#### « networking the networkers »



EIFL Thursday, December 15<sup>th</sup>, 2011

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# **Building Federated Identity Infrastructure**

Slide 1 TRANS-EUROPEAN RESEARCH AND EDUCATION NETWORKING ASSOCIATION

## **Building an Identity Federation**

› Chicken & Egg

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- > Identity Providers with People
- > Service Providers with Resources
- > How can I be an identity provider?
  - > Do you have information on people?
  - > Choose some software...
  - > Success!
- > What about service providers?
  - > EIFL talks to publishers
  - > There are other resources available too...
- > Why do federated identity at all?

# How big is your problem?

- > How many "login" boxes do you have in your campus?
  - > If it is more that one you need federated identity.
  - > Use Google to search

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- > site:auca.kg login
- > site:your.domain sign-in
- > site:your.domain.org password
- > Then make a speadsheet...

|    | A                     | В                                         | С             | D                  | E                              | F          |  |
|----|-----------------------|-------------------------------------------|---------------|--------------------|--------------------------------|------------|--|
| 1  | Site                  | URL                                       | Product       | Audience           | Authentication                 | Importance |  |
| 2  | Course management     | http://e-course.auca.kg/                  | Moodle        | Staff/Students     | Windows Username/Password      | High       |  |
| 3  | e-Portfolio system    | http://eportfolio.auca.kg/                | Mahara        | Staff/Students     | Windows Username/Password      | Moderate   |  |
| 4  | Alumni system         | http://eportfolio.auca.kg/alumni.php      | ?             | Alumni             | Separate System                | Low        |  |
| 5  | Library Remote Access | http://library.auca.kg/en/remote_access/  | Ezproxy       | Library Users      |                                |            |  |
| 6  | Library Databases     | http://library.auca.kg/en/databases/      | Off-site      |                    | IP Auth (no off campus access) |            |  |
| 7  | Library Patron System | http://library.auca.kg/en/authentication/ | Follet        | Library Users      | Self Sign Up                   |            |  |
| 8  | Forum system          | http://forum.auca.kg/                     | InvisionPower | Uni Community      |                                |            |  |
| 9  | Webmail               | http://mail.auca.kg/                      | Roundcube     | Staff/Students     |                                |            |  |
| 10 | Apply Online          | http://applyonline.auca.kg/               |               | Potential Students |                                |            |  |
| 11 | Career Application    | http://career.auca.kg/                    |               | Students           |                                |            |  |
|    |                       |                                           |               |                    |                                |            |  |



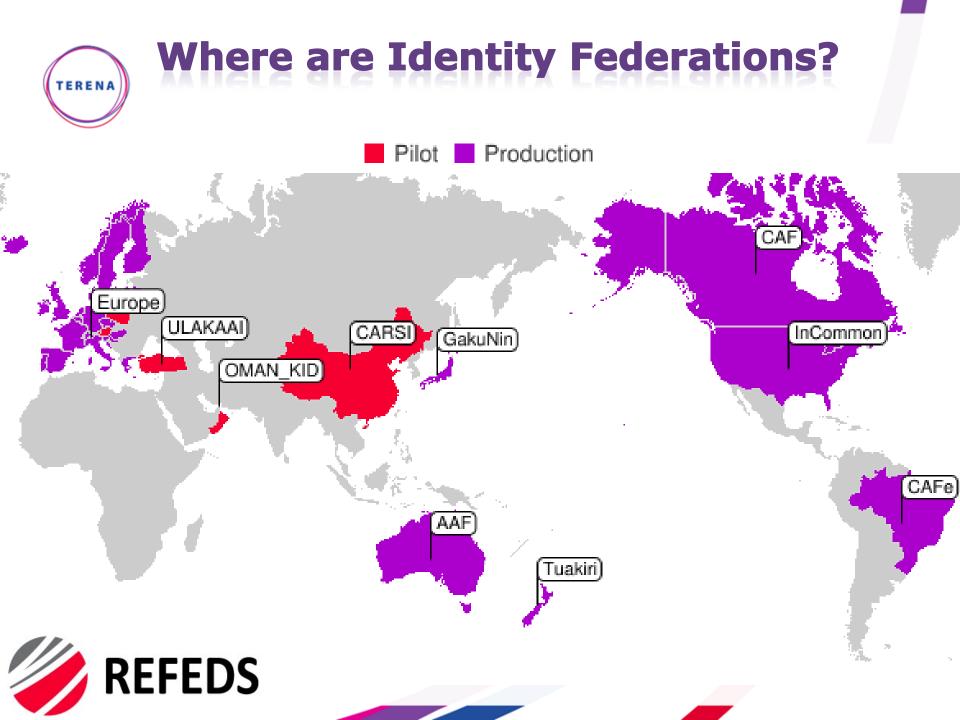
 Concentrate on the skills you have or those you want to develop.

