EOSC AAI Implementation

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Agenda

- Introduction
- Implementing the EOSC AAI
- The evolution of the EOSC AAI
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 and Infrastructure Proxies through the EOSC AAI Federation
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THANK YOU