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eInfrastructure



Magic

Middleware for collaborative Applications
and Global virtual Communities

Deliverable N°D2.1

Roadmap for the delivery and deployment of National AAls in Project regions

Periodical Progress Report

MAGIC Deliverable: D2.1 - Roadmap for the delivery and deployment of National AAls in Project regions (Revised version)

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Abstract: This deliverable provides a roadmap for the deployment of AAls in the countries concerned in the Project. It also includes the funding/business models for national identity federations and their interoperation with the eduGAIN interfederation service.



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For more information on MAGIC, its partners and contributors please see <http://www.magic-project.eu>.

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1. INTRODUCTION

1.1. PURPOSE OF THE DOCUMENT

This deliverable provides a roadmap for the deployment of Authentication and Authorization Infrastructures (AAls) in the countries concerned in the Project. It also includes the funding/business models for national identity federations and their interoperability with the eduGAIN interfederation service.

1.2. EXPERIENCE BACKGROUND

RNP [R1] is a non-profit company supported by the Brazilian government and dedicated to promoting the development of technologies in the field of networks and innovative applications in Brazil.

RNP operates the national advanced networking infrastructure for cooperation and communication in education and research. Besides interconnecting all the federal government institutions of higher education and research, this network provides a laboratory for the experimental development of new applications and network services, allied with communication and collaboration services for the benefit of the organisations using it. This Brazilian National Research and Education Network (NREN) enables interaction and cooperation between people and resources in the country and abroad.

1.3. RELEVANT PROJECTS:

RNP has participated in a number of projects in partnership with European institutions, such as ALICE, Mercosur Digital, EELA, EELA-2 and RINGrid, and actively participates in ALICE2 and FIBRE.

RNP has played a key role in the success of Europe Latin America Collaborative e-Infrastructure for Research Activities project (ELCIRA) (<http://www.elcira.eu>). In particular its activities in the deployment of eduroam in Argentina, Chile, Colombia, Costa Rica, Ecuador and Mexico, and the creation of the federations linked or in process to be linked to eduGAIN in Argentina, Chile, Colombia, Ecuador and Mexico.



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Figure 1: ELCIRA project poster.



2. DOCUMENT AMENDMENT PROCEDURE

All changes should be sent to the author, with a copy to WP2 mailing list. The revisions shall be sent to WP2 and MAGIC ALL mailing list, in order to allow to all members review the entire document, mainly their region chapter.

3. GLOSSARY

EC	European Commission
EU	European Union
EU-LAC	Europe, Latin America and the Caribbean

4. EXECUTIVE SUMMARY

This document reviews the actual status of AAI and eduroam in MAGIC partners regions and formalize what was discussed during the kick-off meeting, as well as the information gathered after the Review Meeting to complete the planning ahead (road) and complete the roadmap view of all regions covered in this project.

5. DESCRIPTION OF WORK

Benefiting from the Brazilian experience in the ELCIRA project, coordinating efforts to create AAI and eduroam in Latin America, RNP coordinates WP2. Aiming at the promotion and consolidation of the foundations for creating a framework for authentication and authorisation in Africa, the Caribbean, Asia and for Latin America, CUDI will support RNP in the inclusion of new NREN and its members, particularly those participating in the SCALAC1 initiative. The WP is structured to enable other RENs to establish their own regional federation initiatives. This Work Package will also facilitate integration with the European initiatives under TERENA activities such as TF-EMC2 and REFEDS, and will make the necessary arrangements to make it possible to join the eduGAIN interfederation service.



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6. PROJECTS PARTNERS AND ROADMAP

6.1. ASREN: THE ARABS STATES REGION



ASREN [R2], the Arab States Research and Education Network, is a non-profit international organization, registered in Dusseldorf, Germany, on 3rd of June, 2011, under the umbrella of the League of Arab States. ASREN is the association of the Arab region National Research and Education Networks (NRENs), as well as their strategic partners that aims to implement, manage and extend sustainable Pan-Arab e-Infrastructures dedicated for the research and education communities and to boost scientific research and cooperation in member countries through the provision of excellent e-Infrastructures and e-services.

6.1.1. Current Status of the Region

Before MAGIC project starts, ASREN region has AAI implementation at ASREN, Jordan (launched mid-2015), TRC, Oman (ready before MAGIC start), pilot in AUB, Lebanon and JUNet, Jordan and planning to implement in Palestine and Egypt.

Regarding eduroam, the service is successfully implemented in Saudi Arabia, United Arab Emirates and Morocco.

6.1.2. Roadmap in ASREN

- Algeria and Morocco are the most suitable candidate countries for Federations. Jordan still needs to appoint people – not ready yet. No response yet from Oman. Egypt good technical resources but not currently able to commit;
- Qatar is working on eduroam;
- Workshop on Joining eduroam and Identity Federation to be held at Talal Abu Ghazaleh University, Amman, 8-10 September 2015.



