

Géant-TrustBroker Project Overview



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7th FIM4R meeting

Frascati, Italy

April 24th, 2014

Géant-TrustBroker [GNTB]: The basic idea



Our goal (SP perspective):

- SPs connected to user's identity provider (IDP)
- Independent of federation borders
- Establishing technical trust and configuration
- Without involving manual setup work by SP and IDP admins

Géant-TrustBroker [GNTB]: The basic idea



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
 - excluding organizational aspects
- GNTB will extend Shibboleth by IDP/SP plugins in order to
 - integrate the central metadata repository automatically
 - use attribute conversion rules
 - update the configurations of IDPs/SPs

Background: Where are we today without GNTB?

Current situation:

- Two types of federations:
 - National federations operated by NRENs
 - Community federations operated by research communities / projects
- The resulting problem: SP and the user's IDP need to be members of the same federation (or inter-federation)







Current situation:

- eduGAIN approach: federation-of-federations-style inter-federation
- Issues:
 - Additional contracts increase the overall complexity.
 - Inter-federation schema is only the common denominator of NREN federations → SPs may not get all required attributes
 - Set up technical stuff, e.g., attribute filters/release policies, manually.
 - IDPs have to trust SPs \rightarrow SPs might not get all required attributes



GNTB is...

- a metadata registry: SPs and IDPs upload their metadata.
- a user attribute conversion rule repository: conversion rules can be shared and re-used by other IDPs.
- a virtual IDP and SP: The GNTB workflow seamlessly integrates into standard SAML workflows to "connect" SPs and IDPs on demand.

Géant-TrustBroker's scope



- GNTB automates the technical setup of IDP-SP communication as far as possible.
- 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



Géant-TrustBroker's workflow



GNTB workflows:

- Management workflows:
 - IDP/SP metadata
 - conversion rules
- Core workflow: technical trust establishment



The GNTB project



- GN3+ Open Call project (10/2013 03/2015)
- Internet-Draft to IETF in summer 2014
- Shibboleth-based prototype
- Pilot operations hopefully start early 2015

The GNTB project



- A milestone document describing GNTB's technical workflows available on the GN intranet.
- Presenting GNTB at TNC2014
- GNTB
 - includes some more features, such as AccountChooser functionality.
 - May be interesting for other use cases, e.g., rapid provisioning.
 - Please contact us or check out the GNTB documents for details.

For more details, please see the documents published on TrustBroker's Géant Intranet website:

https://intranet.geant.net/JRA0/GEANT-TrustBroker

To contact the project team, please email geant-trustbroker@lists.lrz.de



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