eduroam, eduGAIN and Social Identity Mapping

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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

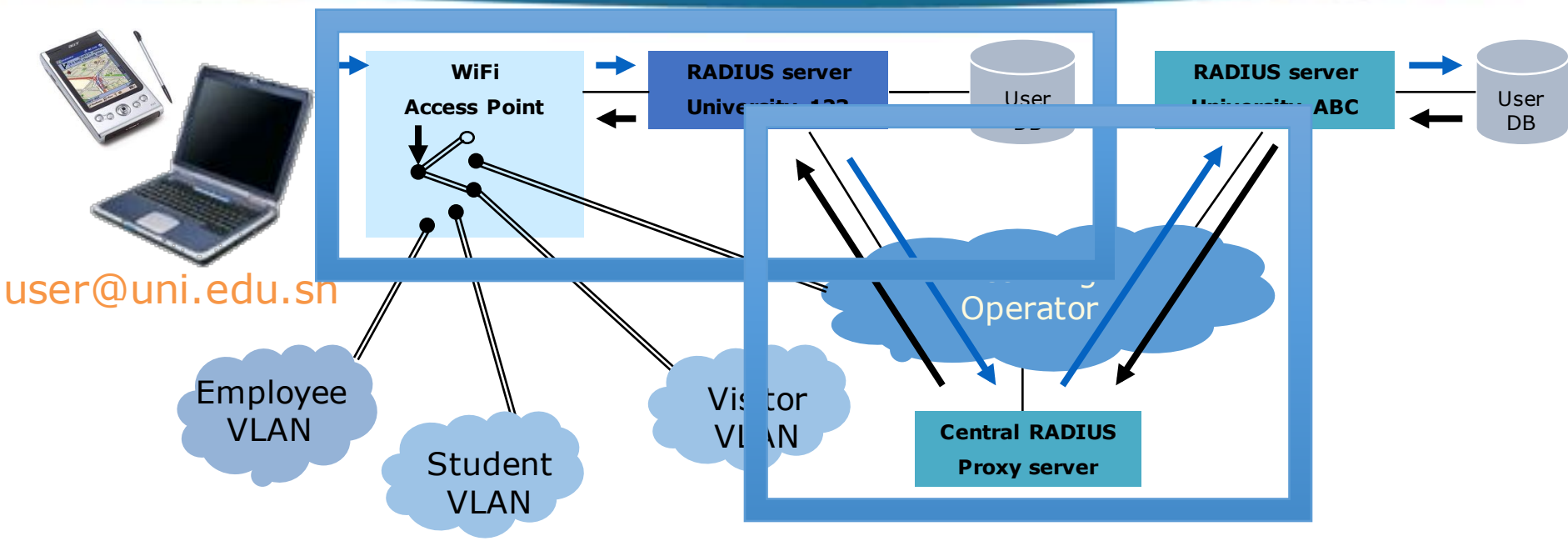
Image URL: http://encyclopedia2.thefreedictionary.com/modem

