

eduTEAMS GEANT Trust & Identity Development Niels van Dijk, SURFnet

eduTEAMS Hands-On, TNC2018 June 11, 2018 Trondheim, NO

support@eduTEAMS.org https://www.eduTEAMS.org https://wiki.geant.org/display/ED



eduTEAMS Handson Agenda



- Introduction into eduTEAMS (Niels)
 - eduTEAMS in the GEANT project
 - High-level design and components
 - Recent developments
- eduTEAMS showcases (Christos)
 - GEANT eduTEAMS Stand Alone service demo
 - LifeScience AAI pilot
- eduTEAMS Demo (Christos, Mihaly)
 - GEANT eduTEAMS Stand Alone service
- eduTEAMS 'OpenSpace' (Christos, Mihaly, Niels)
 - How do I.. ? , What is .. ? Why is.. ? What if I... ?





GÉANT supports and represents over 40 NRENs across Europe.

Together they support over 10,000 institutions and 50 million academic users.



Trust, Identity & Security



Supporting users and enabling secure access to services



eduroam - secure global roaming access service <u>250+ million authentications per</u> <u>month</u> in 89 territories



eduGAIN - interconnects identity federations around the world, simplifying access to content, services and resources ~ 3500 identity providers accessing services



AARC project – collaborating with e-infrastructures, research collaborations, libraries & federations to share policies, architectures, training materials & pilots that avoid re-inventing the authentication & authorisation wheel



REFEDs – supporting identity federations worldwide



Trusted Introducer – services for security and incident response teams

Certificate Service – delivering cost-effective digital certificates. In partnership with **Gdigicert**

Challenges for Collaborative Organizations



- Challenges in Authentication space
 - International Collaboration
 - Collaborative organizations work with people outside scope of R&E communities as well
 - Requires Collaborative organizations to peer with other non R&E Identity providers or maintain an additional Identity provider
- Challenges in Authorization space
 - Services run by Collaborative Organizations often need attribute or group related information in the context of their collaboration, which are not issued by Institutions
 - Requires Collaborative Organizations to manage and provide additional attributes and groups towards their services, independently from the Institutions



GEANT VO Platform as a Service Project



• Goal

- Investigate the conditions that would allow GÉANT to provide services to support Collaborative organizations
- Focus on delivery of technical services
- Out of scope:
 - Technical development
 - Policy & LOA development

• Activities

- Gather requirements and priorities with/from communities
- Look at *existing* tools and technologies
- Look into delivery model
- Investigate business case & sustainability
- Pilot with communities
- Operations and Market



Market Analysis

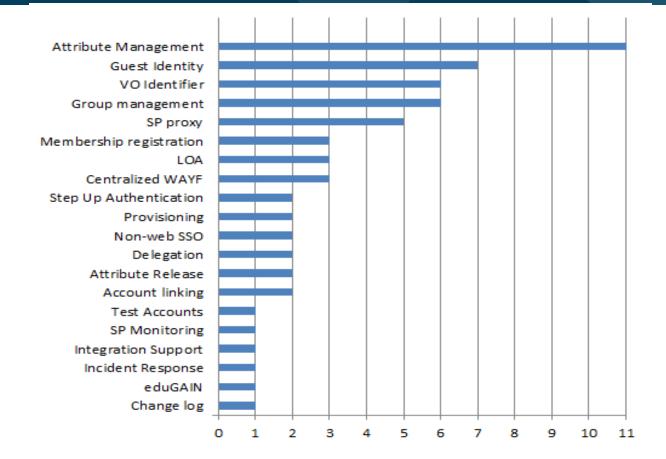


- The FIM4R paper (April 2012) was one of the first to articulate collective requirements for using Federated AAI for VOs.
- performed a survey among several small and large Pan-European VOs to (re-)validate the requirements.



Market Analysis Results





http://www.geant.org/Projects/GEANT_Project_GN4-1/deliverables/D9-2_Market-Analysis-for-Virtual-Organisation-Platform-as-a-Service.pdf

eduTEAMS

A suite of services for using federated AAI for collaborations



Collaboration suite to enable use of federated identity in research communities

Partner for any e-Infra or Research Infra inc. "long tail", informal groups



Components

- Membership Management service
- Discovery Service
- Identity Hub
- Second Factor Auth (Pilot!)

