AARC Blueprint Architecture

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Research Communities

- The way researchers collaborate within scientific communities can vary significantly from community to community.
- The ability to access and share resources is crucial for the success of any collaboration.
- Advanced Research and Education (R&E) needs advanced IT services.
GÉANT Network – A global infrastructure enabling collaboration on a global scale

- GÉANT and the NRENs connect over 50 million users at 10,000 institutions across Europe
- Interconnecting with all world regions, reaching to over 100 countries.
- A global infrastructure enabling European researchers to collaborate on a global scale
eduGAIN – A global network of academic identities

- Interconnects identity federations around the world, simplifying access to content, services and resources
- Researchers can use a single digital identity provided by the home organization
eduGAIN – A global network of academic identities
Federated Identity Management for Research

- Access services using **identities from their Home Organizations** when available.
- Secure integration of **guest identity solutions** and **support for stronger authentication** mechanisms when needed.
- **Access** to the various services should be granted **based on the role(s)** the users have in the collaboration.
- Users should have **one persistent identity** across all community services when needed.
- **Ease of use for users and service providers.** The complexity of multiple IdPs/Federations/Attribute Authorities/ - technologies should be hidden.
AARC Blueprint Architecture - Enabling an ecosystem of solution on top of eduGAIN

- A Blueprint **Architecture** for authentication and authorization
  - A set of architectural and policy building blocks on top of eduGAIN
- eduGAIN and the Identity Federations
  - A solid foundation for federated access in Research and Education
Guidelines and support documents

- Best practices for managing authorisation
- Expressing group membership and role information
- Scalable attribute aggregation
- Implementation of token TTS
- Credential delegation
- Non-web access
- Social media IdPs
- Use cases for account linking
- Use cases for LoA elevation via step-up authentication
AARC Blueprint Architecture

https://aarc-project.eu/workpackages/policy-harmonisation/

**Policy recommendations & frameworks**

- Security Incident Response Trust Framework for Federated Identity – Sirtfi
- Scalable Negotiator for a Community Trust Framework in Federated Infrastructures – Snctfi
- Recommendations on Minimal Assurance Level Relevant for Low-risk Research Use Cases
- Differentiated LoA recommendations for policy and practices of identity and attribute providers
- Recommendations and template policies for the processing of personal data by participants in the pan-European AAI
EUDAT B2ACCESS Service

- Enables communities to use federated identities to access EUDAT services
- Connects to eduGAIN to enable users use their existing accounts at their home organisations
- Supports social ID logins and integration with token translations services for enable non-web access
- Communities can connect their community management systems as Attribute Authorities
EGI Check-In Service

- Enables communities to use federated identities to access EGI services
- Connects to eduGAIN to enable users use their existing accounts at their home organisations
- Supports social ID logins and integration with token translations services for enable non-web access
- Communities can connect their community management systems as Attribute Authorities
INDIGO AAI

- Enables communities to use federated identities to access services using OIDC
- Connects to eduGAIN to enable users use their existing accounts at their home organisations
- Supports social ID logins and integration with token translations services for enable non-web access
- Communities can connect their community management systems as Attribute Authorities
GÉANT eduTeams

- A suite of services to support research collaboration
- Built on top of eduGAIN, takes full advantage of federated AAI
- Simplify the management of group and authorization information
- Enables the integration of users from a wide range of environments
- Service Providers in eduGAIN can utilize Social IDs using the identity Hub
- Connects users to services
Thank you

Any Questions?

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AARC Engagement Group for InfrastructureS

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AARC 2nd edition – Working closer together
AARC Engagement Group for Infrastructures

- Representatives from **research and e-Infrastructures** who operate AAI services for the communities they support
- A **communication channel** with and across the infrastructure providers
- Promote a **consistent vision** for federated access
- Facilitate activities so that infrastructures implement **harmonised solutions** and avoid ‘re-inventing the wheel’
AARC Engagement Group for Infrastructures

• Implementation of AARC guidelines

• AAI platform alignment activity
  • Levels of Assurance
    • How to position the LoA for social identities
    • LoA and eduGAIN IdPs
    • REFEDS assurance profiles
  • Infrastructure identifier syntax
  • Acceptable Usage Policies
  • Home organization affiliation
    • Syntax for home organization affiliation
    • Practices for home organization affiliation
  • Requested attributes from HO
Thank you

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