AUSTRALIAN ACCESS FEDERATION

Experts in Trust & Identity

15 YEARS

Annual Report 2024

Contents

A message from our Chair and CEO

2024 was a milestone year, where we celebrated the Australian Access Federation (AAF) turning 15. Established in June 2009, the AAF has been providing trust and identity services to connect and protect the research and higher education sector.

During this time, we have transformed Australia's research, teaching, and learning communities by delivering innovative technology solutions and policy, that provide seamless and secure access to digital resources and infrastructure, across Australia's entire research and higher education sector.

The national identity Federation that the AAF operates, enabled over 10.6M authentications in 2024. The AAF is part of a global network of over 78 federations, collectively delivering an information ecosystem of infrastructure and services to advance research, education and innovation on a global scale.

As of 2024, the AAF connected over 1100 national and international services that support teaching, learning, research and collaboration. We continually invest in the technological capability of the Federation and our cloud hosted platform, RapidIdP, which grew in 2024, now connects more than 82% of our subscribers.

Our trust and identity solutions enable greater advances in research and impact and protect the education and research sector through enhanced cyber security. Cyber security is integral to AAF's services — which are secure by design — and we have continued to invest in enhancing the security and robustness of our tools and services.

AAF is a founding member of the Australian Higher Education Cyber Security Service (AHECS) and we continue to work closely with many peak groups to support the cyber security of the sector.

2024 continued to see our growth as the national capability delivering trust and identity services for the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS). Our approach is deeply collaborative and in 2024 we worked with fellow national research infrastructure providers to develop a Trust and Identity Framework for national scale access that is based on FAIR (findable, accessible, interoperable and reusable) and CARE (collective benefit, authority to control, responsibility and ethics) principles for data and compute.

We also actively participated in responding to the National Digital Research Infrastructure (NDRI) Strategy Investment planning process in representing the needs for trust and identity of the sector.

Through a series of incubators, we continued to explore and inform solutions with the Australian Research Data Commons (ARDC), ACCESS-NRI, Microscopy Australia, National Imaging Facility (NIF), Pawsey Supercomputing Research Centre and National Computational Infrastructure (NCI). Along with other national infrastructure providers including Bioplatforms Australia's Australian BioCommons, AURIN, TERN and ANSTO. Together, we are building a secure and interconnected national research ecosystem to enhance research and innovation outcomes.

The AAF also leads the Open Researcher and Contributor ID (ORCID) Consortium for Australia. ORCID provides a free and globally unique persistent identifier for every researcher, and we are a national service that supports ORCID adoption at member institutions. The Australian ORCID Consortium continues to grow and now links over 215,000 persistent identifiers with an '.au' domain across 44 member institutions. We were pleased to support 100% of our members in completing a successful ORCID integration in 2024, with 19 members undertaking multiple integrations, strengthening researchers' connection to their research activities and contributions.

Throughout 2024, AAF continued to collaborate with the national persistent identifier (PID) community through the Australian National PID Strategy and Roadmap activities. The Strategy plans to accelerate Australian research quality, efficiency and impact through the universal use of PIDs and ORCIDs. The AAF have contributed to the national collaborative Stakeholder Action Groups throughout 2024, and we look forward to continuing our involvement in 2025. This is an opportunity to strengthen Australia's digital information ecosystem with a national approach to tracking research impact and support research integrity and innovation.

In 2024, we laid the groundwork for a national research system which is increasingly connected, where seamless trust and identity services opens access to research knowledge, and helps Australian researchers and users of research infrastructure — from health services to citizen scientists — build the future.

Looking forward, the NDRI Strategy Investment Plan outcomes, Australian Government's current strategic review of Australia's R&D system and the 2026 National Infrastructure Roadmap planning are crucial opportunities to inform and support the future needs of the nation.

We would like to thank all our members and partners across the research and higher education sector for a fabulous 15 years.

Heath Marks
CEO
Australian Access Federation Ltd.

Paul Sherlock
Chair
Australian Access Federation Ltd.

Our strategic goals

Our Goal

We are transforming Australia's research, teaching and learning communities by delivering innovative solutions that provide secure access to high-value digital resources and infrastructure.

Our Guiding Principles

Our trust and identity solutions are co-designed by a nationally engaged expert team using international best practice. Our services are underpinned by sustainable business operations.

AUSTRALIAN
ACCESS FEDERATION

Experts in
Trust & Identity

OUR GOALS

Delivering innovative technology solutions

Providing secure access to high-value digital resources and infrastructure

OUR GUIDING PRINCIPLES

Co-designed

Nationally engaged

Expert team

International best practice

Sustainable business operations

Who we are

AAF is a not-for-profit that proudly delivers trust and identity policy, services and solutions by the community, for the community.

Federation

For 15 years, the AAF has operated Australia's identity Federation. AAF's Federation is a combination of technology and policy, that builds a trust framework, providing subscribers with a national single sign-on that allows users across many different organisations to collaborate and access online resources within a trusted environment.

The growing AAF subscriber base encompasses many leading organisations in the research and education sector, allowing people to quickly and easily connect with research knowledge and services.

By logging into the Federation via the AAF, people can access a variety of services including:

- scientific instrumentation
- administrative systems
- scholarly resources
- teaching, learning and research resources
- compute
- collaboration
- tools and portals
- file transfer
- data storage

We connect people to CERN (European Organisation for Nuclear Research), CSIRO (Commonwealth Scientific and Industrial Research Organisation), NIH (National Institutes of Health), Elsevier, Nectar Research Cloud, Clarivate, AURIN (Australian Urban Research Infrastructure Network), Australian Plant Phenomics Network, and many more.

Trust and Identity Capability for national research infrastructure

In 2023, we were officially recognised as the national capability delivering trust and identity services for the Australian Government's Department of Education's National Collaborative Research Infrastructure Strategy (NCRIS).

ORCID Consortium Lead

AAF leads the ORCID Consortium in Australia. ORCID (Open Researcher and Contributor ID) is a free, unique, persistent identifier (PID) for individuals to use as they engage in research, scholarship and innovation activities. ORCID allows members to automate how research outputs are reported, and links researchers to their activities and outputs, ensuring they are recognised for their work. The ORCID Consortium provides a national service to support the adoption and use of ORCID at institutions.

