# **EOSC AAI Implementation**

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# Agenda

- Introduction
- Implementing the EOSC AAI
- The evolution of the EOSC AAI



#### Introduction

# EOSC Authentication and Authorization Infrastructure (AAI) https://op.europa.eu/s/phe7

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#### SRIA - Strategic Research And Innovation Agenda

The purpose of authentication and authorisation infrastructure (AAI) in EOSC is to support the FAIR principles for data and services while enabling high-trust collaborations to be established and maintained with little or no friction to the end user



### First Principles

- User Experience is the first measure of success
- All trust flows from the communities
- There is no centre in a distributed system



### **Extending the first principles**

- The EOSC AAI is based on multi-lateral interactions and multilateral trust.
   Explicit, bilateral interactions are out of scope.
- The EOSC AAI model honours the autonomy and integrity of all members, and thus does not require unbounded trust between them
- The EOSC AAI enables the flow of attributes and properties that relate to collaborations, and are used for access to content, services, resources
- EOSC AAI Users give scoped and time-bounded permission for transfer of attributes



### A Jump Point for the EOSC AAI

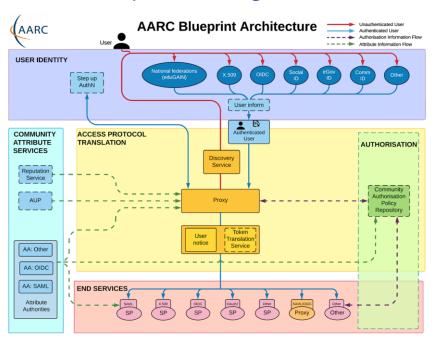
- Not reinventing the wheel; Build on top of the outcomes of AARC
  - The AARC Blueprint Architecture (BPA) with all of its extensions and the ongoing governance within the AEGIS group provide just the starting point for the work ahead
- In particular the AARC BPA:
  - builds on existing best practice in the scientific community
  - provides clear guidance for how campus identity integrate with science
  - comes with the beginnings of a governance structure in the AEGIS group
  - has international buy-in

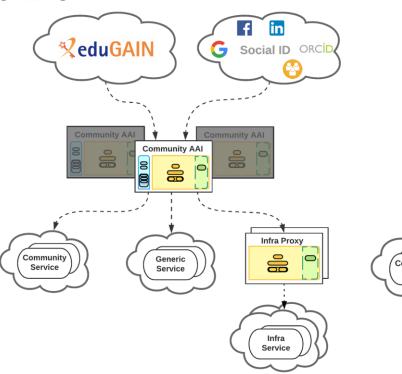


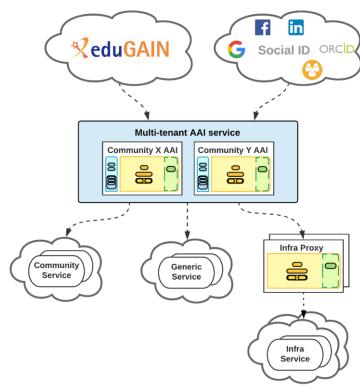
## **EOSC AAI Architecture: Starting Point**