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Details of 1st Workshop on joining eduroam and Identity Federation



Introduction

The Arab States Research and Education Network (ASREN) in cooperation with EUMEDCONNECT3 and MAGIC Projects will conduct a workshop dedicated for staff of National Research and Education Networks (NRENs) and Universities on eduroam, Federated Access and eduGAIN:

- **eduroam:** is the secure, world-wide roaming access service that allows any user from an eduroam participating site to get network access at any institution connected to eduroam.
- **Federated Access:** effective and secure management of authentication and identity information to build a trusted environment where users can be identified electronically using a single identity to login and access variety of available resources and applications worldwide.
- **eduGAIN:** is a service that interconnects identity federations around the world, simplifying access to content, services and resources for the global research and education community.



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Program		
Day 1: eduroam	Day 2: Identity Federations	Day 3: Policies
1. eduroam description <ul style="list-style-type: none"> – From federation-level RADIUS server operator point of view – From institution point of view 2. eduroam deployment <ul style="list-style-type: none"> – Free RADIUS server – Radsecproxy – Federation-level RADIUS server – Institutional RADIUS server 	1. Understand how identity federation works <ul style="list-style-type: none"> – From federation operator point of view – From institution point of view 2. Federation operator <ul style="list-style-type: none"> – Metadata management 3. Identity provider deployment <ul style="list-style-type: none"> – Shibboleth v3 IdP – Metadata – Connecting to the federation 4. eduGAIN <ul style="list-style-type: none"> – Benefits – How to connect 	1. eduroam <ul style="list-style-type: none"> – Brief description – eduroam compliance statement – European eduroam Confederation Policy Declaration 2. Identity Federation <ul style="list-style-type: none"> – Brief description – Identity Federation Policy – Metadata Registration Practice Statement (MRPS) 3. eduGAIN <ul style="list-style-type: none"> – Brief description – eduGAIN Policy Framework Constitution – eduGAIN Policy Framework Policy Declaration

Figure 2: ASREN 1st Workshop on joining eduroam and Identity Federations.



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Outcome of the Workshop

- Participants will have a working RADIUS and a Shibboleth server. They will be able to technically connect NREN and institution to the eduroam infrastructure. They will be able to connect institutional identity provider to the national identity federation and to eduGAIN.
- Participants will have an overview of eduroam, identity federations and eduGAIN. They will be able to prepare the necessary policies and agreements, which can be signed with regional parties. Agreements will be signed and announced during ASREN's annual conference e-AGE 2015 in Morocco 10-11 December 2015.

Who Should Attend?

- Head of IT from NREN and Universities;
- Head of IT departments from institutions;
- IT administrators;
- NREN IT administrators.

Prerequisites:

- Knowledge of local legislation concerning privacy issues;
- Skills in OS administration (Windows/Linux);
- Basic knowledge of PKI (Public Key Infrastructure).

Required Equipment

The following are required for first and second days:

- Machine with public IP and DNS hostname located at the institution and root/administrator privileges for that machine;
- Valid and trusted X.509 certificate for the machine (will be used for SSL connections);
- Notebook;
- VirtualBox installed on the notebook for those who will not have machine at institution ready.



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Trainers

Michal Prochazka



Received his M.Sc. degree from the Masaryk University in Brno in 2009. He works at Masaryk University and CESNET mainly focusing on IT security and identity and access management area. In security area the major focus is targeted on authentication methods in distributed environments.

Issue of federated identity and the concept of identity federations is one of his major scope within the identity management area. For three years he has been leading project Perun – identity and access management system. He is also involved in several projects like CHAIN-REDS, MAGIC, ELIXIR and EGI. In last two projects he is a member of AAI task forces. He was helping with building the eduroam and the identity provider on Masaryk University.

Jan Oppolzer



Jan Oppolzer received his bachelor's degree in electrical engineering and master's degree in telecommunications engineering from Czech Technical University in Prague. He currently works for Network Identity Department at CESNET as a member of Authentication and Authorization Infrastructure team. Among his responsibilities are running Shibboleth IdP for CESNET, operating Czech academic identity federation eduID.cz including technical support for members and developing web-based federation metadata tool to allow easy and user-friendly metadata management. He is also a steering group delegate in international interederation called eduGAIN and a REFEDS member.



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6.2. WACREN: THE WEST AND CENTRAL AFRICAN REGION



WACREN [R3] is the West and Central African Research and Education Network. Incubation of the regional network started at AfNOG 2006 and at the Regional Workshop on Research and Education Networks organised by the Association of African Universities (AAU) in Accra in November 2006. The need to build organizational and technical capacity within constituent NREN countries was identified as a requirement for a viable network.