Strategic Plan 2024–27

1. Building strategic partnerships

- National eResearch Infrastructure Programs
- Health & Government
- Technology sector
- Persistent Identifier Community (PIDS)
- Global
- Key Digital Identity Providers
- Research & Education CIOs

2. Developing skills & capabilities

- Overcoming skills and capability gaps across the sector
- Developing the skills and capabilities of our own staff

3. Strengthening foundational services

- Security posture
- International connectivity
- Customer intimacy

4. Leading technology Innovation

- Innovating the AAF and exploring new opportunities to deliver the next generation of technologies
- Shaping reference architectures

5. Developing value added services

- Identification and exploration of potential market opportunities
- Expanding existing capabilities and actively seek new business models

Annual Plan 2024

Deliver innovative solutions

Deliver innovative solutions

Deliver outstanding customer value

Enhance operational excellence

2024 at a glance

107
organisations connected to the AAF
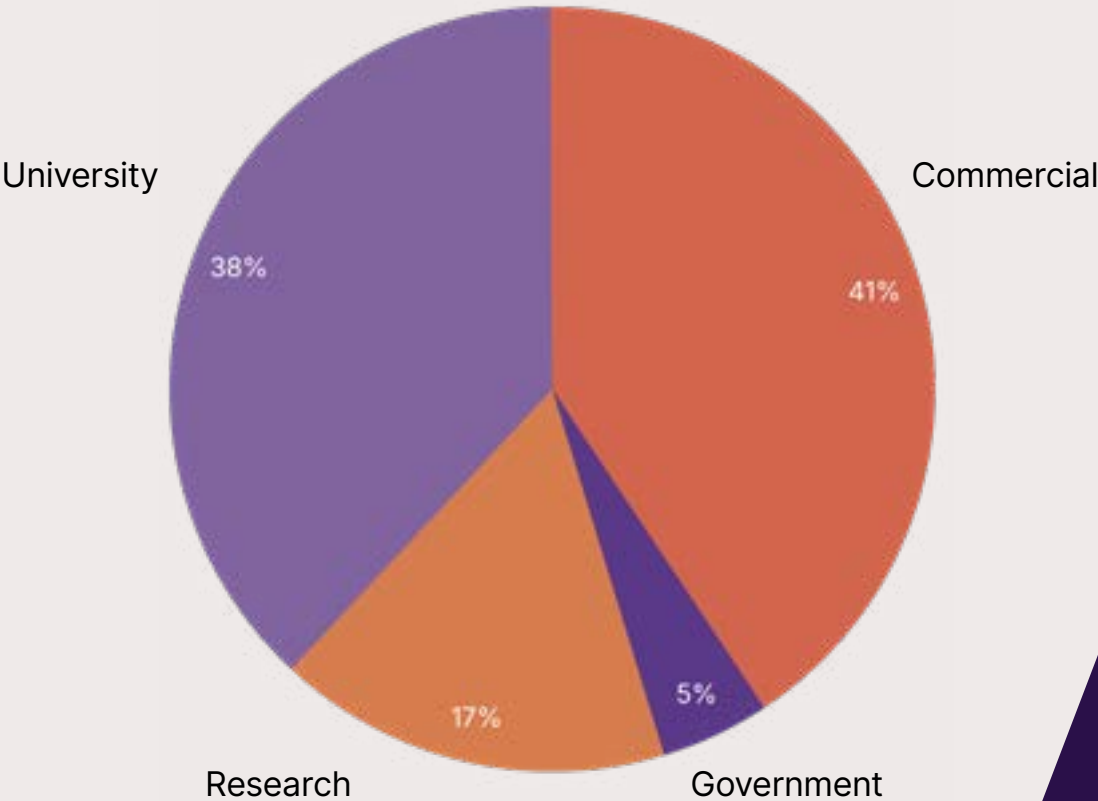
685
Australian service connections

450
International service connections

10,609,095
authentications

Subscriber profile

University

38%

Commercial

41%

Research

17%

5%

Government

Services at a glance

Teaching

Learning

Publisher

Top 5 Services

Teaching and Learning

- 50%
- 16%
- 16%
- 11%
- 7%
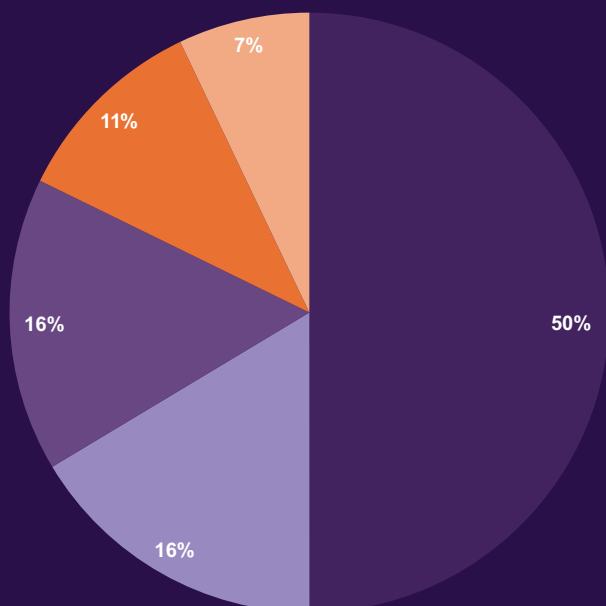
- Elsevier
- My eQuals
- Springer
- Atypon Service
- Sona Systems

Research

- 65%
- 27%
- 3%
- 3%
- 2%
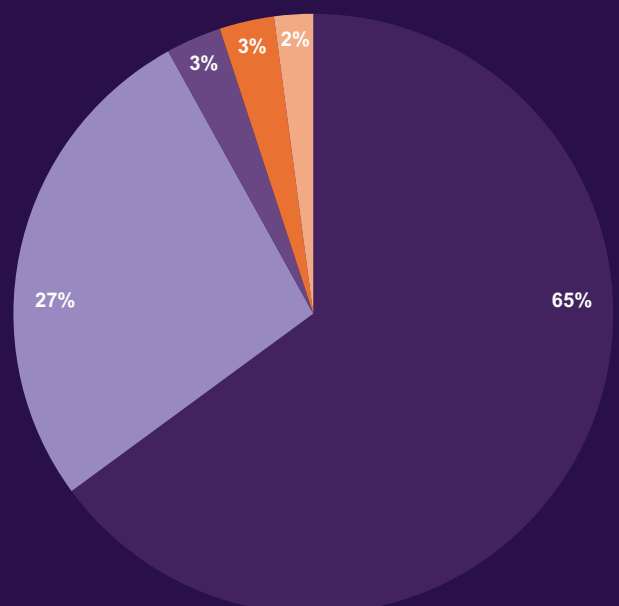
- LabArchives
- REDCap
- ORCID
- Research Cloud
- FileSender

99.95% NETWORK AVAILABILITY

AAF connects

Over 1100 global services connected

For a full list of who we connect visit aaf.edu.au/subscriber/services

Dataverse at Harvard

National Institutes of Health (NIH)

Turnitin

Thomson Reuters

ORCID

Cambridge University Press

Springer

Nature Journal

CERN

Elsevier

Royal Society of Chemistry

The University of
Queensland

Queensland Cyber
Infrastructure
Foundation (QCIF)

QUT

Griffith University

Terrestrial
Ecosystem Research
Network (TERN)

The University of
Sydney

The Australian
National University

Australian Research
Data Commons

Commonwealth
Scientific and
Industrial Research
Organisation
(CSIRO)

Atlas of Living
Australia

Australian
Urban Research
Infrastructure
Network (AURIN)

Australian
BioCommons

The University of
Western Australia

Curtin University

Swinburne
University

Murchison
Widefield Array

The University of
Adelaide

University of South
Australia

South Australian
Health and Medical
Research Institute
(SAHMRI)

The University of
Melbourne

RMIT

University of
Tasmania

Monash University

AARNET

Our solutions

Rapid IdP — AAF's cloud hosted solution

In 2024 we saw continued growth in the uptake of Rapid IdP with 82% of our subscribers implementing AAF's hosted solution.

