

Intro to Federated Identity with eduroam and eduGAIN

Brook Schofield

eduGAIN Product Manager GÉANT

Virtually @ Eko-Konnect, Lagos, Nigeria 7th October 2015



The computer lab



Image URL: http://www.fox.temple.edu/cms_about-fox/technology/it/resources/computer-labs/



University Modem Pool



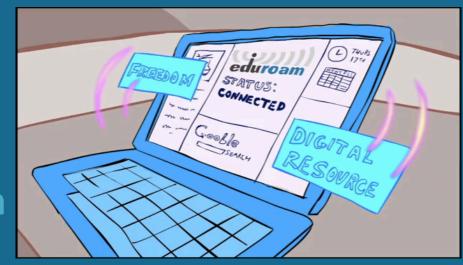
Image URL: http://www.epicycle.org.uk/weblog/2003/feb2003-2.htm

Image URL: http://encyclopedia2.thefreedictionary.com/modem

GDDAN eduroam

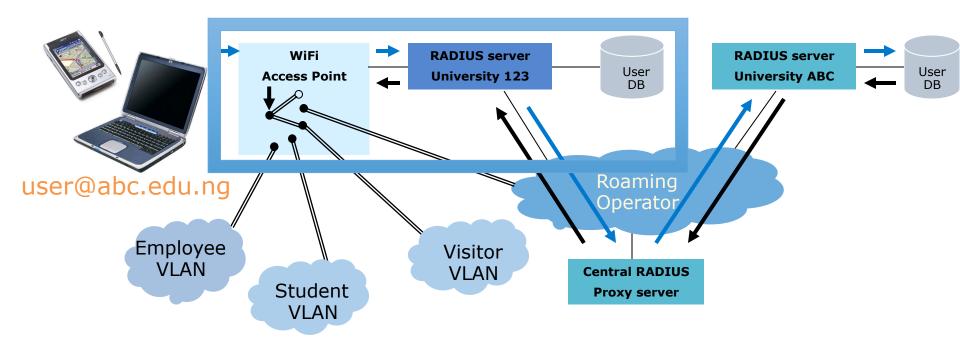
education roaming

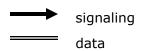
Secure Wireless Service for Research and Education



eduroam



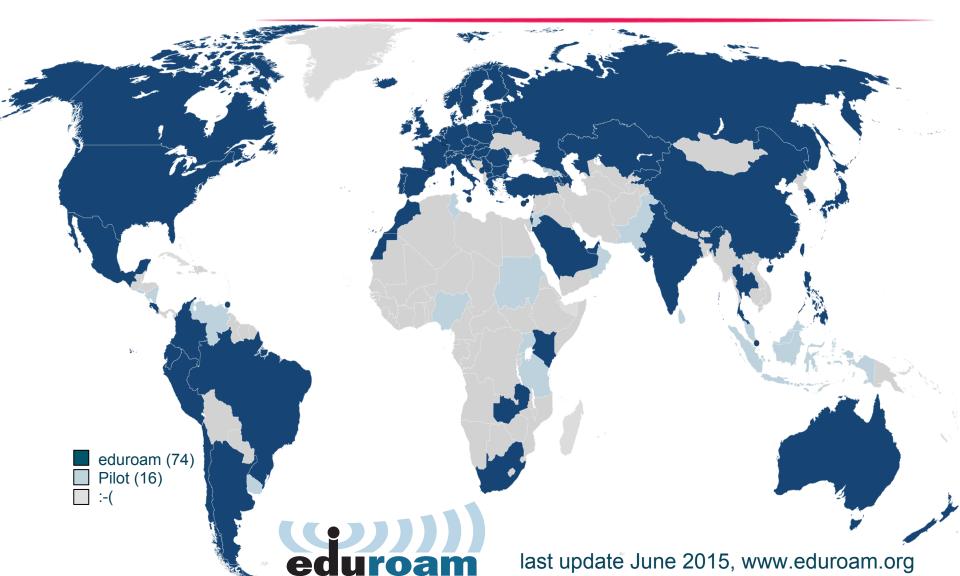




- Trust based on national policy
- Security based on 802.1X/RADIUS
- VLAN assignment to separate users

