# AARC and eduGAIN:

# expanding access to online resources for students, teachers and researchers

### eduGAIN: unlocking access to global resources

REDUCATION Global Authentication Infrastructure

Online services are crucial to research and education. Every service requires an account with a login and password.

Having many passwords is difficult to manage and security is at risk. That is why many research or education institutions provide single online identities to their students and researchers.

But users may also need access to services that are provided by other organisations.

National identity federations solve this problem by bringing together many identity provider institutions, their users, and service providers.

What if users need services that are not available through their national federation?

eduGAIN builds trust between federations so users and services in different countries can interact.

#### **KEY FEATURES**

#### **Fully compliant with EU privacy laws:**

user data only known to their home institutions

#### **Global coverage:**

- eduGAIN participants span Europe, the Americas and Asia Pacific
- Operated in Europe for the benefit of the global research and education community

### edugain gives service Providers:



a worldwide audience



lower costs per user



with no increased demand for user support

### edugain gives Individual users



access to a wider range of services



using their own digital identity



with no extra effort

#### **eduGAIN WORLDWIDE**



55+
FEDERATIONS

>2.600
IDENTITY PROVIDERS

>1.900 SERVICE PROVIDERS

33M AUTHENTICATIONS PER WEEK (est) 27M









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### **AARC**:

# supporting international teams of researchers



Many researchers work in international collaborative groups, driven by common goals and grants.

Based in different organisations and countries, they need services that are specific to their research community and are not aligned with their institution identity and permissions.

AARC\* addresses the needs of research collaboration communities and virtual organisations so that users can access services based on their project 'membership' role and permissions.

Until recently, each research collaboration has made its own solution for identifying users and their level of permitted access to services.

These solutions cannot always work together, which restricts the opportunity for researchers in different projects to collaborate. And researchers spend time creating these solutions instead of doing their research.

AARC is providing guidelines, policies and architectural blueprints so that research collaborations and e-infrastructures can implement and provide solutions that do work together. AARC is also providing training and testing technical and policy aspects through pilots.

### **AARC** is providing:

Blueprint Architecture



8 organisations using it - 3 e-infrastructures & 5 research infrastructures in life science, clouds, data, networks, computing, astronomy, arts & humanities

**Guidelines** 



**17** completed & **9** upcoming on risk management, quality assessment, security & trust, legal aspects, sustainability, technical aspects etc.

**Pilots** 



**16** completed & **8** ongoing / planned for research collaborations, e-infrastructures, libraries, researchers without an ID, & to test fundamentals

**Training** 



5 webinars, 6 workshops, online materials for libraries, research infrastructures, e-infrastructure

### AARC means research collaborations

- · avoid 'reinventing the wheel',
- · spend less time,
- · spend less money,
- get better connected
- · so more researchers have
- safer and more reliable access to
- more services, data, tools and software.



### **KEY FEATURES**

## Architecture piloted and implemented:

• scalable and meets the vision of the European Open Science Cloud

AARC best practices enable research collaborations to build an AARC-compliant architecture to share resources. AARC training & outreach supports the deployment of AARC results.

## Works with partners & other groups that deploy AARC outputs:

- REFEDS
- GN4-2
- Kantara
- FIM4R
- EOSC
- AEGIS







<sup>\*</sup>Authentication and Authorisation for Research and Collaboration