Authentication and Authorisation Infrastructure for the European R&E Sector

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The only real problem for the Internet is scaling!

Mike O’Dell

Trust does not scale!
Taylor Swift

< 2002

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FEIDE
InCommon
Edu gate
Gaining Access to Education
SWITCHaai
The UK Access Management Federation
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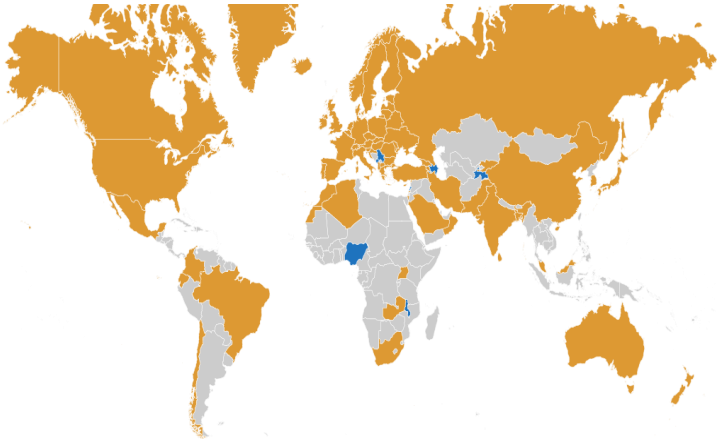
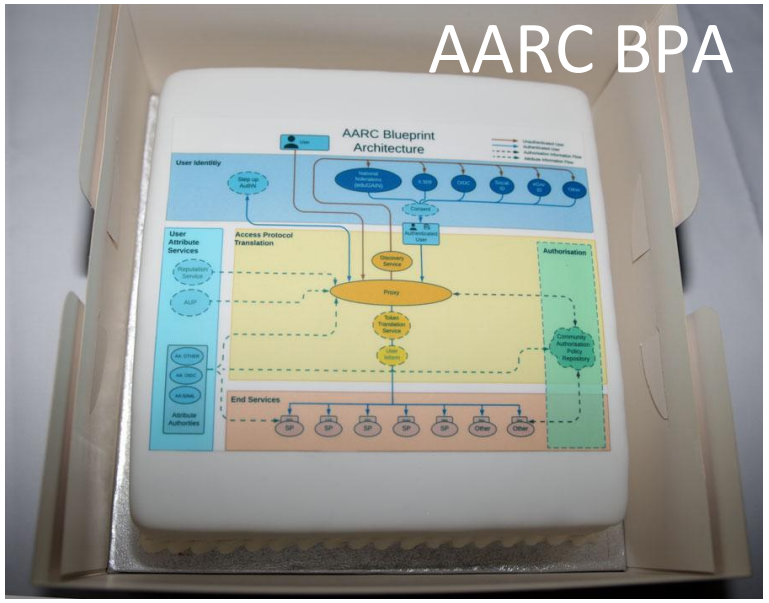


2022

- 80 identity federations
- 5000 IdPs
- 3590 SPs

AARC BPA



Federated Identity Management for Research Collaborations

Paper Type: Research paper

Date of this version: 28 August 2013

Abstract

Federated identity management (FIM) is an arrangement that can be made among multiple organisations that lets subscribers use the same identification data to obtain access to the secured resources of all organisations in the group. Identity federation offers economic advantages, as well as convenience, to organisations and their users. For example, multiple institutions can share a single application, with resultant cost savings and consolidation of resources. In order for FIM to be effective, the partners must have a sense of mutual trust.

A number of laboratories including national and regional research organizations are facing the challenge of a deluge of scientific data that needs to be accessed by expanding user bases in dynamic collaborations that cross organisational and national boundaries.

Driven by these needs, representatives from a variety of research communities, including photon/neutron facilities, social science & humanities, high-energy physics, atmospheric science, bioinformatics and fusion energy, have come together to discuss how to address these issues with the objective to define a common policy and trust framework for Identity Management based on existing structures, federations and technologies.