A regional consultative meeting held in November 2009 as a pre-event to the Open Access Conference 2009. The AAU was given the mandate to identify a Task Team to coordinate activities of working groups to produce documents for the establishment of the RREN.

Following the meeting of representatives of 11 countries in West Africa and Central Africa (Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Gabon, Ghana, Mali, Niger, Nigeria, Senegal, Togo) in initiative of Research and Education Networking Unit (RENU) of the Association of African Universities (AAU), it was taken to the establishment of the first Board of Directors of WACREN, composed of nine (9) members and presided by Professor Tiemoman KONE.

6.2.1. Current Status in the Region

Currently nine formally established NRENs:

- GARNET – Ghana;
- snRER – Senegal;
- MaliREN – Mali;
- Niger- REN – Niger;
- GabonREN – Gabon;
- NgREN – Nigeria;



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- TogoRER – Togo;
- RITER - Côte d'Ivoire;
- RerBenin – Benin (eduroam deployed).

As seen in the picture, eduroam is in a pilot phase only in Benin. No Identity Federation yet in preparation in the region.



Figure 3: eduroam status in July 2015.

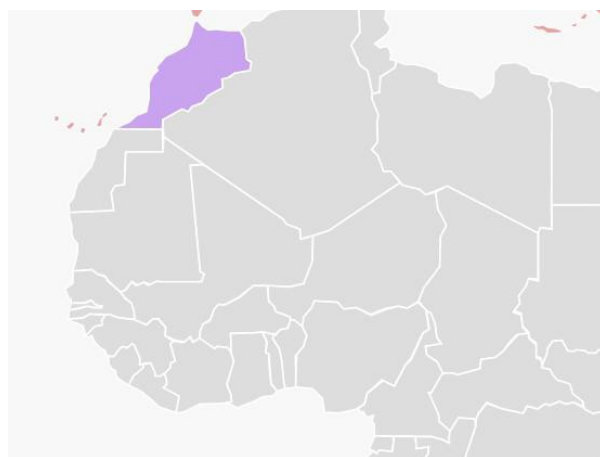


Figure 4: Federation status in July 2015.

6.2.2. Roadmap in WACREN

- During the kickoff meeting, the WACREN's delegates have raised doubts about any possibilities for ID federations, but they said also that already have federation activity on going. Expect to have a couple of federations;
- eduroam is a little more complicated and can suffer from concern idea that an expensive commodity can be shared with others. This argument has arisen in Brazil; the issue is to demonstrate that the users in roaming do not represent impact in the bandwidth of internet provider;
- The focal point of WACREN are going to support the implementation of eduroam and AAI in all NRENs of North Africa region. It is already identified some interested by Nigerian NREN, who already included in its website this information (<http://ngren.edu.ng/services/upcoming-services>)

6.3. CKLN: THE CARIBBEAN REGION



The Caribbean Knowledge and Learning Network (CKLN) [R4] is an inter-governmental agency of the Caribbean Community, CARICOM. The Heads of Government of CARICOM mandated CKLN with the responsibility to build a broadband fibre optic network called C@ribNET, connecting all CARICOM member states, with further connections to the rest of the world.

6.3.1. Current Status in the Region

In the Caribbean, there are a number of emerging NRENs - Barbados, Jamaica, Trinidad and Tobago, the Bahamas, the Organisation of Eastern Caribbean States (OECS), Suriname, Belize, while others are getting started. The NREN in the Dominican Republic, RADEI, is the only one in the Caribbean that is currently a registered organisation.



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Figure 5: Caribbean NRENs.

Training has been done in Trinidad and eduroam implementation. The delegate of CKLN thinks of doing a federation on higher level for the region as there are not well-established NRENs in the region to establish federations and countries are small.

Legislation could be an issue for regional federation, e.g. data protection. So single regional federation may not be a simple solution.

Nowadays, in the Caribbean region, only Trinidad and Tobago has eduroam deployed and there is no Federation implementation.

