting and supporting cooperation and integration of national and global higher education community, science and innovation in Chile, through its infrastructure network and advanced services that operate on it.

4.2 PERU (RAAP - WWW.RAAP.PE)

According to the recommendations resulting from the project CAESAR (Connecting All European and South American Researchers) in 2003 began the project ALICE (Latin America Interconnected with Europe), to develop the infrastructure of a research network that connects Latin America with the pan-European GEANT network, thus enhancing collaborative efforts between the two regions in the fields of education and research.

ALICE is framed in the @ LIS (Alliance for the Information Society) of the European Community seeks to promote the development of Information Society and fight the digital divide in Latin America, where intra-regional connectivity has not yet been developed . To complete this maze of names, mention that the project is managed by the organization DANTE (Delivery of Advanced Network Technology to Europe).

In 2002 during an event of the @ LIS, there is the proposed creation of CLARA (Latin American Cooperation on Advanced Networks), which seeks to build an infrastructure that advanced networks in parallel to form a Latin American and non-governmental organization representing the interests of this group.

Informed of this initiative was created in Peru, April 30, 2003, Peruvian Academic Network (RAAP) under the auspices of CONCYTEC, as a Civil Partnership nonprofit, becoming the National Network for Research and Education (NREN) of Peru signed in Mexico in June of that year, the statutes of CLARA, along with 16 other Latin American countries.

Formed initially by the Universidad Nacional Mayor de San Marcos National University of Engineering, Universidad Peruana Cayetano Heredia, Universidad Nacional Agraria La Molina, the Pontificia Universidad Catolica del Peru, the Peruvian Nuclear Energy Institute

and the National Institute for Research and Training in Communication (INICTEL), the expected RAAP together all educational and research institutions in the country.

4.3   COLOMBIA (RENATA - WWW.RENATA.CO)

RENATA is the result of the union of efforts of the national government and the country's academic and scientific community interested in using the new-generation networks in order to increase the quality of educational processes and to promote collaborative research and work among national and international peers.

RENATA is a civil, non-profit, private corporation responsible for the implementation and appropriation of this new generation data network, providing services and facilitating the connection of Colombian institutes to the research and academic network of centres in the world.
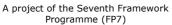
RENATA main purposes are related with:

- Consolidating a national new generation network for academic and research institutions that will effectively use it.
- Fostering and promoting the efficient exchange of information and communications, as well as the collaborative work among the institutions in the regional, national and international networks.
- Encouraging the execution of education, research and development projects which will contribute to the competitiveness and progress of the country.

The main members of RENATA are Regional Academic Networks, which are the result of regional association of public or private academic entities. Around 90 research and academic institutions are connected to RENATA, through this regional advanced networks.

This initiative is supported at the national level by the MINISTRY OF COMMUNICATIONS, MINISTRY OF EDUCATION and the Colombian Institute for the Development of Sciences and Technology, COLCIENCIAS.

RENATA is one of the 12 country members connected to RedCLARA which connects the academic network to INTERNET2 (USA), to GEANT2 (Europe) and from here to the other world academic networks.

5.- ROADMAP

Month	Partner	Participant	Action
M1 **Jun/12**		All	Kick-off Meeting
M3 **aug/12**		All	D2.1 Roadmap (D2.1)
M4 **Set/12**		RedCLARA	Initial stage complete (MS1)
		TERENA	REUNA + edutic Participation
M5 **Oct/12**			AAI Stage I Completion (MS2) Agreement on the collaboration relationship between the European eduGAIN end ELCIRA; Agreements with two NRENs to work on Federation Implementation; Wiki of the 2 new Federation members
M7 **Dec/12**		RNP	On line Training Material on AAI development for Staff training (D2.2)
M9 **Feb/13**			AAI Pilot Operational (MS9)
M10 **Mar/13**	Colombia, Peru, Chile		AAI Pilot *(with whom?)* (D2.3)
M12 **May/13**			AAI Preparation (Assess the Identity Management of participating institutions) (D2.4) AAI Implementation (D2.5)
M13 **Jun/13**		RNP	Federation - EDUGain Interoperation (MS12) AAI infrastructure implemented in two NRENs and inter-operating with eduGAIN AAI.
M16 **Set/13**			Follow up Recommendations and Final Progress Report (D2.6)

6.-   RISKS AND MITIGATIONS

The following is an assessment of the work plan for the entire project with identified risks and the mitigations to be applied

	Minor	Moderate	Major
Very likely	Medium 2	High 3	Extreme 5
Likely	Low 1	Medium 2	High 3
Unlikely	Low 1	Low 1	Medium 2

Likelihood / Impact / What is the chance it will happen?

Work Plan Item	Risk Assessment	Risk deadline	Mitigation
Agreement on the collaboration relationship between the European eduGAIN end ELCIRA (MS2)	1 - Low	October, 2012	eduGAIN has welcomed new LA federations as a federation external to Europe. No barrier should be encountered for other LA federations.
Agreements with two NRENs to work on Federation Implementation (MS2)	3 - High	October, 2012	Three (3) specific NRENs have been targeted to overcome any delay in the signing of an agreement.
Wiki of the 2 new Federation members (MS2)	1 - Low	October, 2012	REFEDS wiki catalogues all emerging and developing federations.
On line Training Material on AAI development for Staff training (D2.2)	1 - Medium	December, 2012	Training materials already exist but in English and Portuguese and the risk of a delay in translation can be overcome with alternative translators.
AAI Pilot Operational (MS9)	1 -	March, 2013	

7.- SUPPORT FOR WP5

To support the WP5 (Extending and Strengthening the Collaboration Platform) deliverable (D5.3) to provide a prototype portal it is important that the partners offering services to the portal and the intended users of the portal are able to access the service via federated authentication.

GARR (as the the operator of the IDEM identity federation) and TERENA (as a member of SURFfederatie) are members of the eduGAIN interfederation service and have no barrier to contributing services.

CLARA is not connected to a federation but since the CLARA Portal is the holder of many identities from Latin American users and it would be advantageous to bilaterally peer between services and the CLARA Portal IdP to enable users to seamlessly take advantage of the shared services.
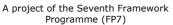
To support the services offered by CLARA and its partners the three target federations of Chile, Colombia and Peru will offer a broad range of users and services.

8.- BEST PRACTICES

This deliverable will provide best practice recommendations for the deployment of AAI in Latin America.

It will be based on existing documentation developed in Europe in the TERENA Task Forces. This deliverable will combine and adapt to the specific Latin American environment a number of best practice documents and how-to material from AAI developments in Europe.

9.- DEVELOPING COUNTRY CAPABILITY

9.4   TECHNICAL

A virtual course will be developed to capacitate NREN technical teams in order to replicate the action in their NRENs and with their customers.

These courses:

- *http://www.terena.org/activities/eurocamp/nov11/*
- *http://www.terena.org/activities/eurocamp/jun11/*

have materials PPT, PDF and a VM image (TurnKey Linux - which probably needs updating) that connects to a dynamic DNS service to use a host12-wp2.iamfederated.org domain and a valid SSL certificate. Might be useful for your course - even to look at what we do with it.

9.5   POLICY

The GN3 project's eduGAIN task is developing a "How to write a federation policy" workshop and template based on the assessment of federation policies by REFEDS utilising the modular policy framework of the Swedish Identity Federation (SWAMID). An assessment of this template for use in the partner countries will be carried on by each partner.