Characteristics

• 2 monthly release cycle

- Supports AARC architecture
- Single- and multi-tenant options

Documentation, Cookbooks, Privacy Policy etc available

https://wiki.geant.org/display/ED

Objectives

Challenges

Achievements

Conclusions

Q&A

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eduTEAMS - Pilots *Engaging with communities, elnfras and NRENs*



Research communities and e-Infrastructures

- AARC2-as-VO (Pilot committed)
- Life Science AAI (Pilot)
- Umbrella (Pilot committed)
- HPC-Europe (Pilot interest)
- EUDAT (Pilot committed)*
 EGI *

* as part of AARC2 interoperability activity



NRENS

• JISC (UK) Moonshot Pathfinder project

SURFnet (NL)
 Science Collaboration Zone project

 WAYF (DK) eduVPN Collaboration usecases



eduTEAMS under the hood



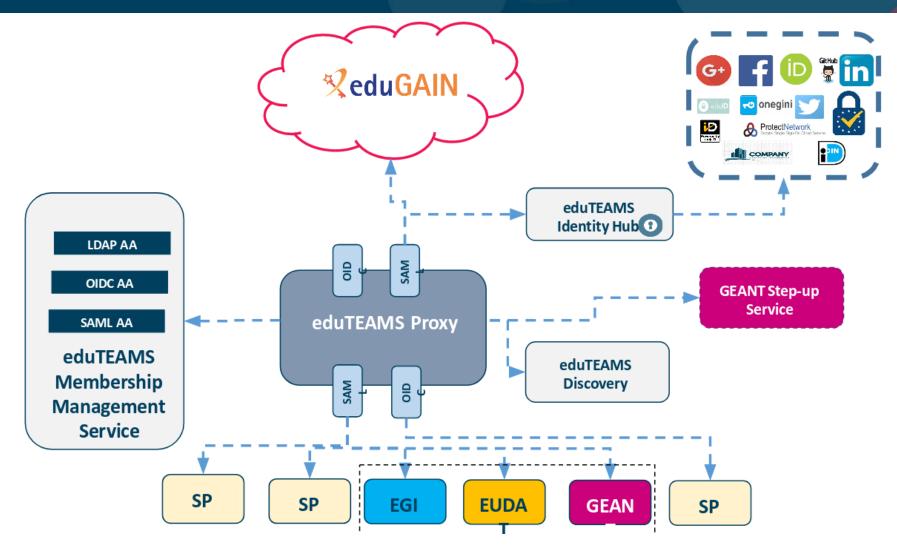
- eduTEAMS Membership Management service
 - CO specific workflows for onboarding members
 - Registry for CO persistent Identifier
 - Limited set of attributes to maximize interoperability
 - Use of eduPerson entitlement to carry richer info
 - Available through eduGAIN
- eduTEAMS Identity Hub
 - One persistent (SAML) IdP for many 'Guest' Identity Providers
 - Available and accessible through eduGAIN
 - Supports Research and Scholarship Entity Category

- eduTEAMS Service proxy
 - Single integration point for SP identity
 - SAML and OIDC support
 - Attribute aggregation from MMS

- Discovery Service
 - Service based or embedded discovery for eduGAIN SPs
 - Allows per SP filtering of IdPs
 - Allows per entity category filtering, e.g. R&S, CoCo, Sirtfi







eduTEAMS Service Offerings



eduTEAMS multi-tenant service

A shared service that can be used by small and medium communities/long tail collaborations and is connected to EOSC

eduTEAMS standalone service

A standalone service offering, specific to a community or NREN national use, and is connected to EOSC

 eduTEAMS bespoke – a bespoke solution, typically involving individual components for a specific community



eduTEAMS multi-tenant Service



- Shared services that can be used by small and medium collaborations, "long tail" communities
- Available through eduGAIN
- Connects to eduGAIN based SP and EOSC services
- Owned by GEANT and operated by GEANT
- eduTEAMS branding & eduTEAMS community identifier
- GDPR & Data protection taken into consideration
- Community has to follow the eduTEAMS service policies
- Some components can also be used for generic Service providers in eduGAIN

eduTEAMS multi-tenant Service

eduTEAMS Membership Management Service (MMS)



Manage Roles and Rights

- Available trough eduGAIN
- CoCo and R&S supported
- Strong focus on privacy and GDPR
- part of AARC2 interop activity
- Technical and cookbooks: https://wiki.geant.org/display/ED/Membership +Management+Service
- Service available at: https://registry.eduTEAMS.org

eduTEAMS Project members

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eduTEAMS Project members People

