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Magic

Middleware for collaborative Applications
and Global virtual Communities

Deliverable D2.2
AAI and eduroam boot camp for experts training



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Periodical Progress Report

MAGIC Deliverable: D2.2 - AAI and eduroam boot camp for experts training

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Abstract: This document describes the development and implementation of in-class training material and methodology to be used on Focal Point expert technical staff training. The material was developed to be used preferably in class. The first workshop took place at ASREN office at Talal Abu-Ghazaleh University (TAGI-UNI), Amman, Jordan and lasted for three days (8 to 10 September 2015). The second one was carried out from October 7th to 9th 2015, in the Jamaica Tertiary Education Commission, under the auspices of the Jamaica Research and Education Network, JREN.



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

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DELIVERABLE ROUTE

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1. EXECUTIVE SUMMARY

This document describes the development and implementation of in-class training material and methodology used on Focal Point expert technical staff training. The first workshop took place at ASREN office at Talal Abu-Ghazaleh University (TAGI-UNI), Amman, Jordan and lasted for three days (8 to 10 September 2015). The second one was carried out from 7 to 9 October 2015, in the Jamaica Tertiary Education Commission, under the auspices of the Jamaica Research and Education Network, JREN.

2. INTRODUCTION

2.1. PURPOSE OF THE DOCUMENT

The main goal of WP2 is develop and provide training sessions in order to capacitate regional experts in AAI and eduroam. This document describes the development and implementation of in-class training material and methodology to be used on Focal Point expert technical staff training. The material developed was planned to be used preferably in class.

Such workshops will also be held in other regions, and the Arab States as well as the Caribbean were the first two.

2.2. TRAINING SESSIONS

2.2.1. FIRST WORKSHOP ON JOINING EDUROAM AND IDENTITY FEDERATION

The workshop on **Joining eduroam and Identity Federation** was realized at Arab States Research and Education Network (ASREN) [R2] office at Talal Abu-Ghazaleh University (TAGI-UNI) on 8 to 10 September 2015 in conjunction with the 1st International Conference on Open Source Software Computing (OSSCOM 2015). ASREN 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 world-class e-Infrastructures and e-services.



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Workshop on Joining eduroam and Identity Federation

Venue and Dates: the workshop took place at ASREN office at [Talal Abu-Ghazaleh University \(TAGI-UNI\)](#) - ([Location Map](#)), and lasted for three days (8-10 September, 2015).

Introduction

The Arab States Research and Education Network in cooperation with German Jordanian University, MAGIC Project and EUMEDCONNECT3 Project conducted a workshop dedicated for staff of National Research and Education Networks (NRENs) and Universities on:

- **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.

Program

First day: eduroam

1.eduroam description

- From federation-level RADIUS server operator point of view
- From institution point of view

Figure 1: Workshop communication in ASREN website.

The ASREN workshop was organised in cooperation with MAGIC Project and EUMEDCONNECT3 Project, and it was designed for staff of National Research and Education Networks (NRENs) and Universities.

The topics discussed were:

- **eduroam:** the secure, world-wide roaming access service developed for the international research and education community.



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- **Federated Access:** effective and secure management of authentication and identity information to build a trust relationship between Identity Providers (IdP) and Service Providers (SP). It devolves the responsibility for authentication to a user's home institution, and establishes authorisation through the secure exchange of information (known as attributes) between the two parties.
- **eduGAIN:** a service developed within the GÉANT Project that interconnects identity federations around the world, simplifying access to content, services and resources for the global research and education community. eduGAIN enables the trustworthy exchange of information related to identity, authentication and authorisation (AAI) by coordinating elements of the federations technical infrastructure and providing a policy framework that controls this information exchange.

There were 11 participants from 6 countries: Algeria, Jordan, Lebanon, Morocco, Palestine and Tunisia, as detailed in the table below.

