eduGAIN’s Future is now

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Agenda

• eduGAIN’s Overview
• Current model Challenges
• Community Recommendations
• What is going to change
• Some conclusions
“eduGAIN interfederation service connects identity federations around the world, simplifying access to content, services and resources for the global research and education community”
Inter-federated Access

Federation Blue

Federation Green
A complex ecosystem
The eduGAIN contributors & stakeholders
Does it work?
eduGAIN Global Coverage

78 Federations
8968 Entities
5369 Identity Providers
3618 Service Providers

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eduGAIN’s entities appearance in multiple Federations

Number of Entities

Number of Entities in multiple federations
Entities' Compliance to Standards

CoCo IdP  CoCoSP  R&S IdP  R&S SP  Sirtfi IdP  Sirtfi SP


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What could Possibly go wrong?

- Complex environment
- User expectations
- New technologies adoption
- Slow governance model
eduGAIN Futures Working Group

REFEDS

Baseline Expectations

Identify key issues with current eduGAIN service

Review the governance model
eduGAIN Futures WG Problem Statements

01. Complex service experience
   - Almost 9000 entities
   - Service experience varies wildly

02. Unpredictability
   - Information exchanged between IdP A and SP B?
   - Hard to rely on eduGAIN without predictable outcome

03. Diverse policies and processes
   - Federations have their own policies and processes
   - Interaction with eduGAIN/participants is often inconsistent

04. Variable service offerings
   - Differences in funding, staffing and service level
   - Service offerings varying accordingly

05. Slow response to change
   - Entities and Federation Operators are often slow to adopt changes to security standards and policy requirements

06. Delays in decision making and new Technologies
   - EduGAIN itself is slow in taking decisions and embracing new technologies

07. Unclear mission and branding strategy
   - Mission, role and brand of eduGAIN are unclear, leading to different expectations
eduGAIN Futures WG Recommendations

REFEDS
- enforce contacts
- eduGAIN CSIRT
- interop SAML Profile
- filter individual entities
- Sirtfi, Privacy Reqs, Assurance
- attributes release profiles
- consistent metadata publishing
- eduGAIN strategy and mission
- clear compliance checking
- new technologies roadmap

Service
- elected Steering Committee
- Federations information audit
- improve joining process

Governance
Actual changes

- Constitution update
- eduGAIN Steering Committee
- eSC Election
- eSC Chair appointment

- eduGAIN Interoperable SAML Profile
- New requirements for Federations and Entities
- eduGAIN Declaration and MRPS updates

- Support entity-level metadata updates (filtering)
- New compliance checking system
- Activate community Pilots/Labs on new technology stacks
eduGAIN Metadata Creation and Distribution

Entity
- Metadata Consumer
  - Service

Federation
- Federation Downstream Metadata
- Federation Upstream Metadata

Federation
- Metadata Distribution System
  - Validation, Aggregation, Signing
  - Metadata getter

eduGAIN
- Metadata getter
  - Validation, Aggregation, Signing
  - Metadata Distribution System

eduGAIN Metadata
Additional technology stacks and profiles for eduGAIN?
eduGAIN provides

- Metadata Distribution Service
- Metadata Validator
- Checking tools
- Support

- CSIRT
- Training

..what else?
Users trust Home Organisation

HomeOrg/Providers trust Federations

Federations trust eduGAIN

Do users trust eduGAIN?

Do users even know eduGAIN?
Trust Flows

**eduGAIN**

User → Entity → Out Of Band → Federation → eduGAIN

**Hierarchical**

User → Service → Root Authority → Intermediate Authority → Service Public Key

Federation → eduGAIN → Fed Public Key → eduGAIN Public Key
Conclusions

eduGAIN is a great success

Main challenges
High complexity/Low consistency/Slow governance/Legacy
Technology

Change process
Futures WG Recommendation on Governance/Service/Tech

Adoption of new technologies involves new trust model
Thank you

Any questions?

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