RapidIdP is the AAF's cutting edge, cloud hosted solution that provides a fast and secure way to connect to the AAF. We deploy and manage the infrastructure needed to connect small, medium and large organisations to services in the Federation. We manage hosting, set up, security patching, feature updates and connection to hundreds of education and research services within Australia and around the world.
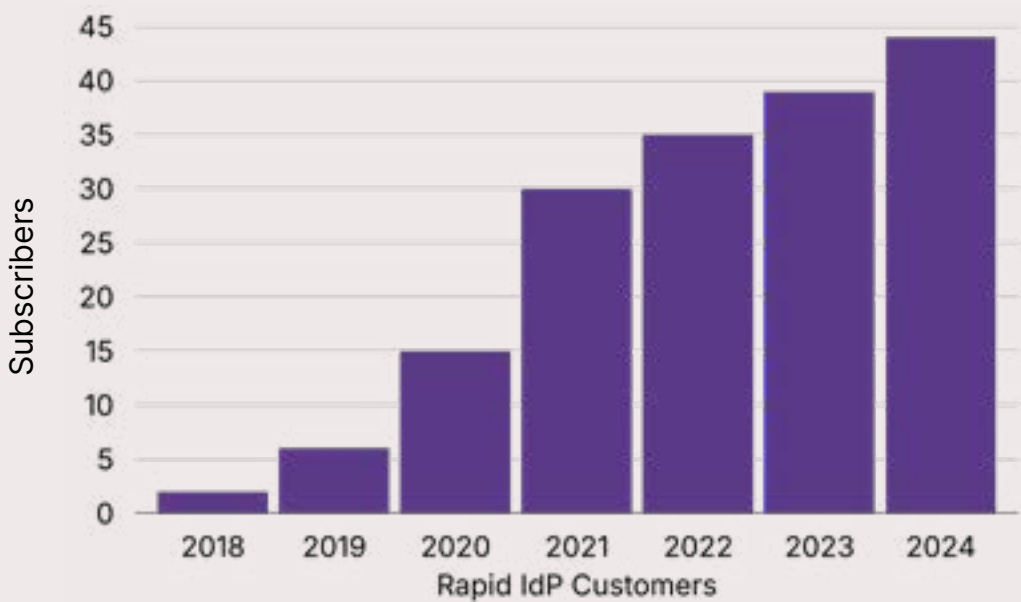
VerifID Global

An easy way to verify your customers instantly and accurately

VerifID Global is an AAF technology operating in Australia and the United Kingdom that verifies a person's relationship to an organisation while preserving privacy. VerifID Global enables public agencies and commercial providers, such as Spotify, YouTube and Flight Centre, to accurately deliver services to students, and other roles in the research and education sector. VerifID Global confirms a person has a current student or staff relationship with a university or research organisation. AAF helps enhance the student experience through VerifID Global by helping merchants verify relationship to the university in order to offer a wide range of discounted services to the academic community.

Services spotlight

Science Direct — Elsevier

Through the Federation the AAF enables easy access to one of the world's largest databases of research knowledge.

As a global leader in information and analytics, Elsevier helps researchers and healthcare professionals advance science and improve health outcomes, striving to create a better future worldwide.

Elsevier is one of the world's leading scientific publishers and data analytics companies, having served the global research and healthcare communities for more than 140 years. Elsevier serves academic and government institutions, top research and development-intensive corporations, healthcare institutions, and medical and nursing students in over 180 countries and regions.

Springer

Enabling Australian researchers and students to access world-class research journal articles.

Springer is a leading global scientific, technical and medical portfolio, providing researchers in academia, scientific institutions and corporate R&D departments with quality content through innovative information, products and services.

As a publisher on the AAF's Federation Springer Nature serves and supports the research community and aims to advance discovery by publishing robust and insightful science, supporting the development of new areas of research and making ideas and knowledge accessible around the world.

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Since 2018, the CSIRO — Australia's national science agency's — connection to the Federation has enabled access to research services and knowledge to solve some of the greatest challenges that Australia faces through innovative science and technology.

CSIRO is one of the largest and most multidisciplinary research organisations in the world, and works with government, universities, industry and the community to develop and deliver a science program for the benefit of all Australians.

The science and research CSIRO undertakes coordinates a sustained effort across disciplines and sectors, incorporating a broad range of perspectives and interests, to deliver impact and build innovation system capability for the long term. Enhancing the quality of life for Australians, stimulating the economy, and preserving our unique environment.

Terrestrial Ecosystem Research Network (TERN)

Enabling trusted access to Australia's ecosystem observatory

TERN, Australia's ecosystem observatory, provides world-class research infrastructure to monitor and understand changes to our environment and climate and enable predictions of future risks. TERN's long-term data streams and products enable Australia's world-leading research and decision-making on climate change, biodiversity, water and soil and support international research collaborations, Australia's membership of the Global Ecosystem Research Infrastructure and government environmental reporting.

TERN measures key terrestrial ecosystem attributes over time from continental scale to field sites at hundreds of representative locations and openly provides model-ready data that enable researchers to detect and interpret changes in ecosystems, enabling a deeper understanding of Australia's environment and its management for sustainable social and economic benefit.

Images credit: TERN

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Uplifting Australia's national research infrastructure through trust and identity

Together with fellow national research infrastructure providers, we're creating a secure and connected national research ecosystem, for greater research and innovation outcomes.

As the Trust and Identity capability for the Australian Government's National Collaborative Infrastructure Strategy (NCRIS), we are supporting the development of a fully connected research ecosystem with industry, government and the community, Our objective is the opening-up of opportunity for research collaboration, innovation, and commercialisation.

Trust and identity underpins every aspect of modern research. It is fundamental infrastructure that will create significant advances in outcomes for Australian researchers.