Title	Full Name	Job Title	Institution	Country
Dr.	Ahmad Alsadeh	Faculty Member	Birzeit University	Palestine
Mr.	AlaaAldin AlRadhi	IPV6 Engineer	IPV6	Jordan
Mr.	Mohamed Aliouat	Computer Engineer	CERIST	Algeria
Mrs.	Aouaouche El-Maouhab	ARN Manager	ARN	Algeria
Mrs.	Fatima Bouslah	ingeneer teacher	Ecole des ingenieurs de l'equipement rura	Tunisia
Mr.	Ghannam Aljabari	Director of Computer Center	Palestine Polytechnic University (PPU)	Palestine
Mr.	Karim Oustouh	Senior Network Engineer	CNRST	Morocco
Mr.	Mohammad Abbass	Networking and Data Communication Directo	American University of Beirut (AUB)	Lebanon
Ms.	Ouafa Bentaleb	IT Engineer	CERIST	Algeria
Eng.	Raed Hindaileh	IT Infrastructure Section Head	Birzeit University	Palestine
Mr.	Ashraf S. A. Mashaleh	Senior Computer Networks Engineer,	Balqa` Applied University	Jordan

Figure 2: List of participants.



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Figure 3: Participants in the region.

Michal Procházka and Jan Oppolzer, both from CESNET (Czech Republic's NREN), produced the training material used in the workshop.



Figure 4: Training material.

The workshop covered the following topics:

- ✓ Identity Federations;
- ✓ Identity Federation Problems;
- ✓ eduGAIN;
- ✓ eduroam;
- ✓ eduroam policy.



Figure 5: Workshop session.



Figure 6: Workshop participants.

The suggested actions following the training are as follows:

- Morocco:
 1. to continue enhancing the eduroam and IdP services;
 2. to work on implementing ASREN Community Portal.
- Jordan: to start implementing eduroam in Balqa Applied University which includes 20 campus location in all Jordan;
- Algeria: to start implementing eduroam and continue developing their IdP services. Will also work on NRENum.net;
- Palestine: to start implementing eduroam in 2 universities;
- Lebanon: started implementing eduroam in AUB and will work on IdP later;
- Egypt: though Egypt people didn't attend, they will use the training material to start implementing eduroam first;
- Any NREN completes implementing eduroam and IdP before the end of November 2015 will be recognized and appreciated during e-AGE 2015 Conference in Casablanca 7-8 December 2015.

2.2.2. SECOND WORKSHOP ON JOINING EDUROAM AND IDENTITY FEDERATION

The Caribbean Knowledge and Learning Network (CKLN) [R3] represents the Caribbean region National Research and Education Networks (NRENs) in the MAGIC project along with a number of other global partners. As such, CKLN coordinated the 3-day training of trainers workshop, on eduroam and Federated Identity, from 7 to 9 October 2015. Other elements of the MAGIC project include working with science communities on themes of common interest, and using the middleware being learned and developed in the developing regions.



Figure 7: Workshop communication in CKLN website.

The Jamaica Research and Education Network, JREN, along with the UWI, hosted this important workshop and saw participation from Jamaican tertiary institutions, as well as representatives from institutions and NRENs in Grenada, Mexico and the Dominican Republic.



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Figure 8: Participants in the region.

Name	Organisation	Country
1. Patrick Anglin	UWI	Jamaica
2. Juan Bailey	CKLN	Grenada
3. Reiner Campillo	CKLN	Dominican Republic
4. Garrick Blake	UWI	Jamaica
5. Mrs. Maureen Kerr-Campbell	Systems Librarians, UWI	Jamaica
6. Mr. Godfrey Walker	Systems Librarians, UWI	Jamaica
7. Ms. Elmarine Jimenez	UTech	Jamaica
8. Fernando Aranda	CUDI	Mexico
9. Luis Manuel Castro	CUDI	Mexico
10. Ms. Natanya Gillard - Ricketts	Montego Bay Community College	Jamaica
11. Ezmond Farquharson	Montego Bay Community College	Jamaica
12. Noe Argelis Luzon Rodriguez	PUCMM	Dominican Republic
13. Stephen Sanchez	PUCMM	Dominican Republic
14. Oscar Alejandro Lazala Vasquez	PUCMM	Dominican Republic
15. Keisha Edwards-Hamilton	Moneague College	Jamaica
16. Robert Lancashire	JREN	Jamaica

Figure 9: List of participants.