eduroam Roaming Operators: World Wide



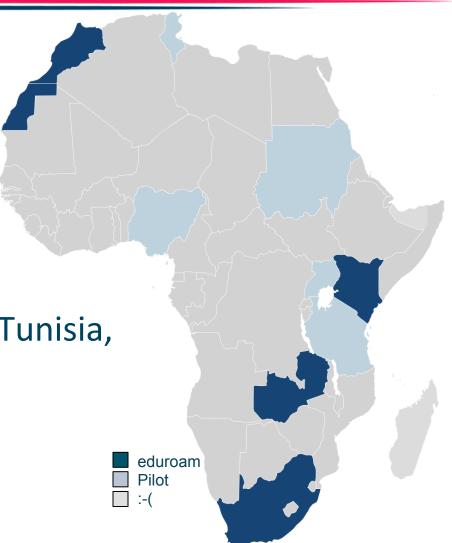


eduroam in Africa



4 production deployments
Kenya, Morocco,
South Africa, Zambia

5 pilot deployments
Nigeria, Sudan, Tanzania, Tunisia,
Uganda





Back into the computer lab



Image URL: http://www.fox.temple.edu/cms_about-fox/technology/it/resources/computer-labs/

The Situation on Campus: Lots of Applications





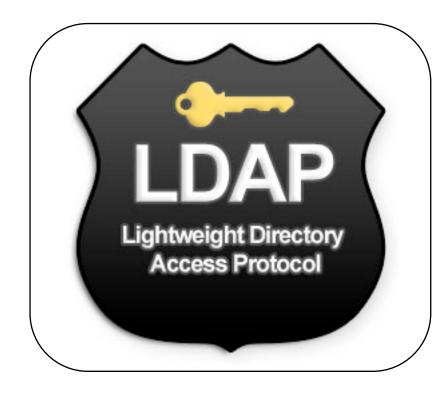
- More applications for students and researchers
- Applications require authentication and authorization



Solution #1: LDAP

- Centralised Password & Account Storage
- Re-use of Accounts/Password across applications
- Focus password security at one location

One account for all applications





Solution #2: Web Single Sign-On (SSO)

- Centralised Account Login
- Re-use of Accounts across applications without another login (while your session is valid)
- No Man-in-the-Middle password attack from LDAP connected applications
- Still limited to the campus...



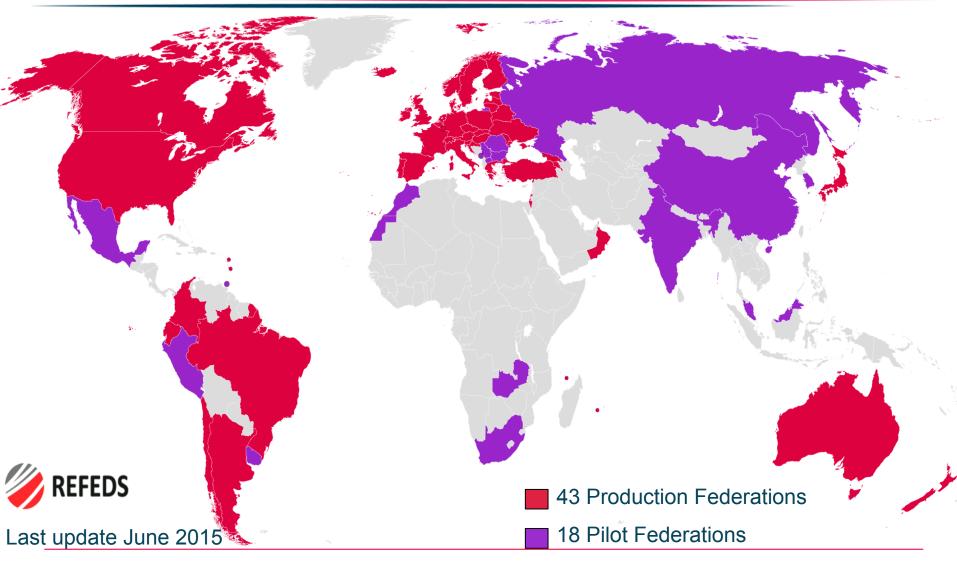
Solution #3: Federations Lots of Federations...