At the AAF we are building a system-wide approach to identity and access management which will result in more secure research infrastructure and allow secure access, and global connectivity for Australian researchers. The Trust and Identity Framework that we have developed with the community enhances cyber security, with a focus on ensuring that national research is safe and secure, and protecting research infrastructure against future cybersecurity risks and technology disruptors.

In 2024 we have worked towards a national approach that standardises and simplifies access for the research community, to deliver a more secure, efficient, and usable research infrastructure. Enabling better access to research infrastructure for government and industry, supporting enhanced translation.

Future planning

We also actively participated in consultations on the trust and identity and cyber needs of research infrastructure as part of the NDRI Strategy Investment Planning process run by the Department of Education. The Investment Plan will set the course for grant opportunities in 2025, which AAF will respond to.

Trust and Identity benefits

Easier access to national research infrastructure through seamless services

Creating a more researcher-centric NRI ecosystem that reduces the time and complexity for researchers to access multiple services.

Better access to international research infrastructure

Working in step with global best practice developments in interoperability and collaboration.

A connected NRI ecosystem for better industry collaboration

Partnering with industry and global identity providers to build and implement the next generation of trust & identity solutions.

A safer and more secure NRI ecosystem

Ensuring the safety and security of our national assets by protecting them against cyber security risks.

Transformation across research themes

Opening up data and opportunities for collaboration across research themes such as environmental science, space, health sciences and more.

Impact tracking

Enabling tracking of data and resources, so researchers and facilities are recognised for their research impact.

Trust and Identity Pathfinder Incubators

ACCESS-NRI

AAF partnered with ACCESS-NRI, exploring options to provide consistent user tracking and reporting.

The Australian Earth-System Simulator (ACCESS-NRI) is a national research Infrastructure that supports the research and development of the Australian Community Climate and Earth System Simulator (ACCESS) modelling system framework. The framework includes atmospheric, ocean, sea-ice, and land surface models coupled to a range of chemical and biological models. Its potential impact is far reaching, and enables crucial modelling and research, that contributes to international global climate reports, weather forecasting, seasonal prediction, climate projection and climate adaptation policy.

This incubator explores the challenges related to reporting on the usage of ACCESS-NRI assets such as code and data, and develop a solution that can improve the current usage tracking approaches across all ACCESS-NRI resources.

By partnering with ACCESS-NRI we are exploring the underpinnings for addressing the challenge for national research infrastructure, by understanding the identity of users and thereby enabling accurate reporting on usage across service and organisational boundaries.

NCI Australia

Enhancing authentication for trusted access to high performance compute for researchers, government and industry.

AAF partnered with the National Computational Infrastructure (NCI) to explore improved trust and identity for researchers, government and industry using high performance compute, data and virtual environments.

NCI provide expert services and hardware, including high performance compute (HPC), storage and data, driving high-impact research and groundbreaking outcomes for Australia.

The strategic goal is to enable higher Identity and Authentication Assurance Levels (IAL), helping to increase use of higher performance compute HPC services by researchers across multiple research fields, including medical, defence, frontier technologies and modern manufacturing.

Australian Research Data Commons (ARDC)

Thematic transformation to meet Australia's long-term research needs.

AAF is partnering with the Australian Research Data Commons (ARDC) to develop a trust and identity reference architecture. This incubator launched in 2024, will enable consistent application of the technology and policy components of the Trust and Identity (T&I) Framework for research collaborations.

ARDC is Australia's leading research data facility, accelerating Australian research and innovation by driving excellence in the creation, analysis and retention of high-quality data assets.

This incubator will test the entirety of the national Trust and Identity Framework and uplift the interoperability of ARDC's Nectar Research Cloud. The incubator will ensure the trust and identity policies and technologies are reusable across ARDC's Thematic Research Data Commons, to support researchers across distributed infrastructures and research communities.

Collaboration with the national research infrastructure community

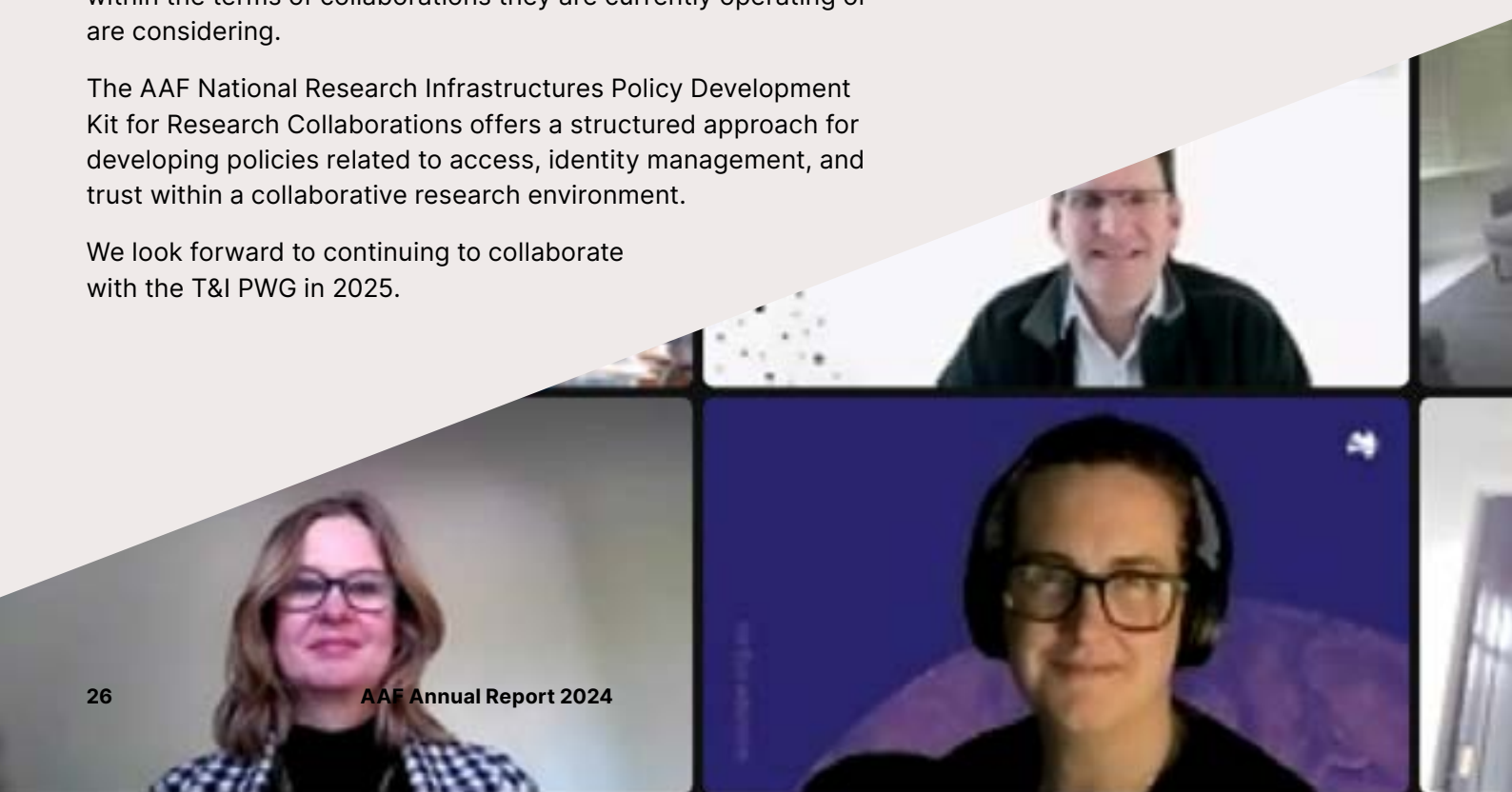## Trust and Identity Policy Working Group

