

Charter for the EOSC Task Force on AAI

Background

The e-science Authentication and Authorisation Infrastructure (AAI) community has a long history of building globally viable solutions for digital identities, which will continue to grow and develop within the European Open Science Cloud (EOSC) framework. The AAI for EOSC is built on top of a large body of existing work that has been carried out in the Federated Identity Management for Research¹ [FIM4R] activity, the AARC and AARC2 projects² and their governance spin-off AEGIS³, in which a large number of international e-infrastructures and research infrastructures are represented.

The EOSC Architecture Working group established an AAI Task Force in 2019, whose aim was to establish a common, global ecosystem for identity and access control infrastructures for EOSC. At the end of 2020, the EOSC Executive Board published the “EOSC Authentication and Authorization Infrastructure” report⁴ covering the first principles & requirements, the EOSC AAI Baseline Architecture, the EOSC AAI Federation participation guidelines (participation policy and technical framework) and the EOSC AAI best practises.

In February 2021, the EOSC Executive Board published v1.0 of the Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC)⁵, which identifies the AAI as one of the 7 areas relating to the primarily technical challenges and prerequisites to implementing the EOSC ecosystem.

Main aims

The EOSC AAI Task Force has the overarching goal to deliver a consistent architecture for authentication, authorization and access control for the European Open Science Cloud following and building upon SRIA and the previous EOSC AAI TF outcomes. The Task Force will contribute to establishing a common global ecosystem for identity and access control infrastructures for EOSC, while embracing following high level principles from the previous EOSC AAI TF:

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

The main aims of the EOSC AAI Task Force are the:

¹ <https://fim4r.org/>

² <https://aarc-community.org/>

³ <https://wiki.geant.org/display/AARC/AEGIS>

⁴

<https://op.europa.eu/en/publication-detail/-/publication/d1bc3702-61e5-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-188566729>

⁵ https://www.eosc.eu/sites/default/files/EOSC-SRIA-V1.0_15Feb2021.pdf

- Evolution of the EOSC AAI Architecture and the EOSC AAI Federation, following the AARC Blueprint Architecture and AARC Interoperability Guidelines.
- Identification and assessment of requirements and gaps through liaison efforts and collaboration with other bodies inside and outside EOSC, such as EOSC Task Forces, EOSC projects, community bodies like AEGIS.
- Identification and assessment of governance models for the EOSC AAI.

Core activities

The core activities of the task force include:

- **Develop the next version of the EOSC AAI Architecture**

Continue evolving the EOSC AAI Architecture, following the AARC Blueprint Architecture and AARC Interoperability Guidelines. There will be two versions:

- EOSC AAI Architecture v2022, due mid 2022, which will focus on the already identified challenges and gaps from the SRIA and previous EOSC AAI TF reports, namely on the: community attributes and authorization, multi-infrastructure workflows, scalability, consistent user experience and interfaces for service providers, growth of EOSC beyond the research and education community.
- EOSC AAI Architecture v2023, due mid 2023, which will focus on the identified challenges and gaps from from the “Requirements for the EOSC AAI v2022”

Output: EOSC AAI Architecture (v2022 and v2023)

- **Engage with stakeholders to identify new use cases and requirements**

Through liaison efforts with other bodies and collaboration with the Task Force members, identify and assess user cases, requirements and gaps. There will be two versions:

- Requirements for the EOSC AAI v2022 which will drive the work of the EOSC AAI Architecture v2023, and
- Requirements for the EOSC AAI v2023 which will inform work beyond 2023.

Output: Report on the requirements for the EOSC AAI (v2022 and v2023)

- **Analyse governance models for the EOSC AAI**

This activity will focus on the analysis of possible governance models for the EOSC AAI, including the EOSC AAI Federation policies, the EOSC AAI Federation support services and the EOSC Core Infrastructure Proxy components, which are currently being implemented by the EOSC-Future implementation project. The output of this activity should be a report at the end of 2022.

Output: Report on governance models for the EOSC AAI (v2022)

All core activities should lead to the design and implementation objectives that were identified in the previous EOSC AAI TF:

- 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

Planned duration

The planned duration of the EOSC AAI Task Force is 24 months.

Working methodology

The day to day collaboration of the Task Force will happen through the mailing list. A regular video conference call will be used to coordinate the work. The time slot and frequency of the task force calls will be decided by the members with the focus to allow for short incremental steps and quick feedback cycles.

The EOSC AAI Task Force will solicit input from the community at large through workshops. We envisage at least 4 workshops, preferable co-located with high profile events where the community at large is represented. Results of the EOSC AAI Task Force shall be made available in the public domain.

The EOSC AAI Task Force will liaise with the global AAI community and with the global community of research infrastructure operators and will conduct public consultations for all deliverables in these communities as deemed appropriate by the TF. Decisions in the EOSC AAI Task Force will be based on the principle of rough consensus to be determined by the Task Force chairs and confirmed on the list.

Dependencies

The work of the other EOSC Task Forces that deal with EOSC infrastructure and services will naturally have many touchpoints with the EOSC AAI Task Force. The TF chairs will liaise with the other TFs as necessary.

The TF will continue seeking input from research communities, infrastructure providers and service providers who are engaged with EOSC through EC funded projects, national initiatives and/or other EC activities related to EOSC.

Membership

The EOSC AAI Task Force is an open forum for the community to exchange information, knowledge, ideas and best practices with a view to solving specified EOSC AAI challenges.

The membership to the EOSC AAI Task Force is open to AAI experts from research communities, infrastructure providers and service providers who are engaged with EOSC through EC funded projects, national initiatives and/or other EC activities related to EOSC.