

STRATEGIC PLAN

AUSTRALIAN ACCESS FEDERATION 2020 - 2025



MAKING NATIONAL AND INTERNATIONAL IMPACT

STRATEGIC PLAN

Established in 2009, the Australian Access Federation (AAF) is Australia's leading provider of identity and access management services to the education and research sector. The AAF facilitates trusted electronic communications and collaboration between education and research institutions both nationally and internationally. The AAF is a vital part of the Australian eResearch infrastructure landscape and is identified as National Research Infrastructure in the Australian Government's 2016 eResearch Infrastructure Roadmap.

The AAF delivers quality technologies, services and expertise that include:



FEDERATION

Australia's national authentication service for research and education. The Federation delivers world-class single-sign-on that allows individuals across organisational boundaries to collaborate and access online resources within a trusted environment. It is a globally connected service consisting of a trust framework of technology and policy. By logging in via the Federation, end users need only their institutional credentials to access a variety of services in other organisations including file transfer, data storage, compute, collaboration tools and portals, scientific instrumentation, administrative systems, scholarly, teaching, learning and research resources. Underpinning the technology is Rapid Identity Provider, a cloud-based technology to rapidly connect an organisation to the Federation and eduGAIN which enables international connectivity.



AUSTRALIAN ORCID CONSORTIUM

The Consortium provides a national coordinated approach to Open Researcher Contributor ID (ORCID) implementation. The Consortium delivers significant cost savings to the sector, through reduced ORCID licence fees and localised support. The Consortium enables the uptake of a unique persistent identifier for every researcher in Australia.



CONSULTING AND TRAINING SERVICES

Providing bespoke support to AAF subscribers in meeting their identity and access management needs.



VERIFID

A privacy preserving solution to verify that a person has a current student or staff relationship with an Australian University or research organisation. VerifID, the national verification service enables universities, public agencies and commercial providers to accurately deliver services to students and other roles in the research and university sector. It also provides a privacy preserving interface to the Federation.

Operating as a shared service, the AAF acts as an enabler, connecting higher education and research to a rich set of services with reduced effort. It lowers the challenges of providing access within the higher education and research sector and removes inter-organisational barriers to collaboration within Australia and globally.

VISION & MISSION

VISION

Our **vision** is to lead access management for Australian education and research.

The growing subscriber base using AAF's services encompass many leading organisations and includes:

- all Australian universities
- CSIRO, ARC, NHMRC, health, other government research agencies
- leading research support organisations
- national and international organisations providing online products or services for teaching, learning and research.

Our **mission** is to deliver secure access and identity services that connect Australian teachers, students and researchers with global online resources.

MISSION

Before the AAF was established the authentication, identity and access ecosystem within Australia's education and research industry was highly disconnected, incoherent, unsustainable, inefficient and costly. Establishing and operating the AAF to date has been achieved through a sustainable model of subscription fees. Supplementary income from capabilities of the National Collaboration Research Infrastructure Strategy (NCRIS) has assisted the AAF with advancing its platforms. After 10 years of operations, the AAF delivers a national approach to authentication, access, verification and persistent identifiers for Australia's education and research sector. In recent years, the AAF has innovated to take this one step further by connecting its services globally (Table 1). The AAF is a cross-cutting capability that is a fundamental enabling service for Australia's digital and data eResearch infrastructure (as outlined in the Australian Government's eResearch Infrastructure Roadmap 2016).

AAF's services have paid dividends by enabling:

- new teaching and learning, and research methods
- new fields of teaching, learning and research to connect to communities
- globally recognised research
- the connection of researchers to scholarly outputs
- new and emerging technologies to scale
- access to national and international research instrumentation
- interoperable cross-cutting data intensive research infrastructures

Before the AAF (prior to 2009)

Bilateral agreements between education and research institutions to connect teaching, learning and research services to its user base

No sustainable approach to the delivery of identity and access management services for the Australian sector

Highly fragmented identity ecosystem across Australia

Inconsistent access methods across jurisdictions and institutions

Cost inefficiencies

Ambiguity in researcher attribution to scholarly outputs

AAF in 2019

AAF supporting national and international policy for cross organisational access

10 years of delivery of a sustainable national approach to identity and access management services for Australia