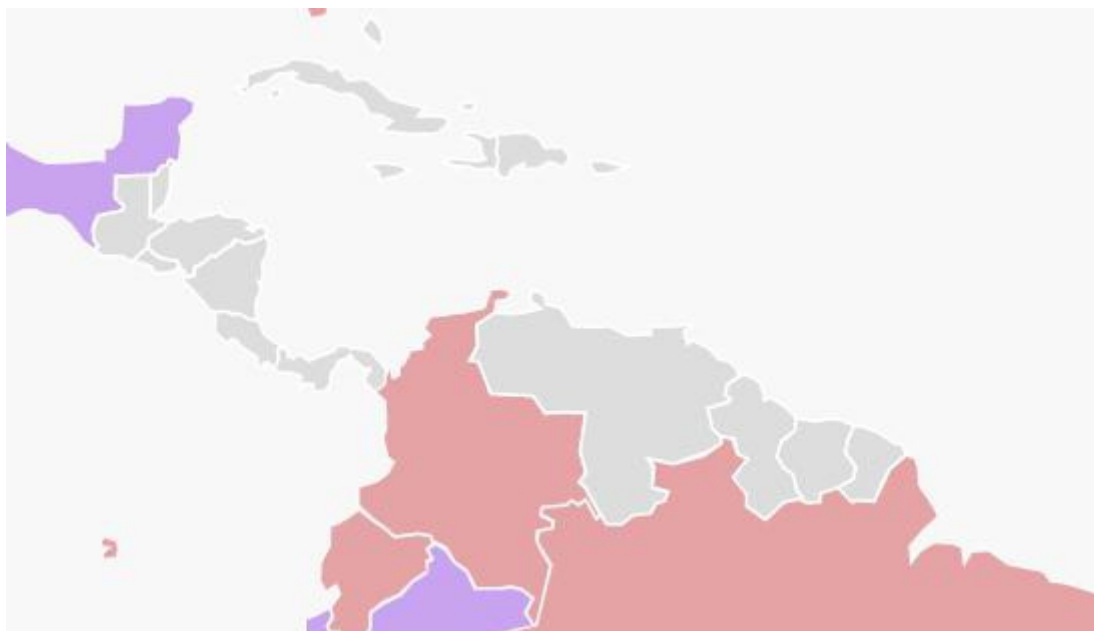


Figure 6: Federation status in July 2015.



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Figure 7: eduroam status in July 2015.

6.3.2. Roadmap in CKLN

- Countries that were indicated as potential countries to join eduroam are: Jamaica, Dominican Republic and Barbados;
- Some hotspots showed in the eduroam map besides Trinidad & Tobago, represents France not Caribbean countries;
- Provide a Workshop, similar to what is planning to be done in Amman, on joining eduroam and Identity Federation in September;
- During the workshop, it will be discuss with participants the best federation model to be adopt in the region. As we have a lack of technical staff, the project aim the best solution to operates and provide support for final users.
- Bellow some information about region implementation:



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Jamaica

- Institution: The University of the West Indies (UWI) - Mona Campus
- **Activities:**
 - Training – delivered on the workshop of October/2015
 - eduroam preparation – currently in progress
 - eduroam pilot tests – July/2016
 - eduroam implementation – September/2016
 - AAI preparation – July/2016

Barbados

No institution committed yet
Promoting session planned for June/2016

Dominican Republic

No institution committed yet
Promoting session planned for June/2016

6.4. TEIN*CC THE ASIAN COUNTRIES



TEIN [R5] (Trans-Eurasia Information Network) is a high speed network for research and education which connects 20 countries in Asia and 34 countries in Europe. This network is actively being used for international joint researches in cutting-edge areas, including information telecommunications and bioengineering. TEIN*CC is established to manage the 4th phase of the TEIN project and the latter was adopted as one of the ASEM projects.

The early phases of the TEIN projects were managed by DANTE (<http://www.dante.net>), a not-for-profit organization based in the United Kingdom. In October 2010, at the ASEM8 Summit that was held in Brussels, Belgium, Korea was granted the operation right to manage the 4th phase of the TEIN project. The project was launched in 2012, with financial supports from the EC as well as members of the participating countries.

The organization of TEIN*CC consists of the Governors' Meeting and the Steering Committee, who are elected representatives from the member states. There is also an Executive Office, which is located at the DMC Hi-Tech Industry Center in



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Seongam-ro, Mapo-gu, and Seoul. The Executive Office consists of both the domestic and international staff, namely the President, the Executive Officer and 11 other staff.