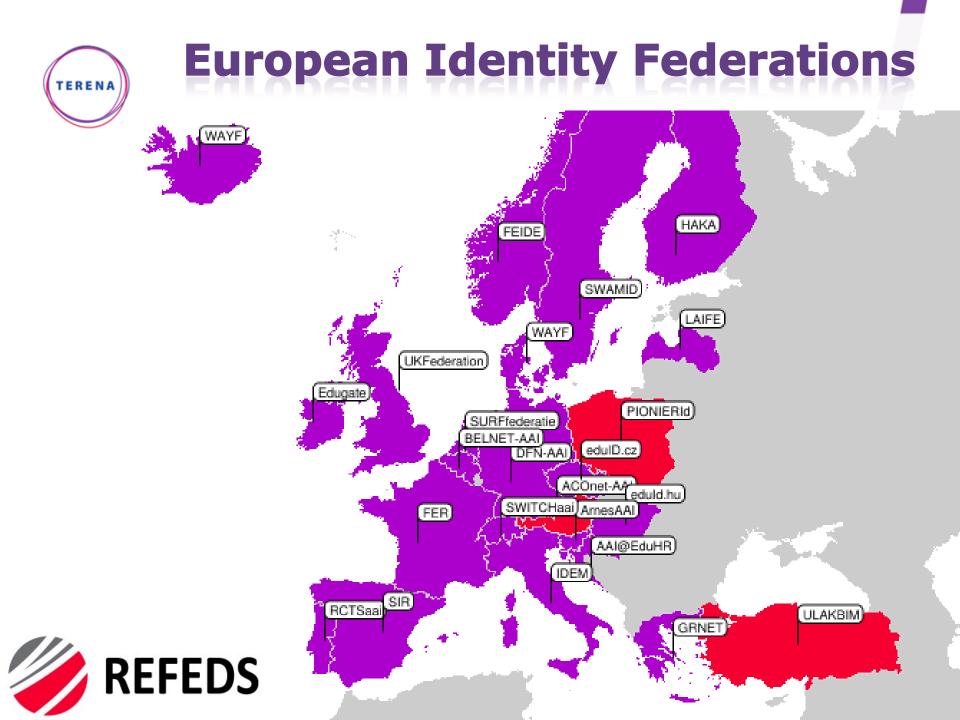
## Shibboleth.

- > Separate IdP/SP/DS
- > IdP is Java (runs within Tomcat)
- > SP is C (supports Apache + IIS)



- > simpleSAMLphp from UNINETT
  - > Integrated IdP/SP/Bridge/Disco
  - > SAML 2.0/OAuth/OpenID
    - > Facebook, Google, Windows Live
  - > PHP (AUCA run their IdP on Microsoft Windows)
  - Multi-lingual interface (includes support for RTL languages).





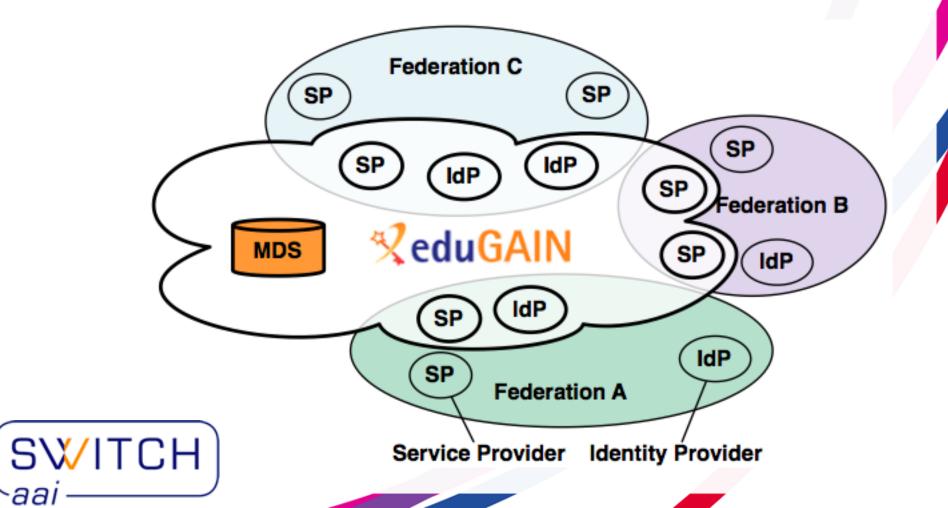


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### How do I connect to everyone?