This paper will describe the needs of the research communities, the status of the activities in the FIM domain and

2011-2013

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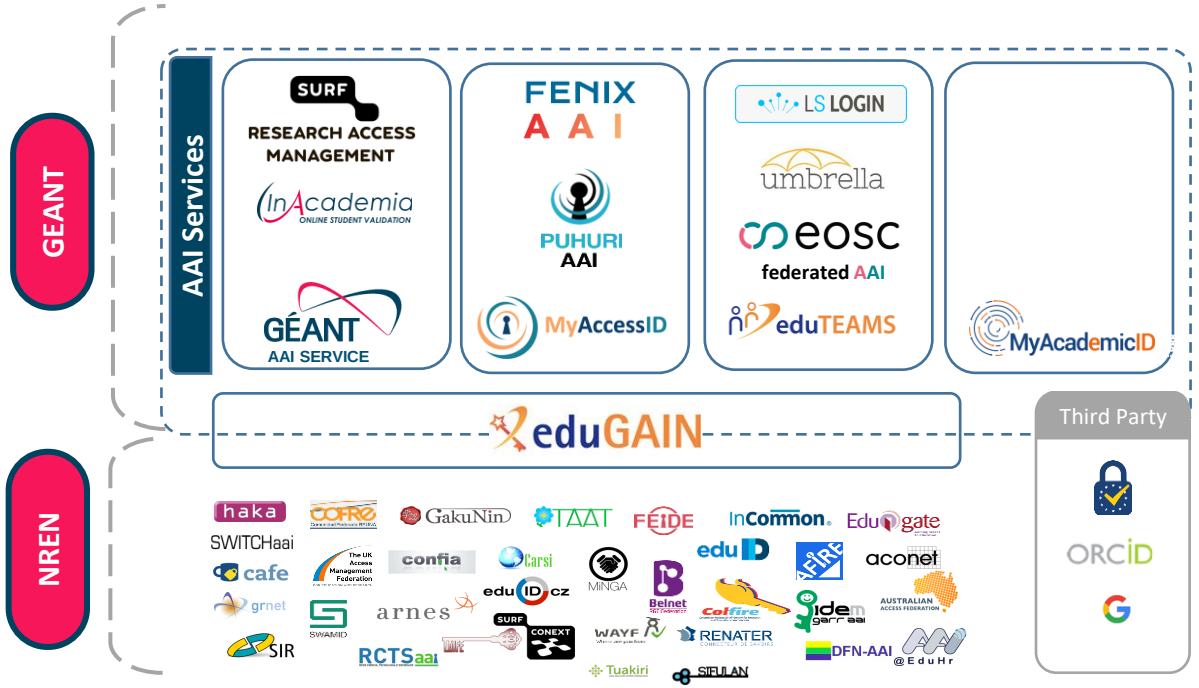
2015-2020