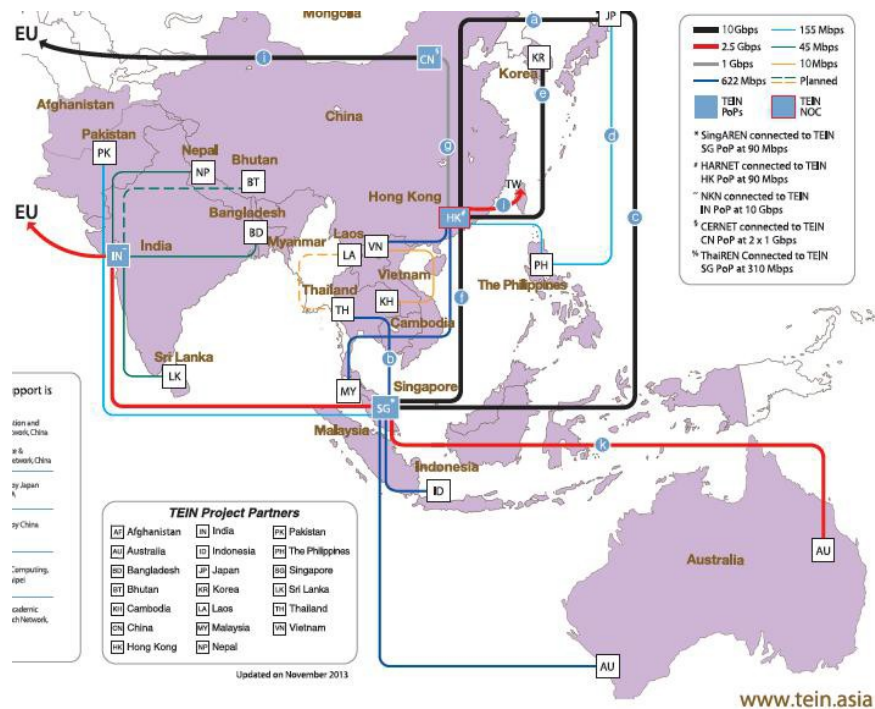


Figure 8: Tein*CC connectivity.

6.4.1. Current Status in the Region

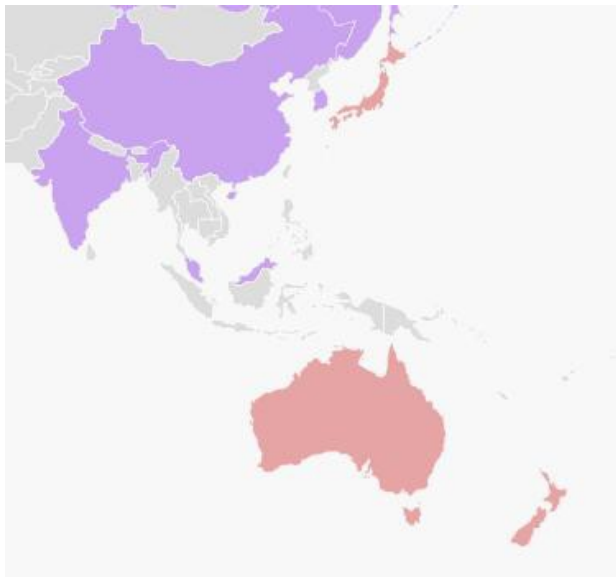


Figure 9: Federation status in July 2015.

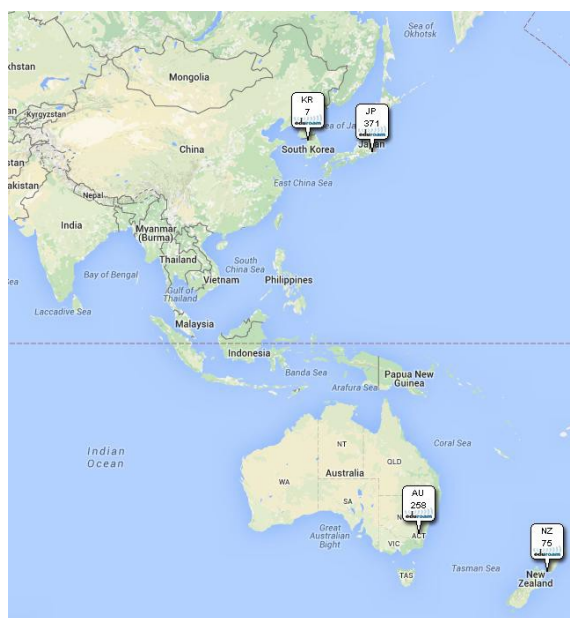


Figure 10: eduroam status in July 2015.

Country	eduroam	AAI
Afghanistan		
Australia	OK	AFF
Bangladesh		
Bhutan		
Cambodia		
China	OK	Pilot
Hong Kong	OK	
India	OK	Pilot
Indonesia		
Japan	OK	GakuNin

Country	eduroam	AAI
Korea		Pilot
Laos		
Malaysia		
Nepal		
New Zealand	OK	Tuakiri
Pakistan		
Philippines	OK	
Singapore		
Sri Lanka	OK	
Thailand	OK	
Vietnam		

6.4.2. Roadmap in TEIN

- Aim for APAN meeting hosts to implement eduroam. Some pilots are happening in the region. Moreover, quite a few id federations starting in the region. Three federations have declared they wish to do something, so support should be given to ensure they progress;
- Next APAN meeting, 10th – 15th August in Malaysia and id taskforce will be held there, there will be a delegate of MAGIC attending to this event and talking about AAI and eduroam implementation
- TEIN project on eduroam to deploy in five more countries;
- One possible synergy between projects is try to merge effort with H2020 project that AARNET is part of, with TEIN*CC. During the GeGC meeting, the deputy of Australia have raised the concern of double work aiming the same objective, so in this part of MAGIC project TEIN*CC will coordinate the work with AARNET to prevent effort in the same countries.