The Trust and Identity Policy Working Group (T&I PWG) has endorsed a set of policies that can be used by research collaborations, to establish shared expectations for identity management and secure collaboration across multiple services and organisations.

Ensuring that researchers can easily collaborate across national research organisations, facilities and services is a challenge. To address this issue, the AAF has coordinated the T&I PWG, with the objective to identify a set of common policies that can be used by research collaborations, enabling trusted and secure collaboration across multiple services and organisations.

In collaboration with fellow NCRIS providers, the T&I PWG has reviewed and provided feedback to the global community on the European Union's Authentication and Authorisation for Research Collaborations Policy Development Kit. How it meets the needs of the Australian research ecosystem has been the main focus. Meeting regularly throughout 2024, to reviewed and endorsed, the policies, both in the context of their own policy suites and within the terms of collaborations they are currently operating or are considering.

The AAF National Research Infrastructures Policy Development Kit for Research Collaborations offers a structured approach for developing policies related to access, identity management, and trust within a collaborative research environment.

We look forward to continuing to collaborate with the T&I PWG in 2025.
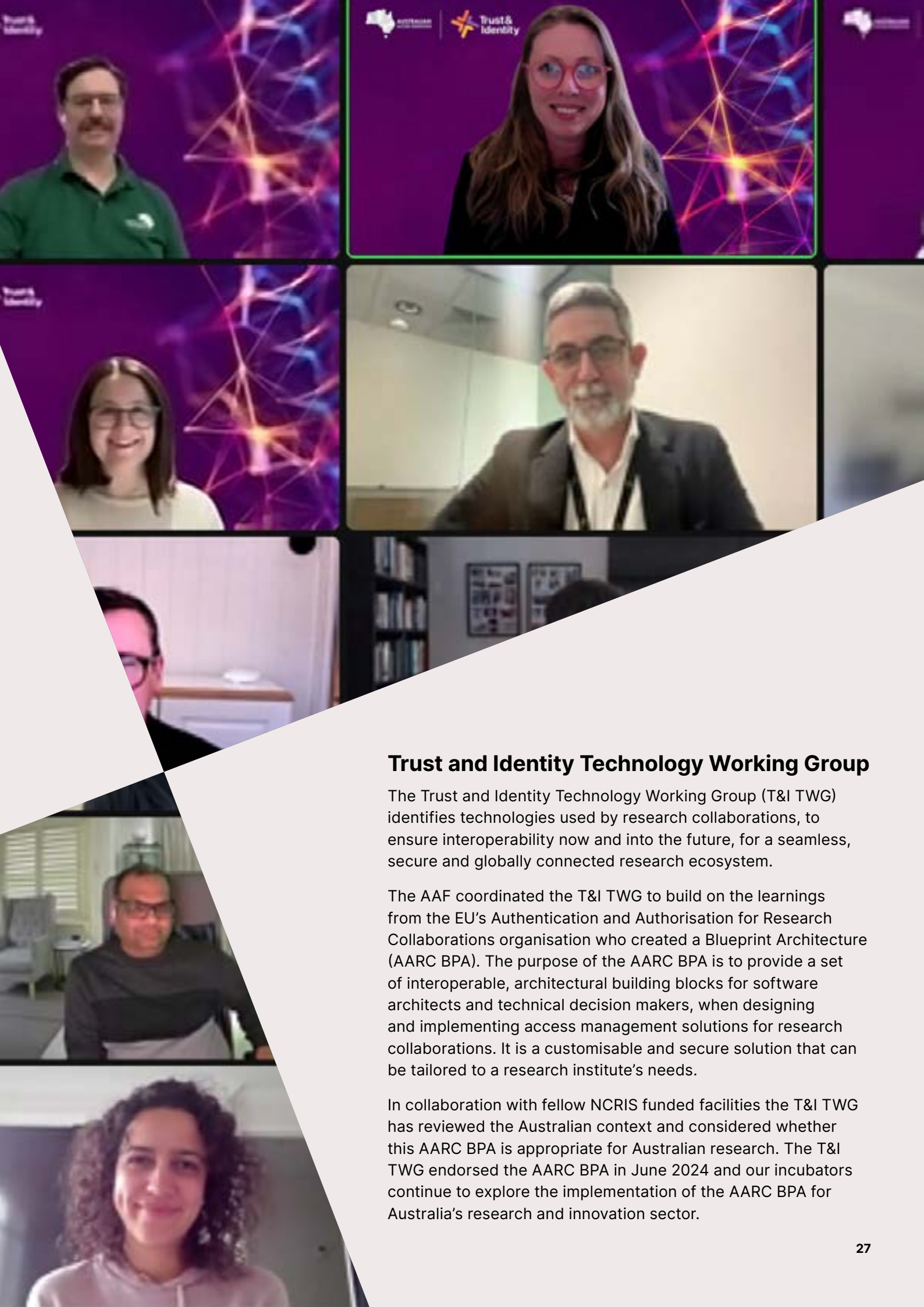
Trust and Identity Technology Working Group

The Trust and Identity Technology Working Group (T&I TWG) identifies technologies used by research collaborations, to ensure interoperability now and into the future, for a seamless, secure and globally connected research ecosystem.

The AAF coordinated the T&I TWG to build on the learnings from the EU's Authentication and Authorisation for Research Collaborations organisation who created a Blueprint Architecture (AARC BPA). The purpose of the AARC BPA is to provide a set of interoperable, architectural building blocks for software architects and technical decision makers, when designing and implementing access management solutions for research collaborations. It is a customisable and secure solution that can be tailored to a research institute's needs.

In collaboration with fellow NCRIS funded facilities the T&I TWG has reviewed the Australian context and considered whether this AARC BPA is appropriate for Australian research. The T&I TWG endorsed the AARC BPA in June 2024 and our incubators continue to explore the implementation of the AARC BPA for Australia's research and innovation sector.