AAF recognised as National Research Infrastructure (NRI) and a national asset

Internationally coordinated, standards-based approach for access to national and international teaching, learning and research infrastructure

Significant savings for the Australian education and research sectors

ORCID Consortium with over 120,000 researchers with an ORCID record

2020 and beyond

Extending capabilities to fully realise international cross-organisational access

AAF delivering a broader range of sustainable services to the sector, which will include integration with emerging technologies and a wider range of stakeholders

AAF funded as a landmark and NCRIS capability

Interconnectedness of infrastructures that cement Australia's position as a world leading provider of higher education and research globally

Integrated research infrastructures leveraging the AAF, enabling researchers to lead and participate in world class research

Institutions and government funding agencies able to better track outputs and measure impact in the research system

Table 1: AAF making a difference 2009, 2019, 2020 and beyond

Strengthening existing and growing new partnerships, both nationally and internationally, will ensure AAF is aligned with both the national and international agendas for teaching, learning and research. Partnerships will help AAF to attract funding to sustain and further advance the services it delivers:

Partnerships with federal and state government programs and agencies:

HEALTH AND GOVERNMENT

- Partnerships with Australian Government eResearch infrastructures will see AAF enabling the services to deliver on the National Collaborative Infrastructure Strategy (NCRIS) and the eResearch Infrastructure Roadmap. Partnerships with the Digital and Data eResearch Platforms (DDeRP) as listed in the Roadmap will integrate AAF services. Aligning closely with eResearch capabilities, such as Australian Research Data Commons (ARDC) and BioPlatforms Australia (BPA), will ensure AAF's services evolve to meet the current and future needs of the ecosystem.
- Partnerships with health and government agencies will put their systems at the forefront to provide cohesive interconnected services, across multiple organisational boundaries.

INDUSTRY

Industry partnerships will help AAF align its technology roadmap with industry access and authentication trends.

REFEDS

Partnering internationally with Research and Education Federations (REFEDS) and other Federation operators will ensure AAF remains the global leader in the development of emerging standards, policies and technologies.

PERSISTENT IDENTIFIERS

Partnerships with the international persistent identifier community will ensure AAF leads advances in ORCID and other researcher identifiers as they emerge.

	Outcome	KPI
Partnership with Australian Government eResearch infrastructure programs	Increased use of and accessibility to national research infrastructure enabled by the AAF Innovation of AAF's technologies as the needs of NCRIS evolve	Growth in NCRIS capabilities utilising the AAF
Partnerships with health and government	Streamlined access between and increased usage of services by education, research, health and government	Growth in the use of AAF services by health and government
Industry partnerships	AAF services are technology aligned and informed through strong partnerships with industry global technology providers	AAF service and technology roadmap reflect industry trends
Partnerships with the persistent identifier community	By supporting the national and international agenda on persistent identifiers, the AAF contributes to maximisation of benefits through long term access to and use of research outputs and information sets	Growth in AAF's portfolio of persistent identifier products
Partnerships with REFEDS and Federation operators	AAF proactively contributes to and becomes globally recognised as a leader in the federation community	AAF has formal arrangements in place with other major federations and contributes through attendance and papers to development of international standards, policies and technologies

Table 2: Strategy 1 - Strategic Partnerships

Ongoing skills development is an essential component of building the national capability in identity and access management. AAF is committed to further advance its staffing capabilities and industry knowledge to continue to meet the evolving nature of the technologies, future policies and processes:

SKILLS

Leading programs of skills development will assist in addressing the skills gap for its members, increase sector knowledge of identity and access management technologies and architectures, and of AAF and its services. Training in access and authentication blueprint architectures for university and research infrastructures will ensure Australia is aligned with international best practice and interoperability.

LEARNING

Developing AAF staff for the next generation of AAF services:

- training and mentoring of AAF staff
- staff engaged internationally in learning defining and developing best practice.

TRAINING

To enable this AAF will deliver:

- an annual Identity and Access Management conference
- training programs in conjunction with NCRIS programs of work
- programs of work that grow international capability.