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6.5. CAREN: THE CENTRAL ASIAN REGION



Launched in January 2009, the Central Asian Research and Education Network (CAREN) [R6] project aims to:

- establish and operate a high-capacity regional R&E network in Central Asia based on broadband Internet (with minimum link capacities of 34 Mbps);
- improve intra-regional connectivity across Central Asia by replacing existing low-capacity satellite connections with terrestrial fibre;
- facilitate R&E collaborations between Central Asia and Europe with direct connection to GÉANT at a minimum bandwidth of 155 Mbps;
- seek synergies with user communities in neighbouring regions, i.e. Asia-Pacific (TEIN3) and the South Caucasus (BSI);
- act as a catalyst for the development of sustainable national research networking in the five former Soviet republics of **Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan**;
- decrease the digital divide, combat brain drain and promote regional development and cohesion;
- support and promote collaborative network applications in areas of high societal impact, such as telemedicine, seismology, distance education, energy and water resources management and environmental studies;
- Pave the way for sustainability of the network after CAREN.



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6.5.1. Current Status in the Region

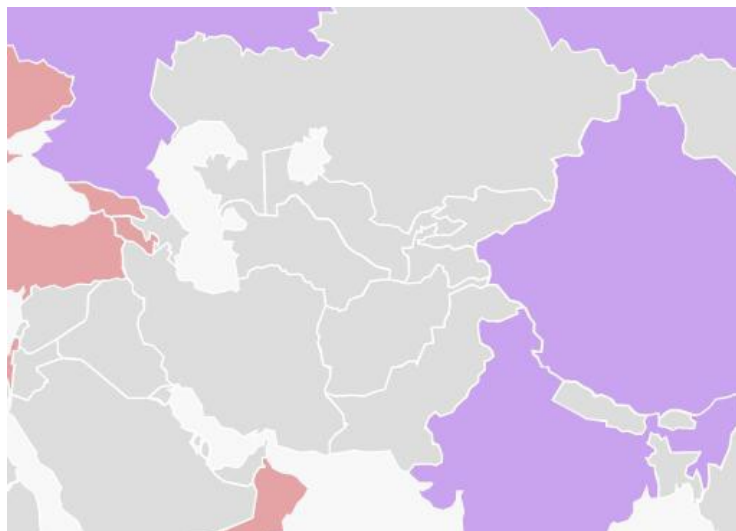


Figure 11: Federation status in July 2015.



Figure 12: eduroam status in July 2015.

- Federation in Kyrgyzstan;
- eduroam already in two countries:
 - Kazakhstan (KazRENA – roaming operator #61);
 - Kyrgyzstan (roaming operator #54).

The Europe Aid Co-operation Office (AIDCO) of the European Commission is contributing 80% (€5m) towards the costs of the project with the remaining funds being provided by the partners based on a cost-sharing model.

The CAREN project aims to establish a high-capacity regional research and education network in Central Asia to provide the region with a gateway to global research collaboration by the end of 2009. It sets out to replace the satellite-based connectivity established by the Silk project with a broadband internet-based network using terrestrial fibre.

Offering a direct link to GÉANT, CAREN will allow researchers, educators and students in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan not only to collaborate among each other but also to engage in exciting joint projects with their peers in Europe and in other parts of the world.

6.5.2. Roadmap in CAREN

- During the kickoff meeting, the delegate of CAREN has committed to translate the training material to Russian, so, MAGIC Project will have training material in Portuguese, Spanish, English, French and Russian;
- During the project, it is expected to raise the federation in Kazakhstan, as there is already eduroam implemented there.
- It is planning an eduroam and NRENnum training in Tajikistan in a week of Nov 21;
- There will be a two-day event in next spring (25 – 26 April 2017). Venue is Kyrgyz Turkish Manas University in Bishkek (<http://manas.edu.kg/index.php/en>). It is explore this event to promote a Workshop of AAI and eduroam.

The following activities are planned:

- | | |
|---------------|--|
| June 2016: | agreement on collaboration between CAREN and MAGIC (RNP); |
| July 2016: | eduroam and AAI Pilot at Kyrgyz Turkish Manas University and Kyrgyz State Technical University (two universities); |
| Sep 2016: | eduroam/AAI preparation (access to Identity Management) and implementation; |
| October 2016: | Demo session at CAREN Regional Networking Conference, Bishkek, Kyrgyz Republic; |



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October 2016: Training conducted by Latin American partners, Bishkek, Kyrgyz Republic;

November 2016: Follow-up support and final progress report.

December 2016: Dissemination of training materials to university technical staff.