Started from AARC-BPA-2019 and the AARC Interoperability Guidelines

https://doi.org/10.5281/zenodo.3672784







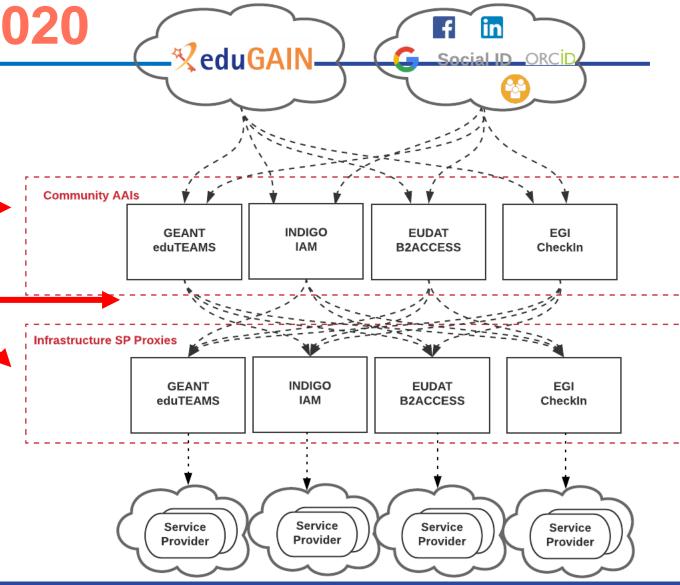


#### The EOSC AAI in 2020

Members of the EOSC-Hub AAI

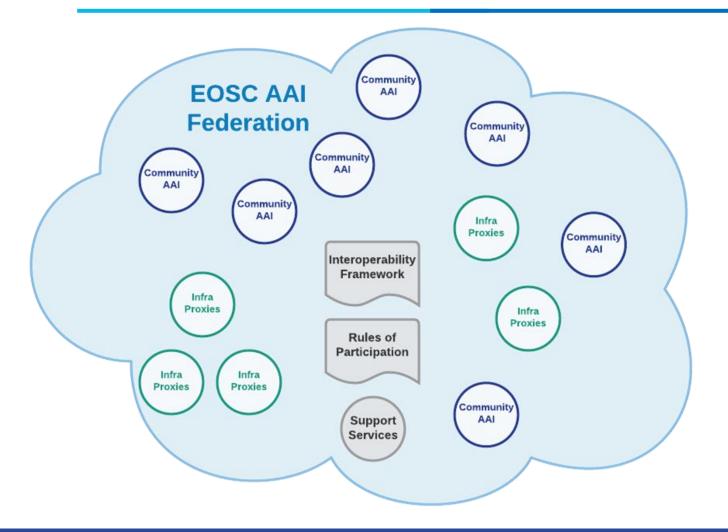
Interoperability through the implementation of the AARC BPA Guidelines

- Each entity has to connect to each other entity (peer to peer)
- Cannot scale beyond a handful of Proxies





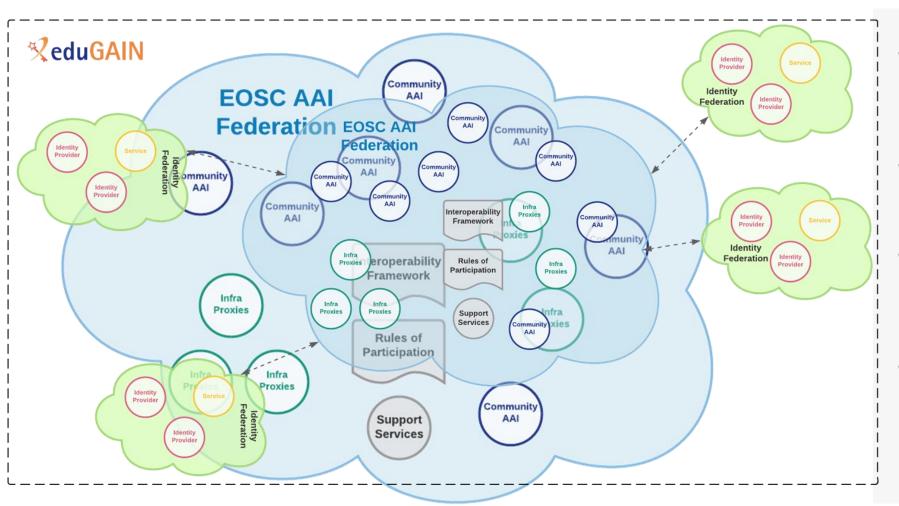
#### The EOSC AAI Federation



- Community AAIs and Infrastructure
   Proxies connect once with the EOSC AAI
   Federation (register metadata, URN
   namespaces, policies etc)
- Technical interoperability conformance tested and monitored by the EOSC AAI FEderation.
- GDPR and Security Policy conformance (Policy Notices, Acceptable Use Policy etc) assessed by the EOSC AAI Federation.
- Community AAIs and Infrastructure
   Proxies discovery and establish trust
   with the rest of the Community AAIs
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   EOSC AAI Federation



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# **THANK YOU**