eduroam

education roaming

Secure Wireless Service
for Research and Education

eduroam Infrastructure



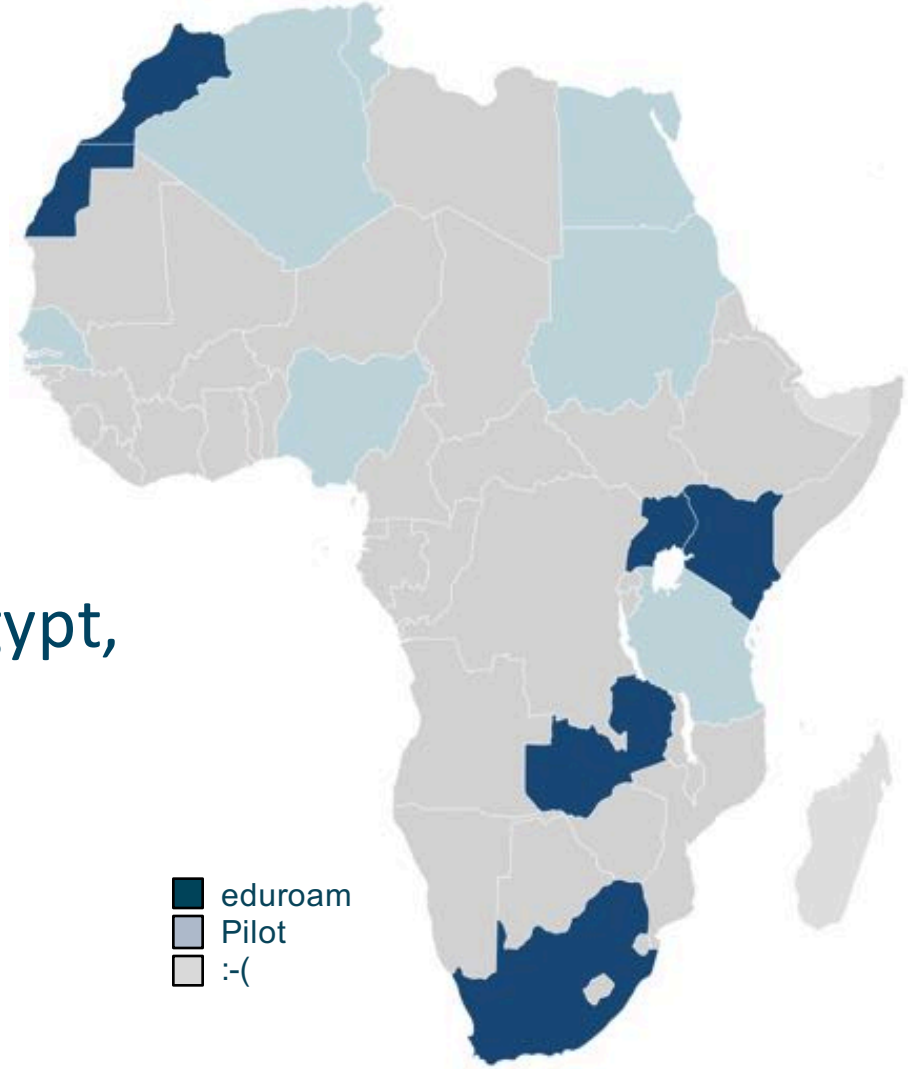
- Trust based on national policy
- Security based on 802.1X/RADIUS
- VLAN assignment to separate users

Where is eduroam?

eduroam in Africa

- 5 production deployments
  Kenya, Morocco, Uganda
  South Africa, Zambia

- 7 pilot deployments
  Nigeria, Senegal, Algeria, Egypt,
  Sudan, Tanzania, Tunisia.