Identity Federations: World Wide





No interconnection between federations





Networks · Services · People www.geant.org



(3))) eduroam



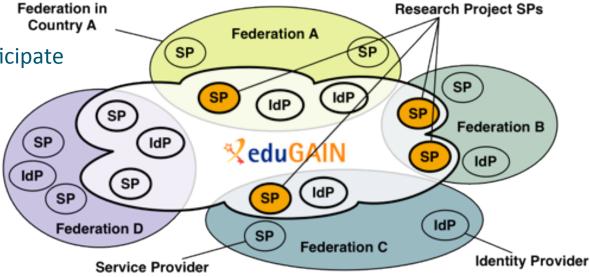
eduGAIN: Global Authentication INfrastructure



- Contribute the valuable resources from your federation to a global pool
- Services:
 - Free
 - Licenced
 - Project Specific



• Allow everyone to participate

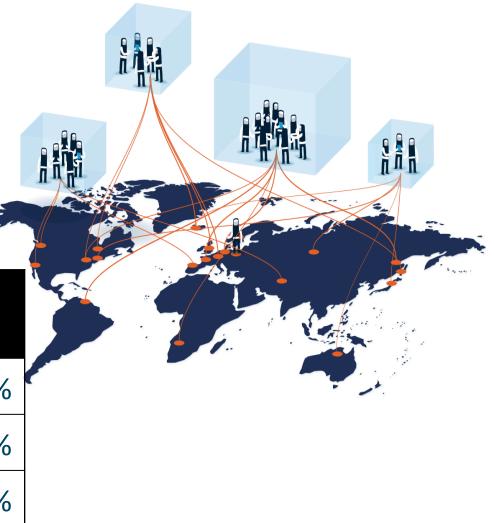


Internetworking is powerful!



- 44% of all IdPs in eduGAIN
 - We want 100% of IdPs
 - We want 100% of Universities to have an IdP also

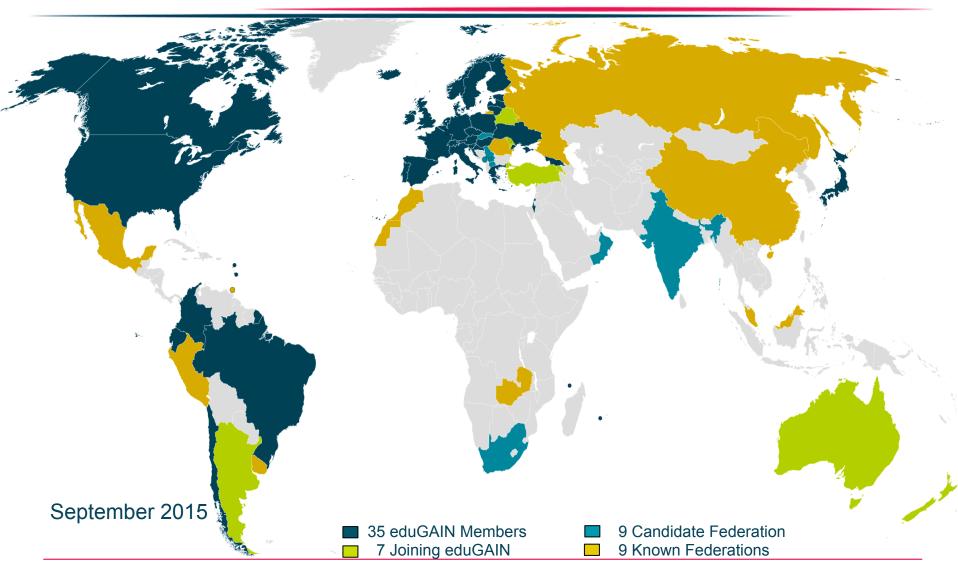
	Globally	eduGAIN	%
Entities	10456	2418	23%
IdPs	3277	1434	44%
SPs	7179	985	14%