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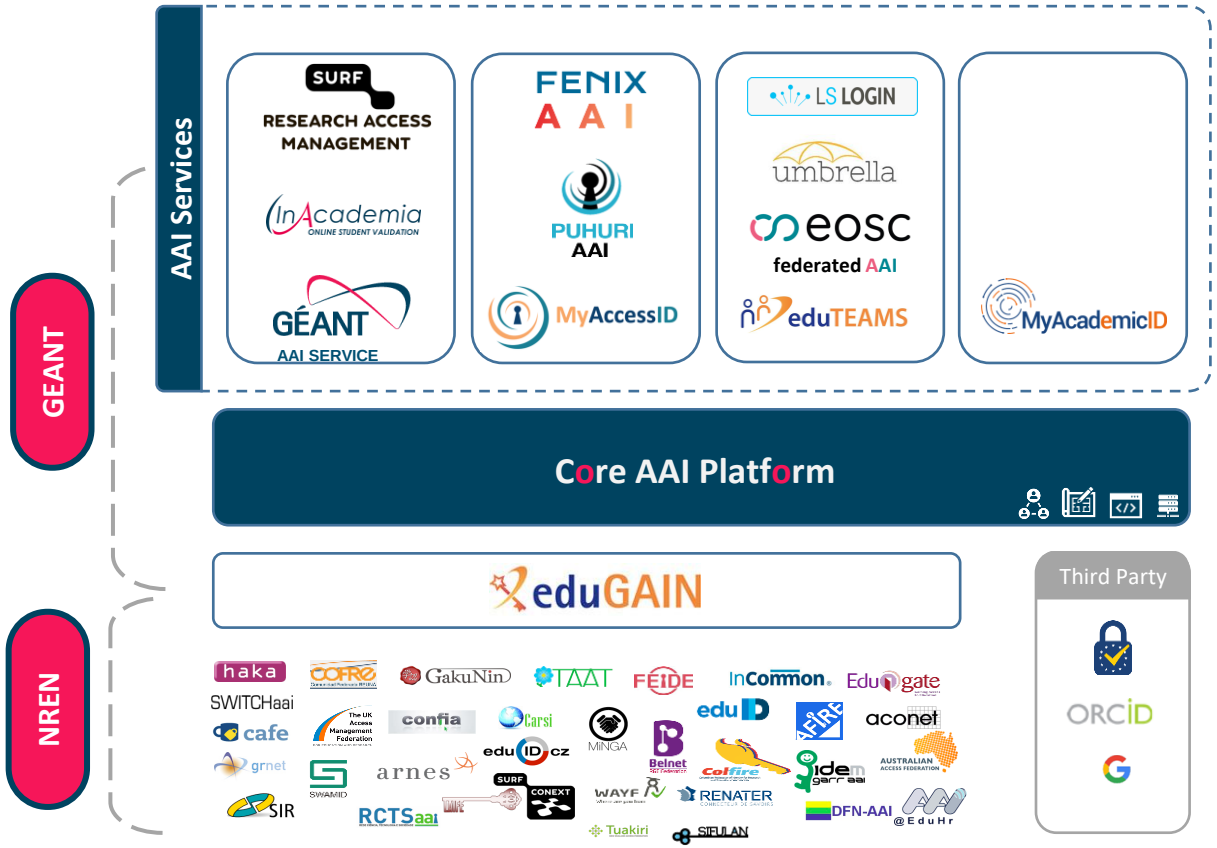
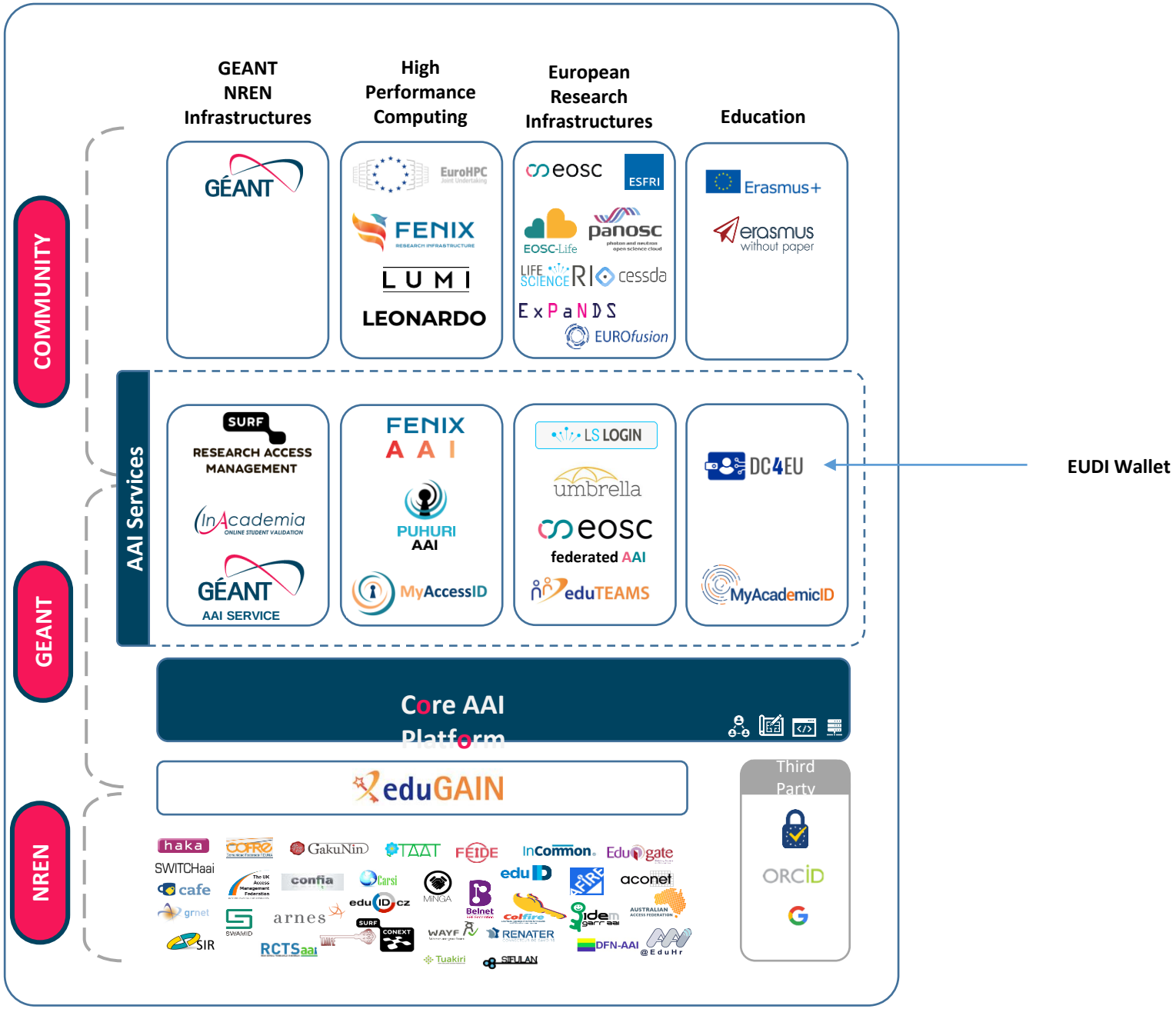