Connecting research across Australia

AAF has a long history of connecting Australian research institutes and facilities, by delivering platforms to increase access and collaboration.

Australian Data Archive — Coordinated Access for Data, Researchers and Environments (CADRE)

Transforming secure access to sensitive data for the social sciences research community

The AAF worked with CADRE project partners on the development of an integrated infrastructure that aligns with the Five Safes Framework, for Australian research institutions and collaborating organisations.

Through a shared and distributed sensitive data access management platform, researchers will gain improved access to crucial data, empowering the development of innovative solutions to a myriad of public challenges.

The CADRE platform will benefit the Humanities and Social Sciences (HASS) research community, research organisations, infrastructure providers and government, and aims to streamline access to a range of sensitive data sets.

By leveraging existing data available through AAF and persistent identifiers like ORCID, CADRE simplifies the data request process for researchers, reduces the time needed to review requests, and improves visibility of the status of requests for both the applicant and the data access committee members.

Partners:

- Australian Data Archive
- ARDC
- AURIN
- AARNet
- Australian Institute of Health and Welfare (AIHW)
- Australian Institute of Family Studies
- Swinburne University of Technology
- Australian National University
- The University of Queensland
- UNSW
- The University of Melbourne
- Research Graph Foundation

Technology advancements

Advancing our Analytics capabilities

In 2024 we commenced work on advancing our Federation reporting and analytics capability.

Through better insight, intelligence, and metrics we will be able to further add value to our subscribers. We expect to progressively release the outputs of this activity in 2025.

Supporting our community with online resources that enable easy access

By continuing to respond to the needs of our community, we launched our new Support Tutorials site that provides a robust range of tools that support their needs.

Topics include how to connect service to the Federation, with material designed to suit beginner, intermediate or advanced users.
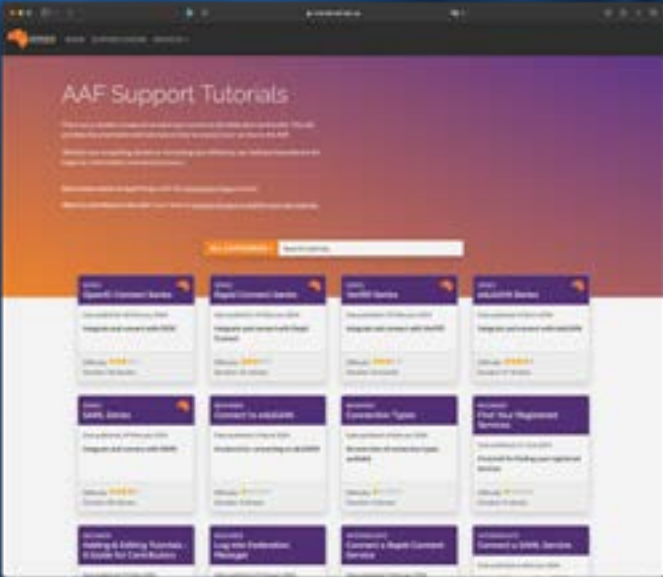
Cyber security

AAF connects and protects Australia's research and higher education sector though a system-wide approach to cybersecurity underpinned by trust and identity.

AAF continued to support our community through cyber secure solutions. As an industry leader and a member of the Australasian Higher Education Cyber Security Service (AHECS), the AAF continues to work closely with the community to amplify cyber security technologies and solutions.

Our technology solutions enhance an organisation's cyber security stance, by employing privacy-preserving technologies, managed authentication, and verification, we create systems that are robust against attacks.

Australasian Higher Education Cyber Security Service (AHECS) Cybersecurity Summit 2024

AAF was pleased to present at the AHECS Cybersecurity Summit in October 2024.

The AAF participated in two panel discussions which highlighted our commitment to collaboration and knowledge sharing, to build resilience and enhance cybersecurity practices, and highlight the importance of trust and identity technologies and policies.

Heath Marks, CEO, Russell Ianniello, Head of Technology and Nick Rossow presented a Partner Session at the Summit, covering technology, security and trust and identity updates from the AAF.

Heath Marks, CEO, said "The 2023 Data Breach Investigations Report states that 86% of cyber incidents globally are trust and identity related. In Australia, we know that cyber-attacks are targeting valuable digital resources and sensitive data. We need a holistic approach to cyber security

for national research infrastructures, underpinned by trust and identity, to ensure secure access to research services. Simplified access to secure, integrated research infrastructure makes it easier for academic researchers to spend more time on their valuable research, and ensures their digital identities remain safe."

Russell Ianniello, Head of Technology, said "At AAF, we strive for seamless, secure and easy authentication. We see the growing recognition of the importance of privacy and data minimisation in the sector, and a shift from centralised technologies to decentralised technologies. There is an increased understanding and adoption of modern, easier to use protocols, that are more secure and protect Australia's valuable research infrastructures and assets."

POLICY DEVELOPMENT

OPERATIONAL SECURITY

STAFF TRAINING AND AWARENESS

COMMUNITY ENGAGEMENT

Communication and engagement

The AAF conducted over 250 national and international engagements throughout 2024, as part of our ongoing commitment to engaging with our subscribers, partners and the wider community.

We had a productive year filled with various engagements to support our valued community. These engagements included live and virtual events, focus group discussions, community calls and many one-on-one consultations.

In 2024, the AAF hosted our partners with European national research infrastructures, conducted multiple roadshows across Australia, and participated in many informative conferences and workshops, both domestically and internationally, to ensure our expert team and technology solutions remain cutting-edge.

To support the needs of the community, we ran two focus group sessions with a cross-section of AAF's subscribers and collaborative partners. The focus groups provided the AAF with valuable feedback and assisted in identifying areas for continued improvement in 2024 and 2025.

AAF continues to engage with the national and international trust and identity community and are proud to be a part of many steering committees, advisories, conferences and working groups, sharing our expertise in the higher education, research and innovation sectors.