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

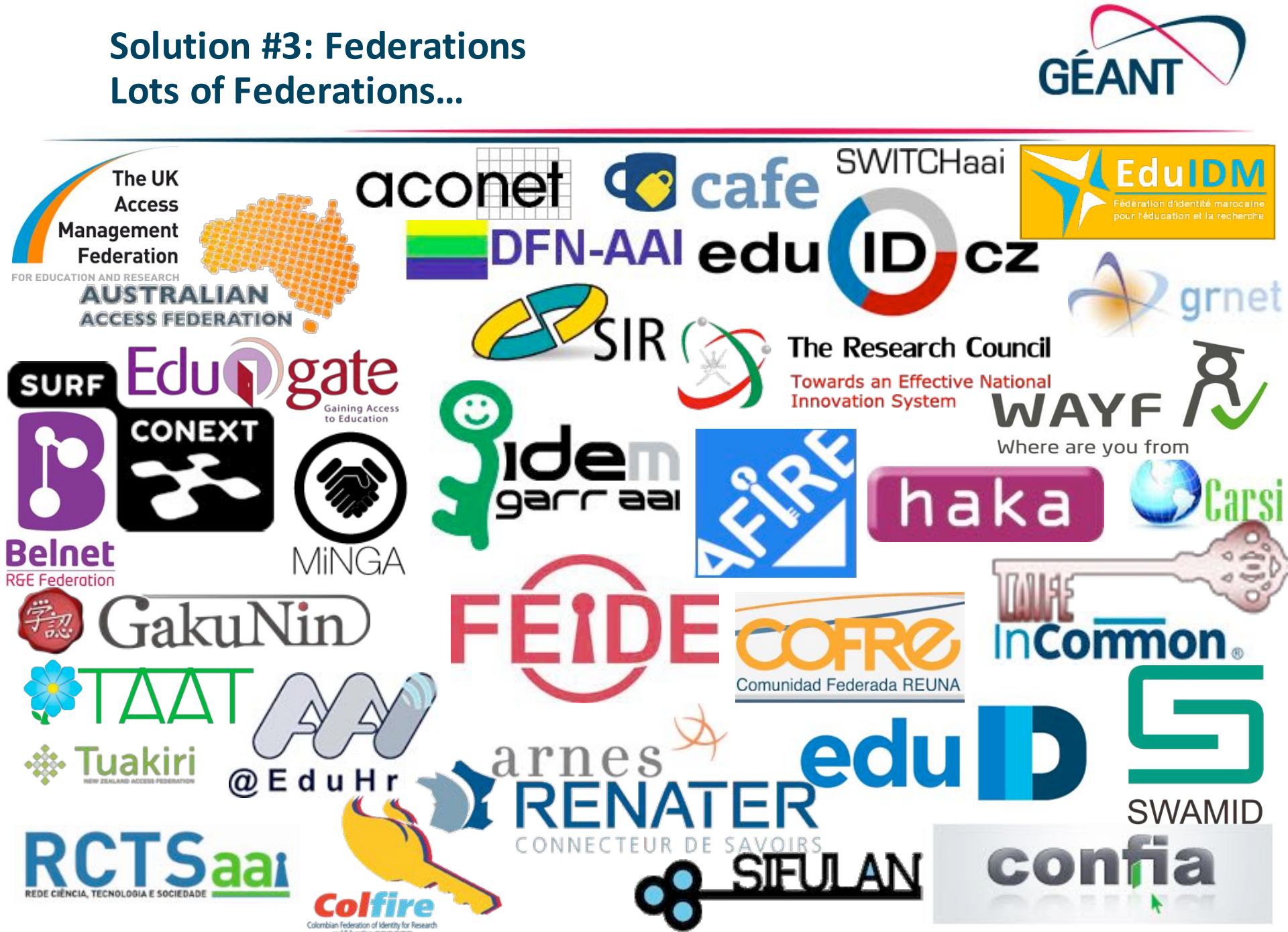
- Centralised Password & Account Storage
- Re-use of Accounts/Password across applications
- Focus password security at one location
- One account for all applications