Common platform

- Group management
- Third party IDs
- Protocol translation

2023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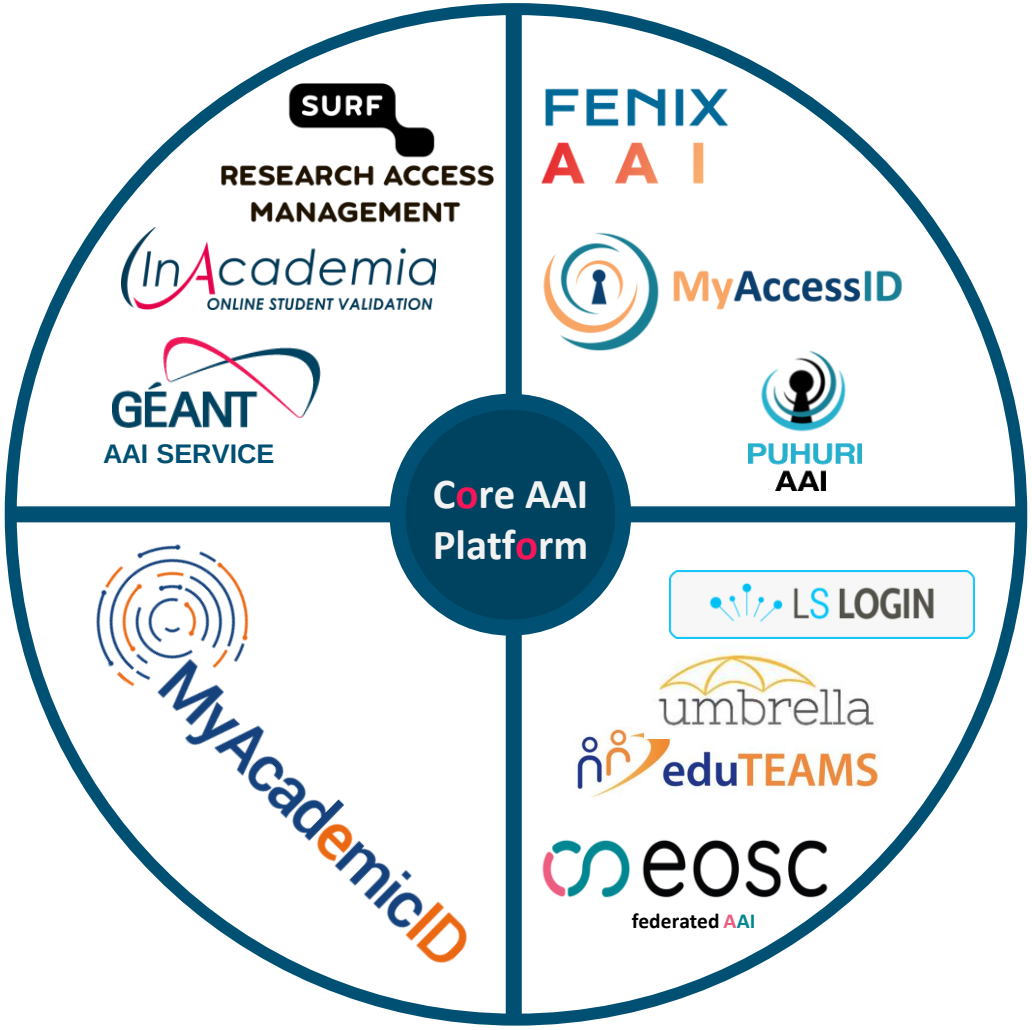
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Take-aways

- It took us over 20 years to build a (human) trust infrastructure
- This infrastructure serves billions of users each month
- It is integrated with (educational and research) business processes
- It is capable of responding to emerging new requirements
- The GEANT core AAI platform allows for seamless integration across domains
  - While preserving the autonomy of communities to select their own (AARC BPA compliant) AAI

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Core AAI is an **scalable**, independent, **trusted** and privacy-preserving integration layer of a wide range of AAI services!

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