6.6. UBUNTUNET: THE EAST AND SOUTH AFRICAN REGION



UbuntuNet Alliance [R7] is a regional association of National Research and Education Networks (NRENs) in Africa. It was established in the latter half of 2005 by five established and emerging NRENs in Eastern and Southern Africa.

National Research and Education Networks; Transnational Communities of Practice; and Transnational Companies or Organisations providing services relevant to the Alliance and its members are welcome to apply. Click [here](#) to Apply for Membership. The following are recognised as NREN Members:

- DRC: Eb@le;
- Burundi: BERNET;
- Ethiopia: EthERNET;
- Kenya: KENET;
- Madagascar: iRENALA;
- Malawi: MAREN;
- Mozambique: MoRENet;
- Namibia: Xnet;
- Rwanda: RwEdNet;
- Somalia: SomaliREN;
- South Africa: TENET;
- Sudan: SudREN;
- Tanzania: TERNET;
- Uganda: RENU;
- Zambia: ZAMREN.



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6.6.1. Current Status in the Region

Currently two Federations are active in the region: SouthAfrica and Zambia, the same have eduroam active in their countries.

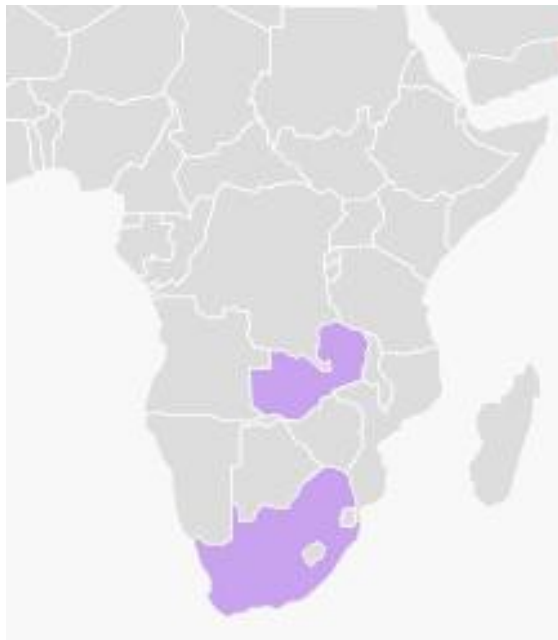


Figure 13: Federation status in July 2015.



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Figure 14: eduroam status in July 2015.

6.6.2. Roadmap in UbuntuNet

- Expect to target 3 or 4 countries. Zambia, Kenya, SA have eduroam. SA has federation but not in eduGAIN. Uganda, Tanzania, Rwanda and Botswana for both eduroam and Federations;
- Eastern Partnership countries should be remembered. Should look to see if there is any way in which MAGIC can assist;
- It is planning a Workshop on joining eduroam and Identity Federation, during the UbuntuNet-Connect 2015, 19-20 November 2015, Maputo, Mozambique (www.ubuntu.net.net/uc2015_cfp). As the event will be place on Thursdays and Friday, the project will take advantage to run in the three previous days (16-18 November 2015);
- RNP will give support and online training to capacitate MoRENNet staff in AAI and eduroam. The deliverable of this training and support will be a MoRENNet Federation integrated with eduGAIN and an eduroam roaming operator working;
- UbuntuNet staff have setup a regional federation called unIDa. This one is open for any institution from our member countries, which do not have their own federation;

- Besides that, UbuntuNet plans to hold another training with NREN engineers at the UbuntuNet Connect in Entebbe in November. The participants will work on setting up an application for their organization.

6.7. REDCLARA: THE LATIN AMERICAN REGION



RedCLARA [R8] -Cooperación Latino Americana de Redes Avanzadas (Latin American Cooperation of Advanced Networks) - is a non-profit International Law Organisation, whose legal existence is dated on 23 December 2003, when it was acknowledged as such by the legislation of Uruguay.

RedCLARA develops and operates the only Latin-American advanced Internet network. Established for regional interconnection and linked to GÉANT2 (pan European advanced network) in 2004 via the ALICE Project (which –until March 2008- was co-funded by the European Commission through its @LIS Programme), RedCLARA provides regional interconnection and connection to the world through its international links to GÉANT2 and Internet2 (USA) and, through them, to the advanced networks of the Caribbean (C@ribnet), Africa (UbuntuNet Alliance), Asia (APAN, TEIN), among others. Thanks to the ALICE2 Project, between December 2008 and March 2012, RedCLARA could significantly improve the capacity of its network and expand its benefits for its members and regional research communities.

RedCLARA is constituted by 13 Latin American countries and its Assembly –where each country has representative- meets every six months to define courses of action and the policies to be implemented.

