Presentation Overview

- History of identity federation and eduGAIN
- How Interfederation and eduGAIN works
- Facts and Figures
- Data Protection and Beyond Europe
Identity Federations World Wide

31 Production Federations
16 Pilot Federations

Last update April 2014
Identity Federations Are Traditionally Limited by Country Borders

All Federations:

- Support SAML2
- education & research
- Use same/similar user attributes
Why and How of eduGAIN: Interconnect Identity Federations

Provide legal and technical frameworks to make Identity Federations interoperate = interfederate
Interfederation Use Cases

**Researchers**
Often work together in international research projects, which operate many web-based services that need authentication. Services are in different countries/federations. Thanks to Interfederation researchers can use their institution's account.

**Lecturers**
Can start e-learning collaborations across country borders. Create (costly) e-learning content collaboratively or easier "sell" it to other universities abroad.

**Content Publishers**
Companies like Elsevier/Thomson Reuters/etc. already joined multiple identity federations. Cumbersome for them and for federation operators. Thanks to Interfederation: Join one, be connected to many!
Interfederation with eduGAIN

- **Global Authentication INfrastructure for education**

- An interfederation service *primarily* for Research & Education
  Connects existing SAML-based academic identity **federations**

- SAML2-based
  Currently mostly web-based services but non-web services would be supported too (e.g. via SAML ECP)

- Developed and funded by European GÉANT projects (www.geant.net) but open also to non-European federations

- Web site: www.eduGAIN.org
**eduGAIN:**
What Is it and How Does it Work?

- **eduGAIN** provides policy framework and standards to build trust
- **SPs** and **IdPs** of participating federations should opt-in for **eduGAIN**
- **MDS** fetches, aggregates and republishes metadata
eduGAIN: Legal Trust and Profiles

- **eduGAIN Declaration (3 pages)**
  - Signed by each eduGAIN Member Federation
  - Contains 13 rules that federations promise to obey

- **eduGAIN Constitution (10 pages)**

- **Profiles for SAML, Metadata, Attributes, ...**

- **GEANT Data Protection Code of Conduct**
  - Declaration of Service Providers to "behave well" with user data
  - Applicable in EU/EEA or similar
eduGAIN: Who is Behind it and How Is it Governed?

Current Governing Structure

- **eduGAIN Steering Group (eSG)**
  Each member federation has one representative. Votes on which new federations are accepted or policy changes.

- **eduGAIN Executive Committee (eEC)**
  Approves changes to the constitution and has veto right. Currently nominated by GEANT Executive Committee.

Other Key Persons

- Operational Team (Tomasz Wolniewicz, UMK, PL)
- Policy & Code of Conduct (Mikael Linden, CSC, FI)
- Emerging Federations (Brook Schofield/Nadia Sluer, TERENA, NL)
- FaaS (Marina Vermezovic, AMRES, RS/Valter Nordh, SWAMID, SE)
- Engaging User Communities (Lukas Hämmerle/Ann Harding, SWITCH, CH)
eduGAIN: Some Statistics

- April 2011: Official start of eduGAIN
- Nov 2013: 21 Federations are members (50%), 5 joining
- Apr 2014: 24 Federations are members (51%), 6 joining

- Entities: 207 IdPs, 107 SPs (323 in total)
  One IdP can represent for dozens of organisations and services depending on federation architecture => actual numbers are higher

- Whole (academic) SAML landscape:
  47 Federations, 2468 IdPs, 5150 SPs (gathered from metadata)
  Not all of them need to be interfederated, e.g. many internal SPs

Numbers from April 2014
Connect | Communicate | Collaborate

eduGAIN & Federation Status

April 2014

- 24 eduGAIN Members
- 6 Joining eduGAIN
- 1 Candidate Federation
- 16 Other Federations
Federations & GÉANT Code of Conduct

- 25 EEA Data Protection
- 5 EEA Compatible DP
- 1 Safe Harbor (USA)
- 17 Federation outside GÉANT CoC (5 in or joining)
GÉANT Data Protection Code of Conduct

- Significant piece of work with huge impact
  - Potentially covers a large portion of the community
    - 30 of the 47 Federations (31 of 48 countries)
- Adoption + use still required.
  - Technology works with Shibboleth IdP.
  - In Development for simpleSAMLphp + Federation Metadata Registry Tools.
- Scalable solution for the other 18 Federations/Countries?
  - Export out of Europe is the problem to be solved!
- Express your attribute requirements (5150 SPs)
  - 3549 don’t express a single mandatory attribute
  - 3851 don’t express a single requested attribute (2759 also have NO mandatory)
- Taken from http://www.terena.org/~schofield/servicecatalogue/
- Entity Categories as a bundle of attributes or a tag for a service.
Where here to help...

edugain@geant.net  
edugain-integration@geant.net