National and international engagement

2024 highlights included presenting at conferences and working groups such as:

International

- REFEDS (Research and Education FEDerations group)
- Federated Identity Management for Research (FIM4R)
- Research Data Alliance
- Council of Australasian University Directors of Information Technology (CAUDIT)
- Asia Pacific Advanced Network
- PIDfest (Prague, Czech Republic)
- ORCID Board
- ORCID Consortia Interest Group (Santiago, Chile)
- APAN Identity and Access Working Group

National

- ADSTAR – Defence Conference
- eResearch Australasia Conference
- AHECS Cybersecurity Summit 2024
- SABRE Alliance Summit
- Digital Nexus Alliance
- National Collaborative Research Infrastructure Strategy (NCRIS) Forum
- National Research Infrastructure Strategy (NCRIS) Communications Network
- Research Infrastructure Connected (RIC) Working Group
- Research Infrastructure Connected (RIC) Community of Practice
- National PID Strategy and Roadmap Stakeholder Action Groups
- Australian ORCID Steering Committee
- Identifiers for Instruments Australia (i4iOZ)

32

presentations

25

conferences & events attended

49

focus groups and one-on-one sessions

4

video presentations

85

community of practice sessions attended

23

workshops attended

22,249

total users across all AAF websites*

79,000

page views across all AAF websites^

249

broadcast communications˜

*17,764 users on aaf.edu.au, 982 users on trust.aaf.edu.au, 3,503 on verifid.global.
^ 44,000 page views on aaf.edu.au, 11,000 page views on trust.aaf.edu.au, 24,000 page views on verifid.global.
˜Updated definition of broadcast communications to include all email and social media communications distributed.

AAF Roadshows

Meeting with our subscribers and community across Australia

Throughout 2024, members of the AAF team met with fellow national research infrastructures and our subscribers to discuss a range of identity and access management initiatives and opportunities to strengthen their organisation's trust and identity stance. Across the year, roadshows were held in Melbourne, Canberra and Perth.

These conversations inform enhancements for access to services and resources, for students, staff, and research communities. Discussions included baseline expectations, assurance levels, attributes, eduGAIN and the Federation.

The Roadshows also provide AAF's team with a valued opportunity to tour innovative research facilities, including the Melbourne Centre for Nanofabrication, supercomputing facilites at Pawsey Supercomputing Research Centre and National Computational Infrastructure, Phenomics Australia Perkins In Vitro Node, and CSIRO's AuScope Virtual Research Environment.

Terry Smith, AAF's Head of Support said, "Meeting with our partners, subscribers and fellow national research infrastructures, enables the AAF to update the community on developments within the Federation and our Trust and Identity incubators. These valuable discussions allow us to tailor our technology solutions and support for access on a national and global scale."

Sarah Thomas, Portfolio Manager, said, "It is wonderful to engage with our existing subscribers, future collaborators and fellow National Collaborative Research Infrastructure Strategy (NCRIS) capabilities to share more about AAF's products and services. These productive meetings give the AAF the opportunity to listen and understand the issues that subscribers or future collaborators are currently facing, and to determine how we can best support them."

The AAF would like to thank all of our partners and institutions who participated in the meetings and led tours, and we look forward to visiting more of our community in 2025.

Visiting exemplar trust and identity facilities across Europe

AAF's Head of eResearch, Sarah Nisbet, and eResearch Portfolio Manager, Nick Rossow, hosted meetings and tours in March 2024 with exemplar trust and identity facilities in Europe. Joined by incubator partner representatives from the National Imaging Facility (NIF) and ACCESS-NRI.

The visit included world-class research facilities and enabled collaboration with international counterparts, to discuss opportunities and global alignment that enhance the quality and impact of trust and identity for Australia's national research infrastructure.

Sarah and Nick attended the AARC TREE (Authentication and Authorisation for Research and Collaboration (AARC) Technical Revision to Enhance Effectiveness (TREE)) kick-off meeting in Utrecht, Netherlands. The AARC TREE

project will define common strategies for the development and deployment of Authentication and Authorisation Infrastructures (AAIs) in Europe and beyond, and we were pleased to share our insights from our incubators and adapting AARC's policy kit for Australian national research infrastructures.

The tour had the opportunity to meet with international trust and identity experts at CERN (The European Organisation for Nuclear Research) and SURF (a cooperative association of Dutch educational and research institutions), to discuss trust and identity solutions for research collaborations. They shared great insight into functionality possibilities for authentication and authorisation in multi-organisational research collaborations – learnings we can apply to our current trust and identity incubators. The tour also visited CERN's Large Hadron Collider (LHC) control room, the world's largest and most powerful particle accelerator.

We thank our European colleagues for generously sharing their time and insights throughout our study tour.

eResearch Australasia 2024

Connecting with the Australian eResearch community

AAF attended eResearch Australasia 2024 for an informative week, discussing the latest developments from our Trust and Identity Pathfinder incubators, cybersecurity for the sector, measuring and communicating the impact of research infrastructure, and building trust through multi-factor authentication.

It was a fantastic opportunity to connect with the community and discuss trust and identity for national research infrastructure, Federation updates, ORCID, and the national PIDs strategy.

AAF presentations and panel discussions included "Addressing the growing Cyber-Security concerns with Digital Research Infrastructure", "Secure and seamless access to national research infrastructure", "Unlocking trust and identity through co-design and change management", "Revealing the invisible: the challenge of measuring and communicating the impact of research infrastructures" and "Know your researcher".
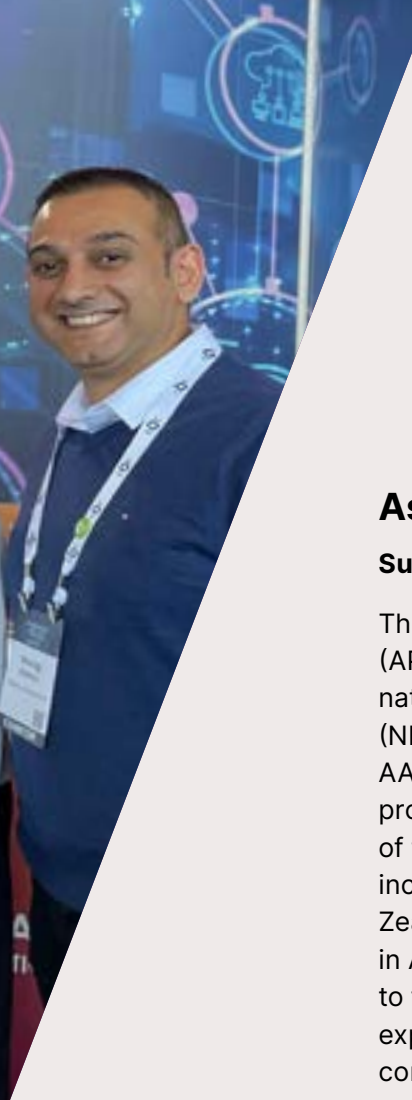
Asia Pacific Advanced Network (APAN)

Supporting global research connection and collaboration in the Asia-Pacific

The Asia Pacific Advanced Network (APAN) is an international partnership of national research and education networks (NRENs) across the region. Through AAF's involvement with APAN, we have proudly supported the establishment of federations across the Asia-Pacific, including Hong Kong, Singapore and New Zealand. The AAF regularly participates in APAN meetings held across the region to further share our knowledge and experience in supporting global research connection and collaboration.