The organisms of the RedCLARA institutional government are the Board (higher organisms constituted by: President, Vice president, Secretary, Treasurer and one Director), a Fiscal Commission (constituted by three Assembly members who are not Board members) and a Technical Commission (with seven members, corresponding to engineers from the networks connected to RedCLARA, oversees the network's development and its technical and security implementations). The Executive Office is the organisms in charge of the Executive Direction of RedCLARA, a post under the trust of the Board and the Assembly.



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The initial idea for the formation of RedCLARA arose in June of 2002 in the Toledo meeting (Spain), organized within the framework of the CAESAR Project -financed by the DG IST program of the European Commission-, the study that took to the generation of the ALICE Project (América Latina Interconectada Con Europa - Latin America Interconnected With Europe).

In that occasion the representatives of the main Latin American academic networks were confronted with the opportunity to get one historical revenge. That is to say: to constitute, finally, the Latin American network that so many times had been tried to bring into being.

6.7.1. Current Status in the Region

After the ELCIRA Project, the following is the status of Latin American countries

Country	NREN	eduroam status	AAI status
Argentina	InnovaRed	Operational	Joining eduGAIN
Brazil	RNP	Operational	eduGAIN partner
Bolivia	N/A	Not planned	Not planned
Chile	REUNA	Operational	eduGAIN partner
Colombia	RENATA	Operational	eduGAIN partner
Costa Rica	RedCONARE	Operational	Not planned
Cuba	RedUNIV	Not planned	Not planned
Ecuador	CEDIA	Operational	eduGAIN partner
El Salvador	RAICES	Not planned	Not planned
Guatemala	RAGIE	Not planned	Not planned
Honduras	N/A	Not planned	Not planned
Mexico	CUDI	Operational	Pilot
Nicaragua	N/A	Not planned	Not planned
Panama	REDCYT	Not planned	Not planned
Paraguay	ARANDU	Not planned	Not planned
Peru	RAAP	Operational	Pilot
Uruguay	RAU	Pilot	Pilot
Venezuela	REACCIUN	Not planned	Not planned



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6.7.2. Roadmap in RedCLARA (Latin America)

- Uruguay, Venezuela are countries to have their implementation (eduroam and AAI) in a fast track implementation, as they are very advanced in knowledge in this subject;
- Cuba is reactivating their NREN, so it may be a possible country to join MAGIC project;

Mexico

Since the beginning of the project until the first quarter of 2016, CUDI [R9] has carried out the following activities:

1. Initial analysis of the project

The project scope was determined including hosting requirements, connectivity, hardware and software as well as the technical resources needed to carry out the NREN activities under WP2.

CUDI member institutions were invited to become beneficiaries of MAGIC WP2 activities.

2. Development of the base platform

A platform to support the deployment of the Mexican Identity Federation by participating institutions was implemented.

The activities for this included:

- a) The purchase, installation and configuration of servers for the CUDI Identity Provider (IdP);
- b) The development of Federation policies relating to the IdPs and Service Providers (SP) that will be integrated into the Federation;
- c) The planning of the Identity Federation website

3. Training

CUDI technical staff attended a workshop run by MAGIC on AAI and eduroam which was held on 7, 8 and 9 October at UWI Mona Jamaica.

The preparation of training materials to be used in training the technical staff of the institutions participating in the project was also started.



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In the second quarter of 2016, CUDI is implementing a SP to federate services, which has and wants to make available to the federation, likewise, it is implementing a Discovery Service (DS) for the Federation. In addition, it is developing the Identity Federation website.

Work is currently ongoing to define the metadata to be used by the Identify Federation. The corresponding final document is expected to be ready at the end of the second quarter.

The documents setting the policies of the Identify Federation, the IdP and the SP were sent to participating institutions and are awaiting their signature. Equally, each institution was asked to define a service they want to make available to the Identity Federation.

It is expected that by the end of June 2016, the first service will be implemented within the Identity Federation as a pilot AAI.

In addition to this, training of technical staff at Mexican institutions will start at the end of June 2016, to enable them to install and configure an IdP and an SP. This training will be continuous throughout the third quarter of 2016 through in-person workshops and online training.

Once the training of technical staff has been completed, work for the development of a pilot AAI at each institution will begin. It is estimated that this work will be completed by the end of the first quarter of 2017.

eduroam Activities

CUDI currently has eduroam service for local users and is working to integrate into eduroam the eight Mexican institutions supported by MAGIC. UNAM and UAM have both already made significant progress, and we expect them to have an operational eduroam service in the near future.

AAI and eduroam Activities

In May 2016 a workshop open to academic institutions on eduroam and Identity Federations will be held alongside the CUDI Spring Meeting 2016. The workshop will be further complemented with an online course



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7. REFERENCES

- | | |
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8. CONCLUSION

With this document, we can provide that all objectives committed in the project will be achieved if project members meet all planning.



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