eduGAIN

Recommendations for the Implementation and Application in International University Partnerships

What is eduGAIN?

eduGAIN® (**EDU**cation **G**lobal **A**uthentication **IN**frastructure) is an international inter-federation service interconnecting research and education Identity Federations. It is provided by GÉANT, a pan-European research and education networking project.

eduGAIN in Perspective

Today, online services are crucial to research and education. Students, teachers, researchers, and institution staff rely on them for collaboration through many web services (e.g., for webmail, e-learning, teaching, conferencing, analysing and sharing data, and accessing journals and libraries). Many universities already provide their users with a single online identity which gives them access to all the services locally available within the home university. However, often user identities need to cross borders between universities and countries (e.g., for student exchange in university partnerships). Therefore, it needs a secure bridge connecting existing online identities on a global level – eduGAIN.

How does eduGAIN work?

Identity Federations – a university's combination of Service and Identity Providers – use different architectures, systems, and policies and are typically deployed nationally. eduGAIN is a global service. It enables Identity Federations to interconnect easily. Participating universities can use their existing systems to operate across borders without many individual arrangements. Thereby, users need just one trusted identity from their university to access services from other universities. And due to single sign-on (SSO), they need to log in only once during a browser session and can instantly start to work and collaborate. Around the world, about 80 federations participate in eduGAIN, with more than 5,000 identity providers and 3,500 service providers.

Benefits of eduGAIN

- Reduced overhead for accounts and user support;
- Saved time, effort, and money for individual arrangements in university partnerships;
- Possible choice of trusted services and secure international transfer of user data;
- Services reach a larger international community.

General framework

The eduGAIN technology involves a "metadata service" which regularly retrieves and aggregates information from participating universities about Service and Identity Providers and makes it available to partners. eduGAIN coordinates necessary elements of the technical infrastructure and provides a policy framework controlling the exchange of information between Identity Federations.

Requirements

To join eduGAIN, an authorized person representing the university must sign the eduGAIN policy declaration and submit it to the postal address of the eduGAIN Team, as well as send a scan via email. The participating university also needs to delegate two members – a delegate and a deputy, plus ideally a security contact. Moreover, the university needs to provide some URLs to the eduGAIN Team: To the metadata (including a signing certificate), the main university webpage, the university's Federation Policy (English version), and a Registration Practice Statement (English version) describing rules and procedures used for registering entities which get exposed to inter-federation. To get a better idea, you find documents from other federations on the Members page.

References & further useful Sources

- Explanatory Video How to benefit from interfederating through eduGAIN
- eduGAIN – Main webpage
- eduGAIN – Members page
- eduGAIN – Wiki pages