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eduTEAMS Discovery Service



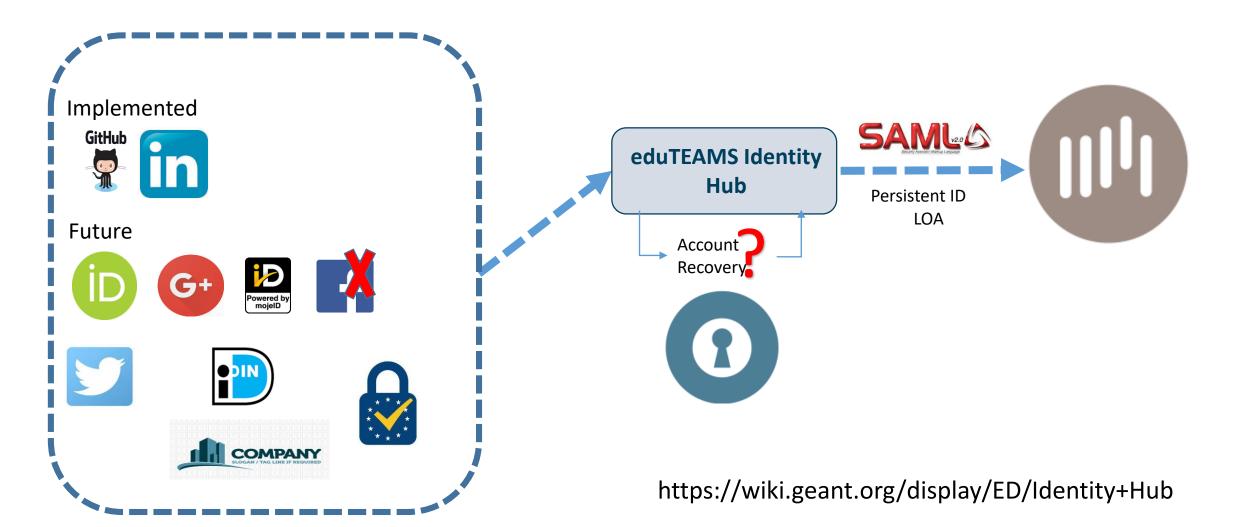
- Component of eduTEAMS, but generically usable for eduGAIN SPs
- Based on proven service from CESNET
- Engaged in RA21 Pilot Resource Access for the 21st Century (<u>https://ra21.org</u>)

https://wiki.geant.org/display/ED/Discovery+Service

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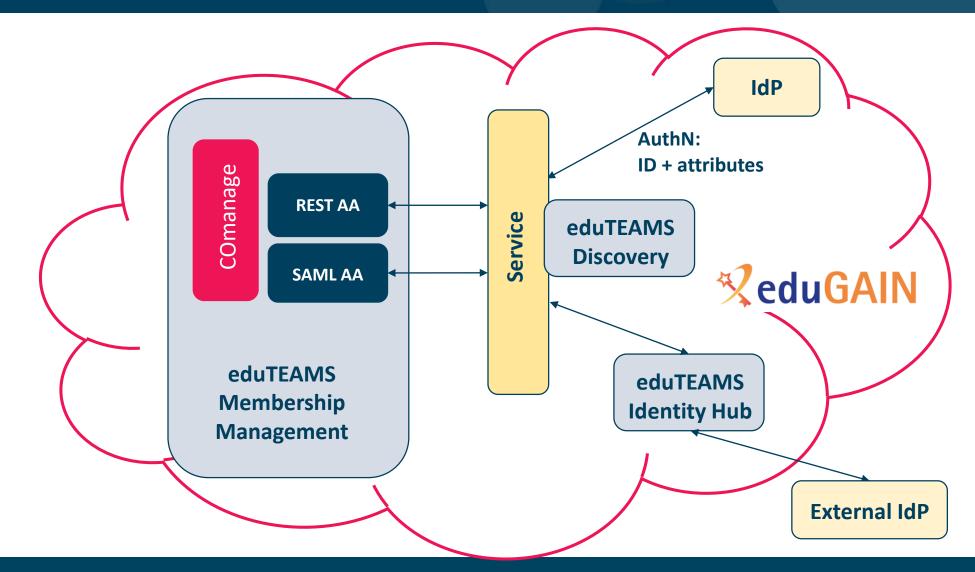
eduTEAMS *Identity Hub*





eduTEAMS Multi-tenant service ecosystem





eduTEAMS multi-tenant Service Roadmap



eduTEAMS multi-tenant Service

- All services have been available in pilot for some time now
- Tweaking and tinkering based on pilots and other input
- Further improving documentation
- Moving the services into production before the end of Q1 2019
- Not only technical services, but also delivering service policy, GDRP compliance

https://wiki.geant.org/display/ED

eduTEAMS Standalone Service



- Standalone service offering, specific to a community or NREN
- Owned by the community or NREN, operated by GEANT
- Community branding & community specific identifier
- Community managed policies
- Connected to eduGAIN services and/or EOSC (GEANT, EGI and EUDAT)
- Connected to community specific services
- More details in presentation Christos

eduTEAMS standalone Service

eduTEAMS bespoke



- Bespoke solution, typically involving just components
- It can be just the proxy or an MMS or the discovery or the IDhub or combinations
- Allows for combining directly with 'external' components, e.g. as offered nationally or as existing in the community
- Ownership model depended on the solution, operated by GEANT
- Concept tested as part of the Life Science AAI pilot
 - Presentation Christos
 - Presentation Mikael Linden https://tnc18.geant.org/core/presentation/133

eduTEAMS bespoke Service



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