FOLLOW IN OUR FOOTSTEPS

AARC RESEARCH COMMUNITIES SHARE EXPERIENCES AT FIM4R

AARC has proved a useful forum for research communities and e-infrastructures to make contact and address the increasing need for federated access to their online services and resources. They could also 'safely' try out specific authentication and authorisation infrastructure (AAI) solutions for their infrastructures.

All of the solutions that have been tried in AARC use the AARC Blueprint Architecture (BPA) and could provide useful shortcuts to future research communities. But with AARC coming to an end in April, leaving a trail that can be followed is now one of the project's goals.

Research communities participating in AARC pilots presented their work to the FIM4R (Federated Identity Management for Research) community at a workshop on 11 February. FIM4R and AARC have a close relationship, with many participants in common.

Representatives from the Worldwide LHC Computing Grid, LIGO, LifeWatch, DARIAH and EGI, and EISCAT 3D showed their solutions, based on the AARC BPA and policy guidelines.

As an example of the challenges, David Hübner of DAASI International describes his AARC work on behalf of DARIAH: "We basically invented our own infrastructure, which worked for us but then we faced some scaling issues. There were more and more services in the DARIAH community that all needed to connect to the various Identity Providers in the federations and we had no possibility to centrally manage policy issues, for example. With the AARC BPA you have a central component, the proxy, which makes it very easy for the service operators in the community to connect to the AAI, so that's one of the things we wanted to achieve. The second point was interoperability with other communities and infrastructures." At FIM4R, David presented the solution that allows interoperability between

DARIAH and EGI, so their researchers can access a wider range of resources, tools and data.

AARC is documenting the pilots work in case studies detailing the initial requirements, relevant policies and training materials as well as the technical solutions. These can be found on the 'AARC in action' webpage alongside other useful materials: https://aarc-project.eu/aarc-in-action/

The FIM4R workshop also covered developments in working groups led by REFEDS (Research and Education Federations), WISE (Wise Information Security for Collaborating e-Infrastructures) and InCommon, which all tackle aspects of the federated identity management challenge. Another focus was to track the adoption of recommendations in the FIM4R version 2.0 white paper, which was published in June 2018 and expresses common requirements of research communities.

Hannah Short of CERN and the WLCG AARC pilot says that FIM4R will continue to be a key place for research communities to go to for information and expert support. "Even after AARC has stopped, it's somewhere where the same people will be able to keep sharing best practices."

Fim4r.org

FIM4R White paper: **https://doi.org/10.5281/zenodo.1296031**

Aarc-project.eu

AARC ACHIEVEMENTS BENEFIT RESEARCH COLLABORATIONS

The AARC project answers an increasing need among research collaborations and e-infrastructures for authentication and authorisation mechanisms and for federated access to their online services and resources. AARC has two main pillars, the Blueprint Architecture (BPA) and the policy framework, that promise benefits for the research community at large. AARC ends in April, but its impact will remain visible for years to come.


Architecture

The BPA is a reference architecture that provides 'building blocks' for an AAI that supports federated access. Research and e-infrastructures adopting the BPA can take advantage of the Identity Federations and eduGAIN and enable federated access to resources in a way that was not possible before.

A new version of the BPA will shortly be released, which focuses on allowing the AAIs of different research- and e-infrastructures to inter-operate. This functionality is needed by research communities requiring access to resources that are offered by other infrastructure providers.

The new BPA promotes a 'community first' approach, introducing the Community AAI. This element streamlines how researchers can access services - either by using their credentials managed by an institution participating in eduGAIN, or by using credentials issued by other parties.

The BPA has been adopted by EGI, EUDAT and GÉANT, and provides a cornerstone AAI in the European Open Science Cloud. Several research infrastructures have adopted or are adopting BPA-based AAI solutions, including DARIAH, LIGO, PaNOSC and Life Sciences - 13 research communities from the Life Sciences domain.
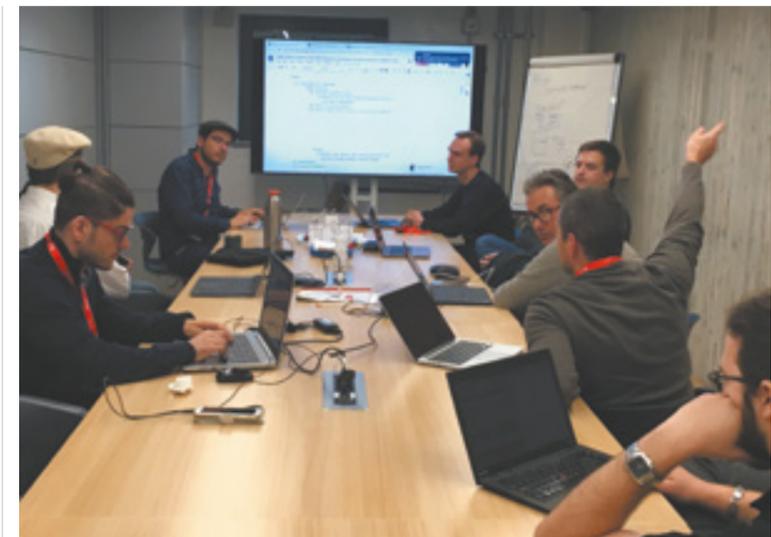
Policy

A large number of policy guidelines documents have been published, and a 'Policy Development Kit' has recently been released. The PDK includes a self-paced training course, a complete handbook and templates on the best ways to ensure high levels of trust for users, resource providers, and infrastructures.

AARC has invested significant effort on policy, as "more often than not it's the trust and governance issues that prove more complicated [than the technology] and that's where policy comes in," says Hannah Short of CERN, one of the lead authors of the PDK. "If we have hundreds of organisations working together, we need to ensure that each is conforming to a baseline of operational security, that they're respecting the privacy rights of their users and that everybody is doing this in a consistent way."

All these developments are part of the AARC legacy that will keep supporting research collaborations to securely access a wider range of resources and work better together, even after the project ends.

Further info:

See more detailed news reports about the BPA: **bit.ly/2svzyTH** and the Policy Development Kit: **bit.ly/2CIb5VJ.**

Guidelines in full: **aarc-project.eu/guidelines/**

AARC project overview article: **bit.ly/2sqFld7**