AAF's Head of Support, Terry Smith, chairs the Identity and Access Management (IAM) Working Group, which focuses on generating awareness and understanding of IAM. In 2024, the IAM Working group continued to promote the use of identity federations and benefits of increased security, ease of use and improved collaboration opportunities across the region, particularly targeting regions that have yet to begin their identity journey.

We look forward to continuing to share our expertise with the APAN community at upcoming 2025 meetings.

AAF leads the ORCID Consortium in Australia

2024 was another successful year for the ORCID Consortium led by the AAF and we would like to express our thanks to our Consortium members for their ongoing support.

ORCID is a persistent identifier (PID) that is free for individuals to use as they engage in research, scholarship and innovation activities. ORCID enables researchers to spend more time conducting research and less time managing it, by enhancing discoverability of research outputs and automating updates to individual records. As Consortium Lead, the AAF is proud to provide a national service to support ORCID adoption at member institutions.

Throughout the year, the AAF played a key role in promoting the adoption and usage of ORCID within the Australian higher education and research sector, while also engaging with the ORCID and persistent identifiers (PIDs) community both nationally and internationally.

In 2024, we were pleased to support 100% of our members completing a successful ORCID integration, with 19 members undertaking multiple integrations. With close to 30,000 new ORCID iDs created in 2024, this continued adoption and growth represents the importance of ORCID for the national research community.

The AAF have continued to collaborate with the national PID community through the Australian National PID Strategy and Roadmap activities. Released by the Australian Research Data Commons (ARDC) in early 2024, it plans to accelerate Australian research quality, efficiency and impact through universal use of PIDs and ORCID iDs. The AAF have contributed to the national collaborative Stakeholder Action Groups throughout 2024, and we look forward to continuing our involvement in 2025.

285,381
items added through member integrations

217,730
ORCID records with a '.au' domain

192,870
ORCID iDs connected by integrations

33,063
researchers that have benefitted from automatic updates to their ORCID records made by the Australian ORCID Consortium

29,860
new ORCID iDs created

44 MEMBERS

Building a future where impact tracking is easy: The Australian National Persistent Identifier (PID) Strategy and Roadmap

Persistent identifiers (PIDs) are crucial for impact tracking, as they are globally unique machine-readable codes assigned to objects such as scholarly articles, people, datasets, instruments, or online resources. They serve as unalterable markers for locating and identifying specific resources amidst the dynamic landscape of the internet.

We are delighted to be working with the Australian Research Data Commons (ARDC) and the community on the development of the Australian National Persistent Identity (PID) Strategy and Roadmap. This is an opportunity to strengthen Australia's digital information ecosystem with a national approach to tracking research impact, and supporting research integrity and advancement.

Melroy Almeida, AAF's ORCID Engagement and Support Lead, says, "Research relies on various resources including collaborators, related projects, funding opportunities, labs, data, and observations. By improving how easily researchers can access these resources, repetitive administrative work can be reduced, boosting productivity, and fostering meaningful and impactful research."

The PIDs Cost Benefit Analysis Report, commissioned by AAF and ARDC in 2022, led to the development of the Australian National Persistent Identifier (PID) Strategy and Roadmap, which was released in early 2024. The Australian National PID Strategy outlines key steps to enhance research quality and optimise the national research landscape.

The AAF look forward to continuing to actively collaborate with the ARDC to ensure priority PIDs, including ORCID, are adopted by researchers and institutions, driving improved research outcomes across Australia.

ORCID

ORCID Steering Committee

The ORCID Steering Committee acts in the interests of the Australian ORCID Consortium members. Providing guidance to the AAF as Consortium Lead and ensuring future sustainability.

Professor Joe Shapter	Independent Chair
Natasha Simons	Australian Research Data Commons (ARDC)
Elleina Filippi	AAF nominee
Jill Benn	Council of Australian University Librarians (CAUL), Chair
Professor Susan Dodds	Universities Australia Deputy Vice-Chancellors, Research Committee, Chair
Greg Sawyer	Council of Australasian University Directors of Information Technology (CAUDIT), CEO
Julie Glover	NHMRC, Executive Director
Claire Forsyth	Australian Research Council (ARC)
Michelle Vincent	Australasian Research Management Society (ARMS), Chair

AAF Team

Chief Executive Officer	Heath Marks
Chief Operating Officer	Elleina Filippi
Head of Support	Terry Smith
Head of Projects & Managed Services	John Scullen
Head of eResearch	Sarah Nisbet
Head of Technology	Russell Ianniello
ORCID Engagement & Support Lead	Melroy Almeida
ORCID Community Specialist	Julie Toohey
Senior Finance Officer	Marita Dore
Development Team Lead	Matthew Puku
Senior Developer	Jun Zheng
Senior Developer	Jack Carpenter
Software Developer	Waldo Fouche
Software Developer	Wibowo 'Bo' Sutanto
Software Developer	Kelley Foster
Solutions Architect	Anurag Katariya
Software Developer	Shamseera Kurumbeth
Data Engineer	Blair Jackson
Systems Engineer	Darcy London
Senior Technical Support Analyst	Dalia Abraham
Junior Data Entry	Lachlan Scullen
Project Manager	Niels Charlouis
Senior Business Analyst	Cherry Green
Senior Solutions Analyst — Identity & Access	Patrick Carnuccio
eResearch Portfolio Manager	Sarah Thomas
eResearch Portfolio Manager	Nick Rossow
eResearch Analyst	Dr Fahame Emamjome
Business Analyst	Andy Nguyen
Policy Analyst	Amber Daniels
Policy Working Group: Trust and Identity	Dr Danny Kingsley
Executive Assistant	Sheree Cuyten
Projects Officer	Carolyn Plant
Communications Manager	Kerry Mora
Communications and Marketing Officer	Emily Kuehner

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Australian Catholic University

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Kortext

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Learning Technologies Group Pty Ltd

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Monash University

Murdoch Children's Research Institute (MCRI)

Murdoch University

MyUNiDAYS Limited

National Health and Medical Research Council (NHMRC)

NeuRA

Northern Territory Government

NSW Health

Office of the National Data Commissioner

Olivia Newton-John Cancer Research Institute

OpenLearning.com

ORCID, Inc

Oxford University Press

PAN Software

PebblePad

Proxi.ID

QIMR Berghofer Medical Research Institute

QPAY (MySmock Pty Ltd)

QS unisolution

Queensland Cyber Infrastructure Foundation (QCIF)

Queensland Government - Department of Environment and Science

Queensland Health

Queensland University of Technology

Research Research Ltd

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TAFE NSW

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Teamviewer, Inc

The Beans Group Ltd

The Royal Society of Chemistry (RSC)

The University of Adelaide

The University of Melbourne

The University of New South Wales

The University of Notre Dame Australia

The University of Queensland

The University of Sydney

The University of Western Australia

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YOTI