> eduGAIN solves the scaling problem for Services

 No longer join "customers" federation but instead join your "preferred" federation.



# What should I do next?

› Download the EuroCAMP Materials



- > Sign-up for a Dynamic DNS account (free)
- > Run through the training
- > Provide me with feedback is it confusing?
- > Deploy a Campus Identity Federation
  - > AUCA didn't have the above materials!
  - > AMRES is scaling the service for Serbia.
- > Tell publishers/EIFL that this is what you want!
- > Technology is only part of the solution
  - > Policy is important too!
  - Technology can work on your campus now and build a valuable service to justify future policy effort.





- > Building Federated Identity
  Infrastructure 3-Day Event
  - > simpleSAMLphp IdP
  - > Shibboleth SP
  - > JANUS for Metadata Management

#### > 19 Participants / 9 countries

- > Armenia
- > Azerbaijan
- > Belarus
- > Estonia
- › Lithuania
- › Moldova
- > FYR Macedonia
- > Serbia
- > Turkey



# EuroCAMP Amsterdam



# > Building Federated Identity Infrastructure 3-Day Event

- > simpleSAMLphp IdP
- > Shibboleth SP
- > JANUS for Metadata Management

#### > 19 Participants/10 countries

- > Bulgaria
- > Cyprus
- > Estonia
- > Georgia
- > Israel
- > Latvia
- > Lithuania
- > Romania
- > Russia
- > Slovakia

## What's in the course materials?

› Virtual Machine Player

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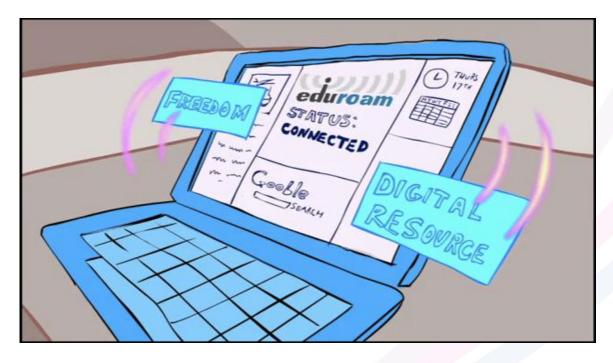
- > VirtualBox or equivalent
- > Virtual Machine Image
  - > Based on TurnKey LAMP
  - Preinstalled Apache, SSL
    Certificates, simpleSAMLphp
    Shibboleth, MySQL, LDAP,
    DynamicDNS
- > Training Materials
  - > Intro to Federated Identity (activity)
  - > Setup your environment (hands on VM)
  - > My First IdP (hands on and information)
  - > Shibboleth Service Provider (hands on)
  - > JANUS for Metadata Management

| nKey I | myfirst-idp [Running]<br>.inux Configuration Console                              |
|--------|-----------------------------------------------------------------------------------|
|        |                                                                                   |
| - 1    | Usage                                                                             |
|        | EuroCAMP Training Virtual Machine                                                 |
|        | You may access this Virtual Machine over the network using the following methods: |
|        | Web: https://HOST12-WS3.LAB.IAMFEDERATED.ORG                                      |
|        | http://192.87.38.114                                                              |
|        | Webmin: https://192.87.38.114:12321                                               |
|        | PHPMyAdmin: https://192.87.38.114:12322<br>SSH/SFTP: root0192.87.38.114 (port 22) |
|        |                                                                                   |
|        | Built with TurnKey Linux http://www.turnkeylinux.org                              |
|        | (Advanced Menu>                                                                   |
|        |                                                                                   |
|        |                                                                                   |
|        |                                                                                   |



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# ecuroam



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#### "Give a Man a Fish, Feed Him For a Day. Teach a Man to Fish, Feed Him For a Lifetime" Lao Tzu

Slide 14

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