Image URL: http://www.volkanoransoy.com/

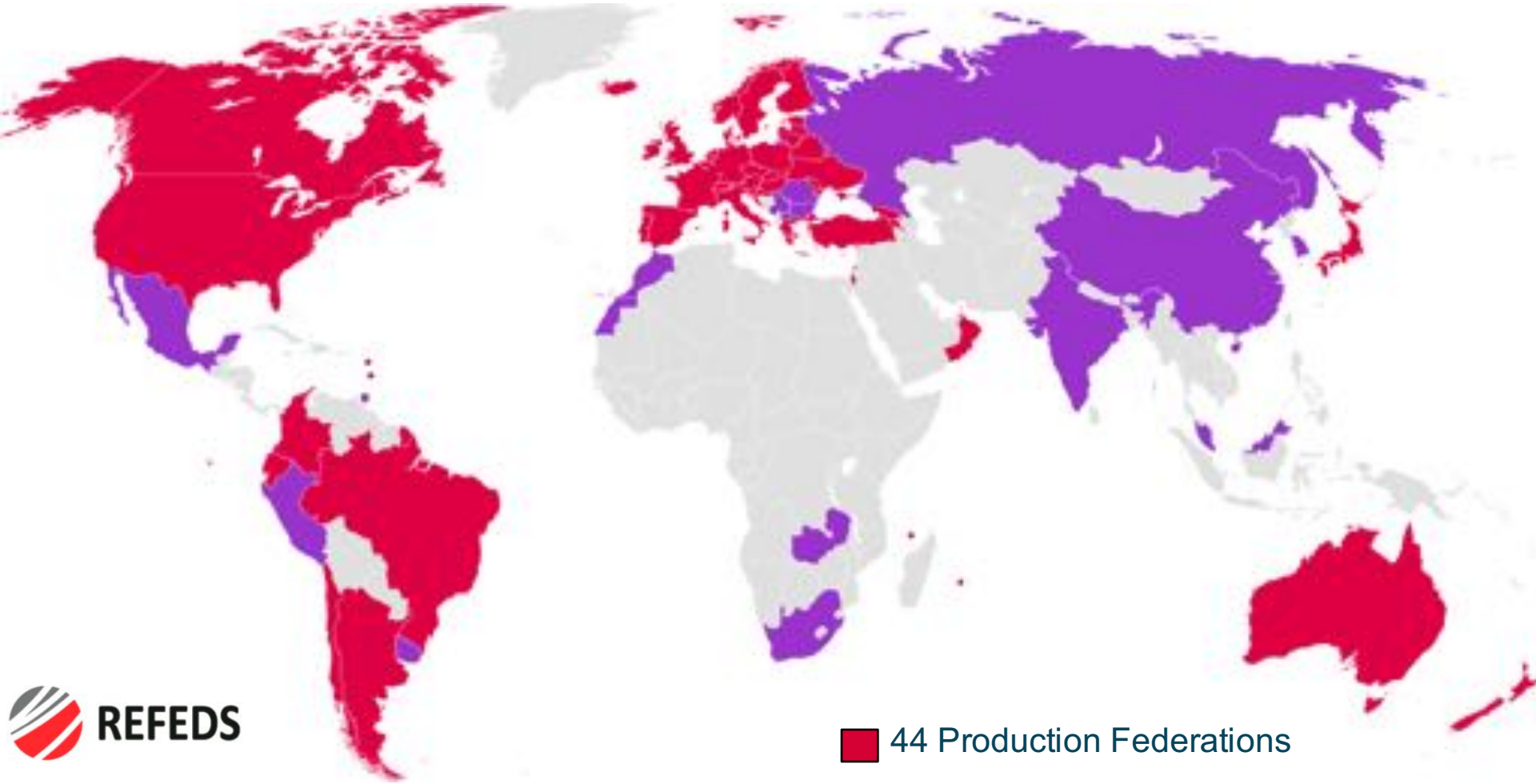
Solution #2: Web Single Sign-On (SSO)