Networks · Services · People www.geant.org

eduGAIN & Federation Status

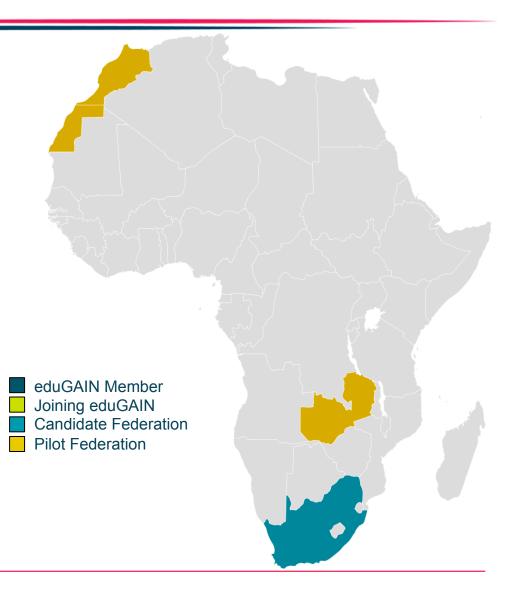




Identity Federations and Africa



- eduGAIN Participant / Joining
 - None ⊗
- eduGAIN Candidate
 - South Africa
- Pilot/Known Federations
 - Morocco → eduIDM
 - Zambia (supported by SURFnet)
 - NgREN Federation
 - WACREN EduID



TNC16 - Building the internet of people



Date: 13-16 June 2016

Location: Prague, Czech Republic



Call for proposals:

GÉANT invites community members to bring to the table their proposals for topics, sessions, lightning talks, posters and demonstrations.

Deadline: 30 November 2015

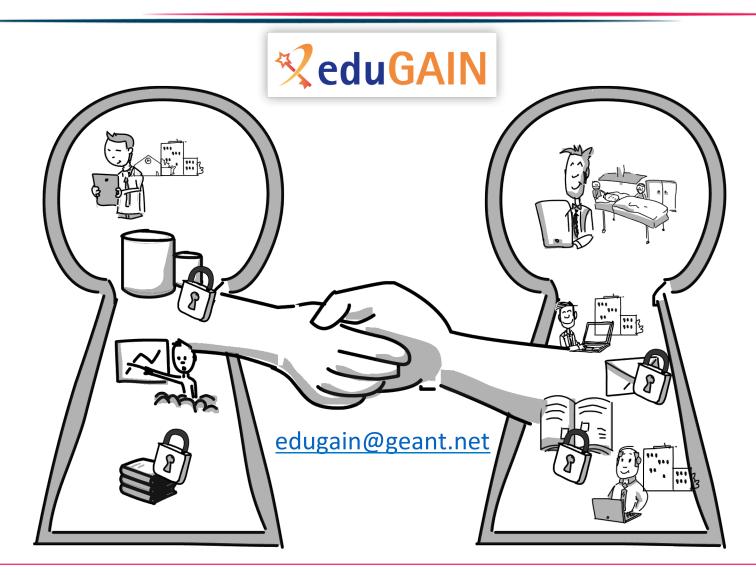
Website: http://tnc16.geant.org



20 Networks · Services · People www.geant.org



We're here to help...



Thank you and any questions



Networks · Services · People www.geant.org