The three main goals of the workshop were to contribute to strengthening of NRENs in eduroam service deployment for the Roaming Operator and Campuses (UWI Mona is currently working on deploying eduroam), Federation Policy Development, and SAML federation deployment (for campus, federation and inter-federation. Participants are expected to develop Federation Identity Policies in

their countries as well as develop eduroam for their institutions, while training others as part of the MAGIC pilot implementation.



Figure 10: Maxine Henry-Wilson, Acting Head of JREN participates in the Workshop session.

Actual pilot of an eduroam deployment was done during the workshop. This development paved the way for JREN's proposed deployment of eduroam through the UWI Mona Campus by the first quarter of next year.

The workshop was facilitated Mr. Brook Schofield, Project Development Officer from GÉANT, the pan-European research and education network that interconnects Europe's National Research and Education Networks (NRENs). Most of Mr. Schofield's recent work is on dissemination of eduroam, which works hand-in-hand with federated identities. Brook's expertise and obvious wealth of experience and passion for his work coupled with his very easy-going style made for a very productive and engaging three days.



Figure 11: Kenneth Sylvester (Chief Executive Officer of CKLN) and Brook Schofield (Project Development Officer fo GÉANT).

Brook also presented ATLAS Probes [R4] to the representatives present for deployment in their networks, allowing the region to commence participation in the RIPE NCC project. RIPE Atlas employs a global network of probes that measure Internet connectivity and reachability, providing an unprecedented understanding of the state of the Internet in real time. RIPE NCC is building the largest Internet measurement network ever made. This was an additional bonus to the workshop with further deployment being considered.

The workshop was held at the Jamaica Tertiary Education Commission conference room located on the Mona Campus of the UWI and is the address used for the Jamaica National Research and Education Network, JREN.



The suggested actions following the training are as follows:

- Jamaica, Dominican Republic and Mexico each to set up a Federation;
- UWI Mona setting up Eduroam (pilot, using UWI servers). Use these for a JREN pilot, as well as regional deployment;
- Participants to encourage and advocate for eduroam to IT Directors at universities;
- CKLN – seek additional PR Material in French and Spanish to support participants in their advocacy;
- Develop technical paper on how to establish an identity provider on your campus, deploying virtual machines – CKLN will undertake this with assistance from Brook and other community members;
- CKLN to work with interested parties in Barbados and the Bahamas (contacts have been forwarded to Brook for follow-up);
- JREN will seek to write the Policy document based off the international template (Prof. Robert Lancashire had said he would give it a go for JREN);
- Encourage the other NRENs to also prepare a policy document.

3. REFERENCES

[R1]	MAGIC Website	http://www.magic-project.eu
[R2]	ASREN website	http://asrenorg.net/
[R3]	CKLN website	http://www.ckln.org
[R4]	RIPE Website	https://atlas.ripe.net/probes/

4. DOCUMENT AMENDMENT PROCEDURE

Requests for amendments to this document must be made to the author, Leandro Guimarães, WP2 - RNP, leandro.guimaraes@rnp.br, and copied to the Management of the MAGIC project.

5. GLOSSARY

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



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6. CONCLUSION

Originally was planning only one expert training session in the MAGIC project. This is described in "T2.2 - Creation of an in class training to train regional experts in AAI and eduroam in order to replicate the action in their NRENs and with their customers", and detailed as: "an in class training (boot camp) will be developed by this Task to capacitate NREN technical experts in order to replicate the action in their NRENs and with their customers". However, the project team have considered more effectiveness if each region planned and organize regional workshops, doing this, MAGIC project have saved some travel budged, to be use in another activities under the project. There is another session planned to be held in Africa next year, besides that, the project team is also negotiating with others regions to have expert sessions as well.



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