- 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



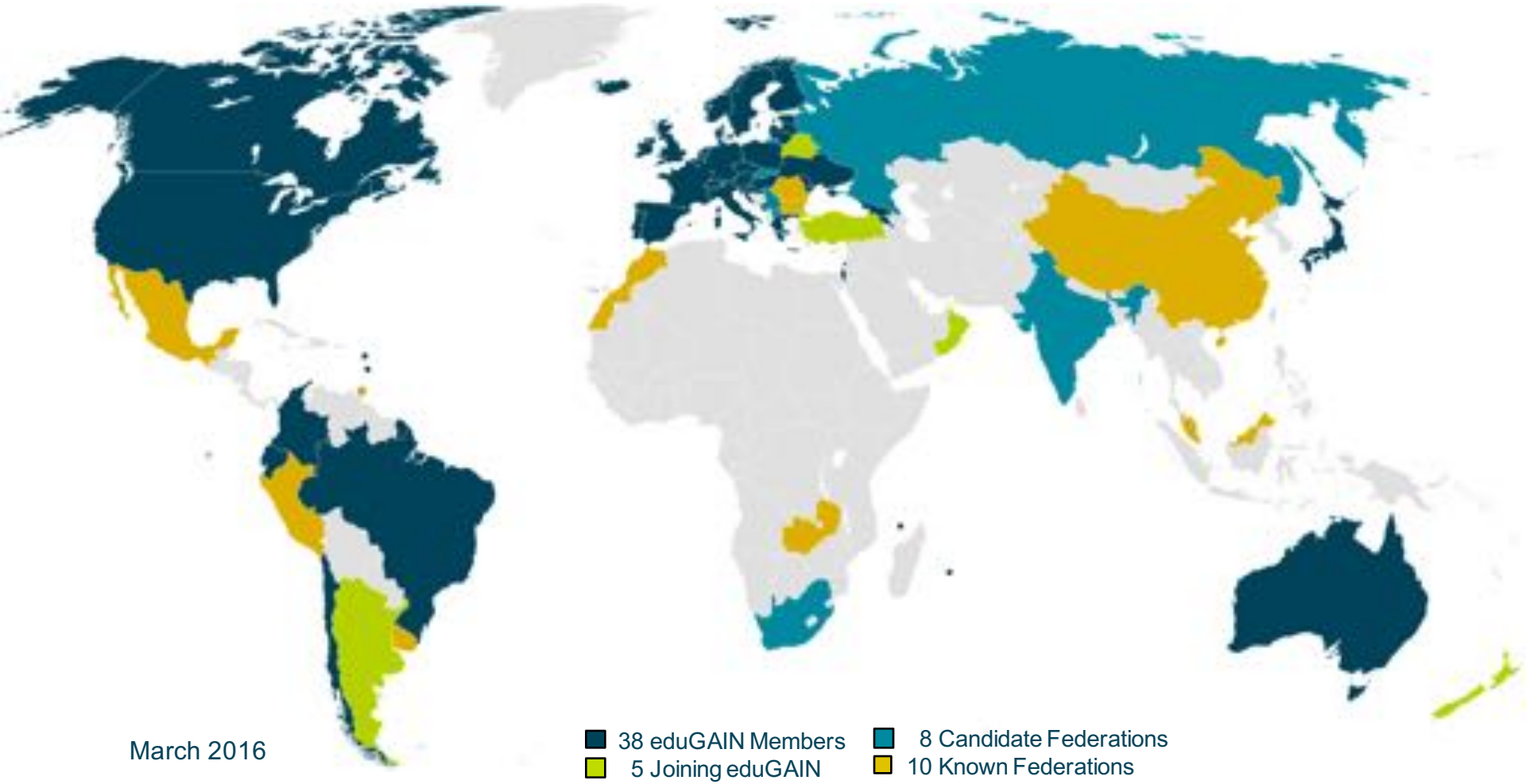
No interconnection between federations

*G*lobal *A*uthentication *IN*frastructure

eduGAIN: *G*lobal *A*uthentication *IN*frastructure

