

AAF Technology Roadmap 2019-2021

2019

2020

2021

Subscriber requirements

- International connectivity (eduGAIN)
- Shib IdP V3 upgrade
- Shib IdP V4 upgrade
- Service Catalogue refresh
- Service Provider Boost Program

AAF operational (enhancements & extensions)

- ORCID
- eduGAIN enabled tools/software
- Rapid IdP
- Security & privacy
- Federation Tooling
- Business Intelligence

Innovation

- eduGAIN enhancements
- OpenID Connect/OAuth/Social
- Advancing HPC authentication
- New ORCID Technology (Hub)
- Access to sensitive data
- Government research centre integration

Infrastructure

- Amazon Web Services (Exploiting AWS capabilities)
- Cloud Services (Github, Freshdesk, Dropbox, MailChimp, Slack etc.)

Subscriber requirements			
Activity	Description	Status	Funded
Internationalisation (eduGAIN – new core attributes, R&S Entity Categories)	Connecting AAF to the global Federation network to enable AAF subscribers to collaborate internationally with other eduGAIN federations.	Active - multiyear activity	AAF operations
Service Provider - Boost Program 2019-2020	<p>The Boost program, which includes data collection, analysis, profiling and reporting on organisations is an ongoing activity.</p> <p>The Boost program identifies a target group of AAF subscribers to take part in a review and analysis activity. This activity will then report on the findings to assist subscribers with maturing their SP.</p>	Planned	AAF operations
IdP Shibboleth V3 upgrade	The AAF is working with IdP's to upgrade to Shibboleth V3. This upgrade is because of the end-of-life of V2. The AAF are working with organisations to complete the upgrade to V3.	Active	AAF operations
IdP Shibboleth V4 upgrade	With the release of Shibboleth IdP V4 expected in 2019 the AAF will be working with subscribers to upgrade to the latest version or migrate to the Rapid IdP solution.	Pending release	AAF operations
Service catalogue	To enhance the current AAF service catalogue to include a comprehensive list of all Service Providers and additional information about each service listing.	Inactive	AAF operations

AAF Operational (enhancements & extensions)			
Activity	Description	Status	Funded
ORCID	<p>As the Australian ORCID Consortium Lead the AAF provide technical support for all ORCID members. This support includes:</p> <ul style="list-style-type: none"> administrative support on-boarding members and running webinars/training central technical support contact for ORCID maintaining documentation for the Consortium and technical documentation eduPersonOrcid engagement activities and resources. 	Active	AAF operations
eduGAIN enabled tools/software	<ul style="list-style-type: none"> Extend the Federation Registry to enable eduGAIN metadata flows Add the AAF Virtual Home to eduGAIN as an IdP Add the AAF Attribute Validator to eduGAIN Possible extensions to AAF Status to monitor the eduGAIN metadata source. 	Scoping	TBC
Business intelligence	<p>Central reporting service to provide information on subscriber utilisation of the federation (i.e. what organisations are authenticating to AAF connected research infrastructure and vice versa).</p>	Active	AAF Operations

Rapid Identity Provider	<p>The ARDC funding will further the development and adoption of AAF's Rapid Identity Provider. A managed connection to the federation.</p> <p>AAF Virtual Home enhancements and updates Migration and onboarding tools to increase speed and efficiency of migration Feature development based on user feedback and technology innovation Maintain security and penetration testing</p>	Active	ARDC
Security & Privacy	<p>Ensure AAF's information resources and systems are managed and protected to ensure their security in terms of confidentiality, integrity and availability.</p>	Active	AAF operations
Verification service	<p>The development of the student verification service has been completed. The next phase includes:</p> <p>Releasing VerifID as a product trialling and testing it with the market releasing it to a broader market.</p>	Planning	AAF operations
Federation Tooling	<p>Commence the planning for the next generation of Federation Tooling.</p>	Planning	AAF operations

Innovation			
Activity	Description	Status	Funded
HPC	<p>Advancing HPC (and non-web based) authentication via AAF to meet the broader needs of the Australia's HPC facilities. AAF has already completed phase 1 of this</p>	Scoping	Pawsey funded

	project with Pawsey. Phase 2 will aim to identify current gaps without viable solutions, comparison to international efforts for non-web-based authentication and the benefits to Australia’s HPC facilities.		
OpenID Connect /Oauth/Social	Advancing multi-protocol support with OpenID Connect (OIDC) for Australia’s national authentication infrastructure. Identify the success of the service to date compared to other international implementations.	Scoping	No funding
ORCID Hub	This body of work will investigate the demand for organisations to authoritatively assert their relationship with a researcher and the potential need for ORCID attributes within the federation. With ORCID, AAF aims to advance persistent identifiers (PID) for the national research environment.	Scoping	No funding
Multi-factor authentication	Exploring options for higher levels of assurance for the Australian education and research sector to enable secure access to sensitive data via the AAF.	Scoping	No funding
eduGAIN	Significant work is required for AAF to effectively roll out eduGAIN nationally as a mainstream service to Australia’s research community. This will enhance international research collaboration through eduGAIN.	Scoping	No funding
Government	Exploration into what is required to enable a full set of partners from education, government and industry to enable access to federated services.	Scoping	No funding

AAF Infrastructure			
Activity	Description	Status	Funded
AWS hosted service		Active	AAF Operations
Cloud Services	<ul style="list-style-type: none">• Github• Freshdesk• Dropbox• Mailchimp• WPEngine• Slack	Active	AAF Operations