	Outcome	KPI
Leading programs of skills development	<p>Skills gap in identity and access management reduced</p> <p>Increased sector knowledge and engagement</p> <p>Reduced support overhead for the AAF</p>	<p>AAF delivers for its Members an annual program of skills development and engagement that is aligned to the identified skills and knowledge gap in identity and access management</p> <p>A decline in the support delivered by the AAF into these targeted skill areas</p>
Developing AAF staff	<p>An appropriately skilled workforce to support the future needs of the AAF</p>	<p>AAF staff achieve annual, individual KPI and development plans</p> <p>Individual subject matter experts are recognised within the sector and industry</p>

Table 3: Strategy 2 - Skills and Capabilities

Continuing to strengthen foundational services is critical to ensure ongoing quality of service, value and relevance to AAF subscribers and partners:

INTERNATIONAL CONNECTIVITY

International connectivity is identified in the 2016 eResearch Infrastructure Roadmap as a capability to be advanced by the AAF.

CUSTOMER BASE

Growing the customer base strengthens the value of the AAF shared sector service.

STANDARDS

Technology standards continue to evolve at a fast pace, platform innovation provides the foundations through which services are aligned with industry trends and the evolving needs of the sector.

CYBER SECURITY

The need to continually strengthen the security environment is paramount. Improvements in the AAF's cyber security maturity capability and meeting legislative requirements is an ongoing program of work.

SUPPORTING

Supporting teaching, learning, and research continues to remain the foundation of AAF's mission.

	Outcome	KPI
International connectivity	Australian research infrastructures and Australian researchers connected globally	NCRIS funding secured to enable the foundational technology required to advance international connectivity of research infrastructure through AAF services
Platform innovation	AAF's services are aligned with industry trends and evolving needs of the sector	<p>AAF platforms are maintainable, secure and relevant to stakeholders</p> <p>AAF service and technology roadmaps reflect industry trends and NCRIS needs</p>
Strengthening security environment	AAF's services are aligned with industry trends and evolving needs of the sector	AAF operations, services and technologies are aligned with cyber security industry best practice
Growing the customer base	New customer segments using AAF services	Growth of connecting and retaining subscribers in new target markets
Supporting teaching and learning	AAF supporting the evolving needs of teaching, learning and research	Annual AAF survey confirming alignment with membership needs

Table 4: Strategy 3 - Strengthening Foundational Services

AAF’s recognition as a leading National Research Infrastructure (NRI) is critical to achieving impact for Australian teaching, learning and research. A dedicated focus on leading innovation for the AAF means:



Innovating the AAF to deliver the next generation of technologies as new technical standards, technical blueprints and research infrastructures are architected and developed and exploring new opportunities to ensure AAF maintains a leadership position amongst its NRI peers and international colleagues. Innovation of AAF’s technology is critical to AAF’s position as National Research Infrastructure.



Shaping reference architectures in-line with international architectures, such as the European Union funded *Access and Authentication for Research Collaboration Blueprint for Research Collaboration*, will help to position AAF’s services for interoperability and best practice. Positioning of the AAF into Enterprise Architecture models will continue to be important.

	Outcome	KPI
Innovating the AAF and exploring new opportunities to deliver the next generation of technologies	AAF Innovation Roadmap	NCRIS funding secured to support the advancement of innovation of AAF services
Shaping reference architectures	Standardised approaches to the authentication and authorisation needs of the sector	AAF contributes to sector architecture programs

Table 5: Strategy 4 - Leadership

5 YEAR STRATEGY

5 Diversifying Through Value-Added Services

Continuing to diversify operations through value-added services will further strengthen AAF's sustainability. For the AAF this includes:

NEW CAPABILITIES

Identifying and delivering new capabilities that through careful due diligence address market gaps, leverage AAF's core competencies and align with its core mission.

EXPAND

Expand existing capabilities and actively seek new business models that leverage current investments and deliver AAF's services to new markets. One such activity will be to ensure that the potential of the AAF VerifID platform is fully realised.

	Outcome	KPI
Delivering new capabilities	Identification and exploration of potential market opportunities	New products introduced as opportunities are identified and analysed. New products provide a return on investment within 18 months and be fully sustainable over the life of the product
Expand existing capabilities and actively seek new business models	AAF verification products (e.g. VerifID) are seen as market leaders nationally and internationally for organisations wanting to verify student and staff affiliation	AAF verification products have a large share of the market for federation deployed verification solutions

Table 6: Strategy 5 - Diversifying through value added services