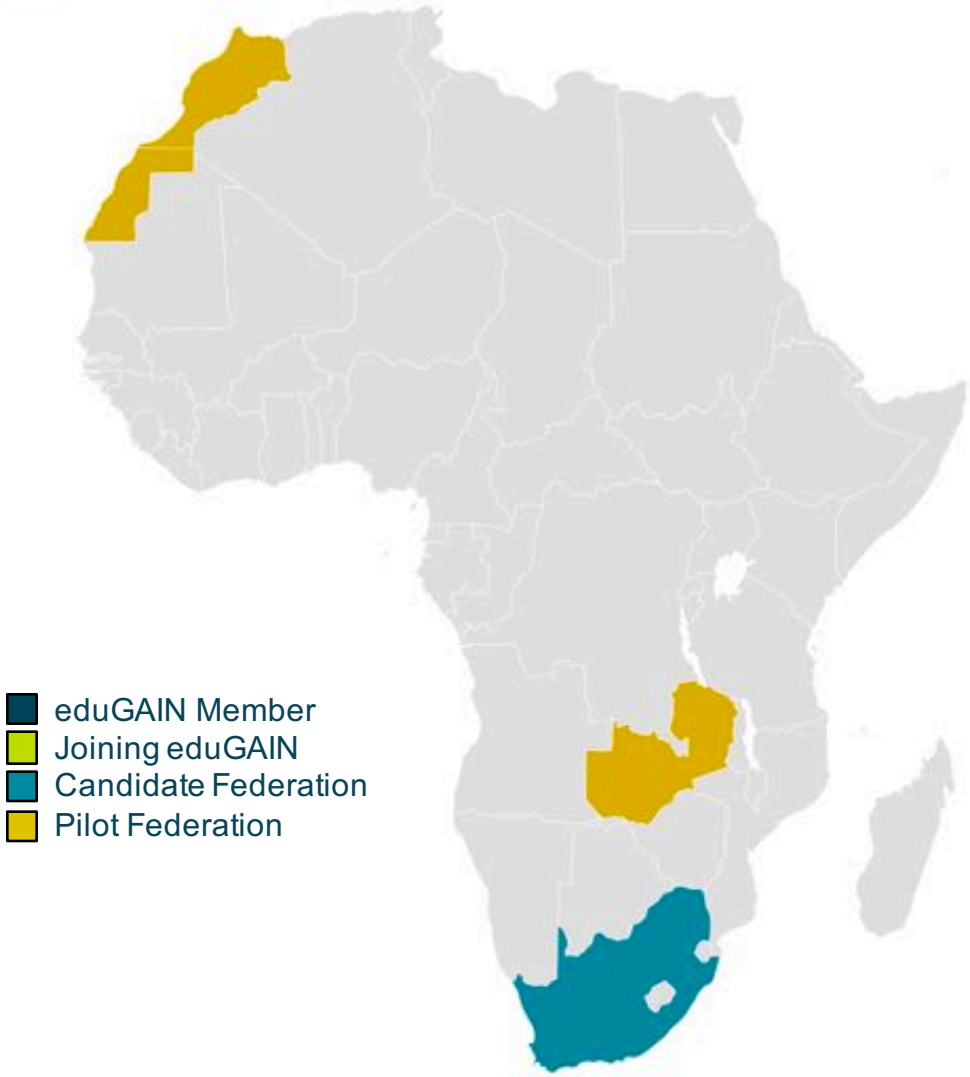
- Contribute the valuable resources from your federation to a global pool
- Services:
  - Free
  - Licenced
  - Project Specific
- People:
  - Allow everyone to participate

