GÉANT-TrustBroker project overview

Slides assembled by the Géant-TrustBroker team at
Leibniz Supercomputing Centre, Germany
for a short presentation by

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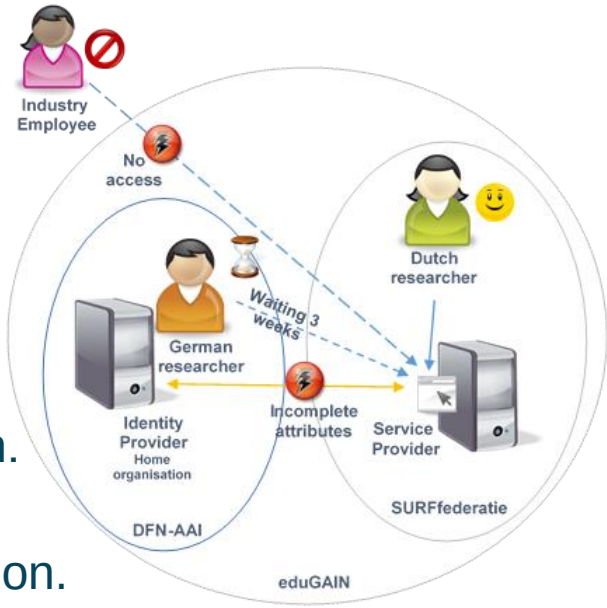
GÉANT-TrustBroker [GNTB]: The basic idea

- Our goal from the user's perspective:
  Let users login to and use federation-external service providers (SPs) by connecting them to their identity provider (IDP) independent of federation borders and without involving manual setup work by SP and IDP admins.

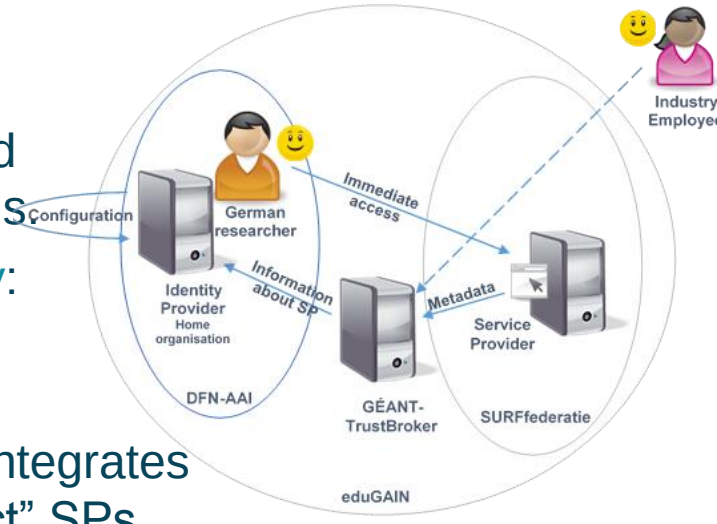
- More technical:
  - GNTB facilitates the user-triggered, on-demand exchange of IDP and SP metadata as basis for SAML-based AuthNZ
  - GNTB therefore *complements* existing
    - NREN and community federations
    - inter-federations (e.g., eduGAIN)
  - GNTB will automate the setup of IDP-SP communication
    - *including* user attribute conversion when data schemas differ
    - *excluding* organizational aspects such as the need for written contracts between certain (commercial) SPs and IDPs

Background:
Where are we today without GNTB?



- Historically, we have two types of federations:
  - National federations operated by NRENs
  - Community federations operated by research communities / projects
- The resulting problem:
  Users can only access a service when its SP and the user's IDP are members in the same federation.
- The eduGAIN solution approach:
  Build a federation-of-federations-style inter-federation.
- eduGAIN is great, but inter-federations bring new issues:
  - Additional contracts increase the overall complexity.
  - The inter-federation schema (i.e., available user attributes) is only the common denominator of NREN federations; thus, eduGAIN SPs may not get all the attributes they require for full service functionality.
  - IDPs still need to set up technical stuff, e.g., attribute filters/release policies, manually. Therefore, users cannot use new SPs immediately.

GÉANT-TrustBroker's scope



- GNTB is…
  - a metadata registry: SPs and IDPs upload their metadata just like in other federations
  - a user attribute conversion rule repository: Inter-federation conversion rules can be shared and re-used by other IDPs.
  - a virtual IDP and SP: GNTB seamlessly integrates into standard SAML workflows to "connect" SPs and IDPs on demand. "Connecting" entities includes the exchange of metadata and the automated setup of user attribute conversion rules.
- GNTB automates the technical setup of IDP-SP communication as far as possible. Manual approval steps are optional.
- GNTB does not handle organizational aspects, such as the demand for written contracts with commercial SPs.
- eduGAIN and GNTB complement each other:
  - eduGAIN is the organizationally profound, long-term solution
  - GNTB allows for the quick setup of all technical aspects

The GNTB project

- GNTB is a GN3+ Open Call project (10/2013 – 03/2015)
- A milestone document describing GNTB‘s technical workflows in detail is available on the GN intranet.
- GNTB‘s SAML-based core workflow will be submitted as Internet-Draft to the IETF in summer 2014.
- We‘re working on a Shibboleth-based prototype.

- Pilot operations can hopefully start before summer 2015.

- GNTB functionality may be interesting for some other use cases, e.g., rapid provisioning of Shibboleth testbeds (suggested by Moonshot developers).

- GNTB includes some more features, such as AccountChooser functionality. Please contact us or check out the GNTB documents for details.

To contact the project team, please email

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