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*



Federation Development Criteria

elcira
Europe Latin America Collaborative e-Infrastructure for Research Activities

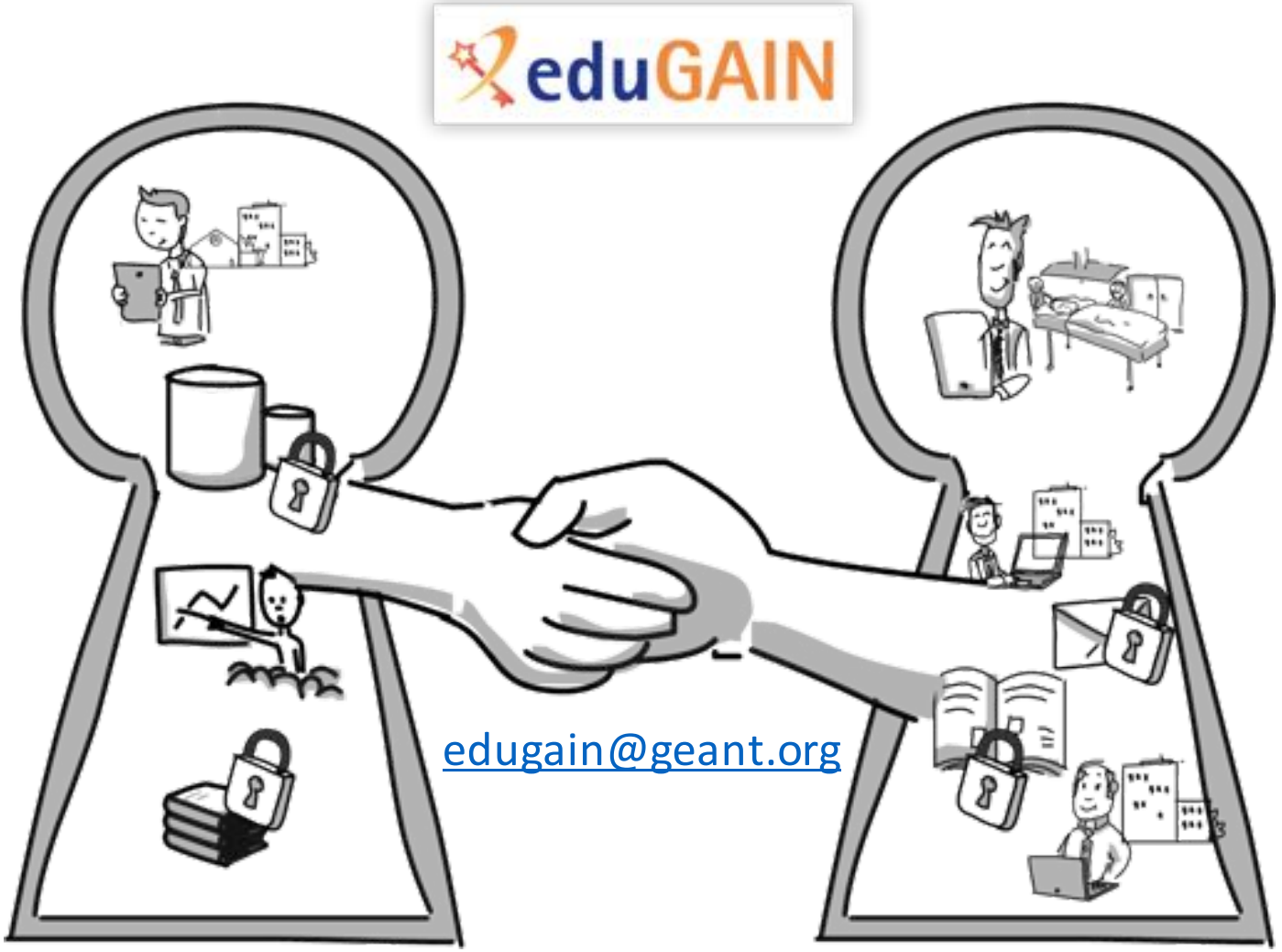
Pilot
- Name, Webpage, Metadata Feed

Production
- Policy for IdPs & SPs

Candidate
- Metadata Registration Practice Statement

eduGAIN
- Declaration Signed, Metadata Feed Validated

We're here to help…



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Social Identities…

A family of services

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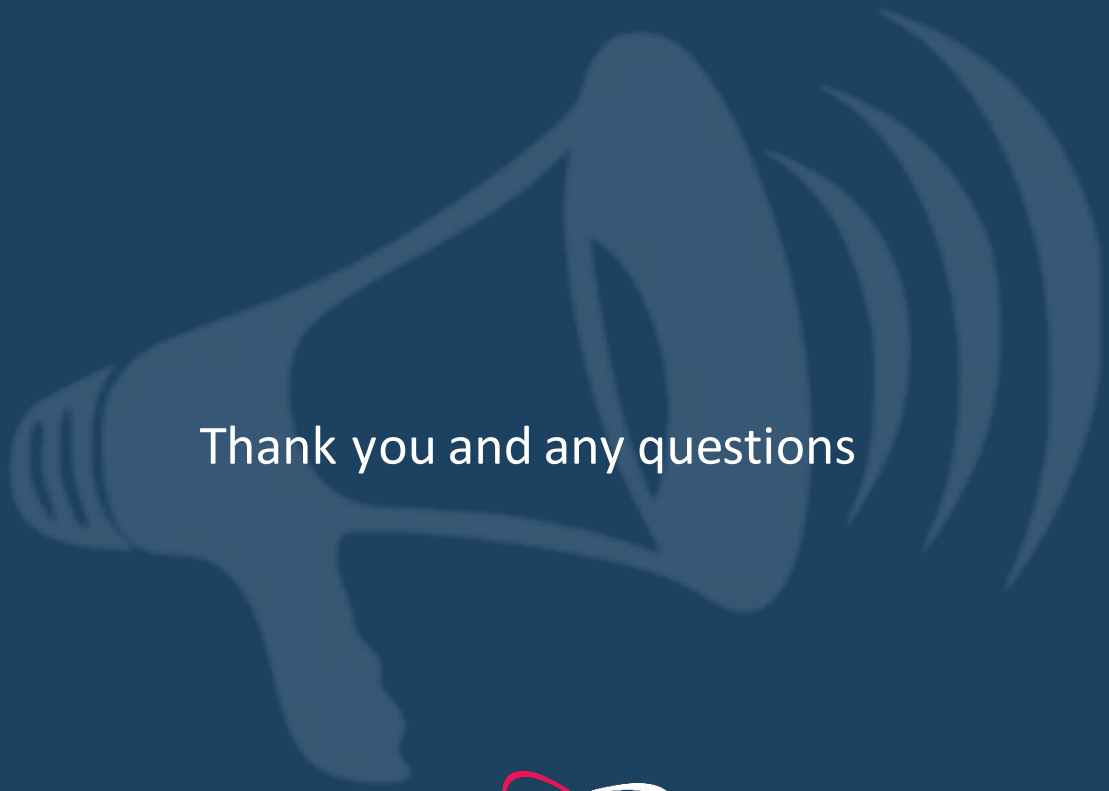

Thank you and any questions

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