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**AUSTRALIAN
ACCESS FEDERATION**
www.aaf.edu.au

AUSTRALIAN ACCESS FEDERATION: ONE YEAR ON

Presented by: **Heath Marks** *Project Manager*
Terry Smith *Technical Program Manager*



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OVERVIEW

The **Australian Access Federation (AAF)** provides a production framework and support infrastructure to facilitate trusted electronic communications and collaboration within and between universities and research institutions in Australia and overseas.



**AUSTRALIAN
ACCESS FEDERATION**

1. The Australian Journey
2. What's happened in the last 12 months?
3. Roadmap of activities

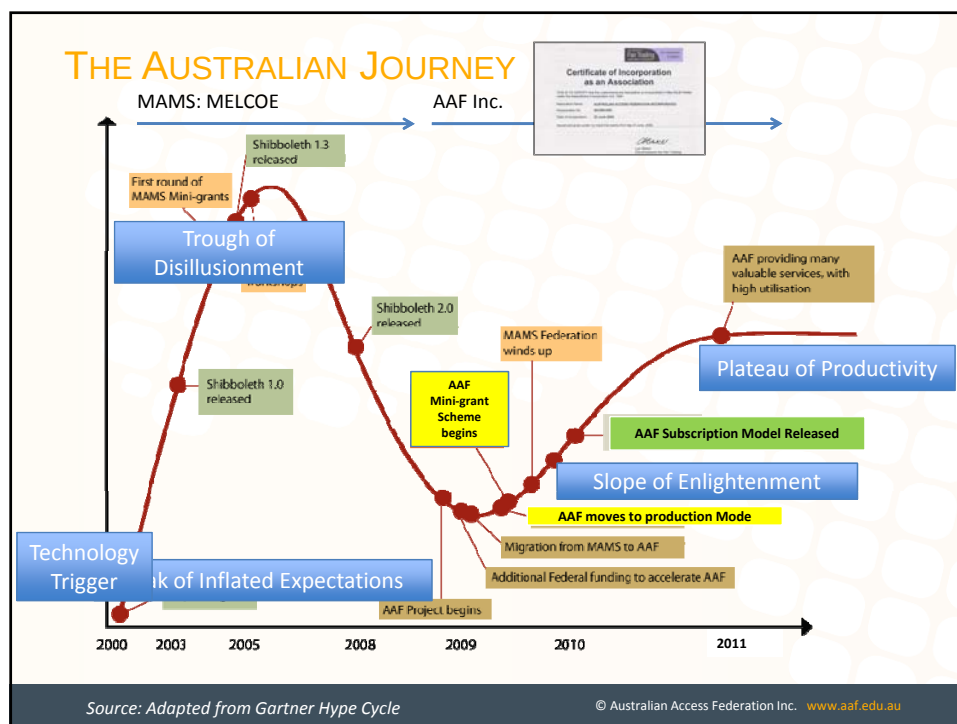


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AAF SHORT VIDEO



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THE LAST 12 MONTHS!

FROM JUNE 2009 TO END OF 2010:

- \$2 Million DIISR Funding – 8 Key areas
 - [MAMS Testbed Migration](#) \$150,000
 - [Technical resources to assist organisations to join the AAF](#) \$300,000
 - [Marketing and Communication](#) \$250,000
 - [Mini-grant program](#) \$455,000
 - [CAUDIT support](#) \$150,000
 - [AAF Inc Operations](#) \$400,000
 - [Foundation Members Support](#) \$150,000
 - [Advanced Technical Developments](#) 145,000
- Focus on significantly accelerating the implementation of the AAF =
Plateau of Productivity



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AAF PROJECT STAFF

Project Manager	Heath Marks	Griffith University
Technical Program Manager	Terry Smith	QUT
Change & Communication Manager	Glenys Kranz	Griffith University
Developer	Steven Beagley	QUT
Policy, Process and Strategy	Patricia McMillan	University of Queensland
Technical Specialist	Bradley Beddoes	QUT
Technical Support	Damien Mannix	VeRSI
Technical Support	Stuart Allen	Intersect
MAMS Migration	Bruc Liong	Macquarie University



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Intending to Join:

- Australian National University
- Australian Synchrotron
- IVEC
- The University of the Sunshine Coast
- University of Newcastle
- Victorian eResearch Strategic Initiative
- Deakin University
- The University of Sydney
- The University of Notre Dame
- University of Southern Queensland

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AFFILIATE PARTICIPANTS



NetSpot	Hosted Moodle and Mahara solutions in the cloud
Pebble Learning	Hosted e-Portfolio solution in the cloud
RMIT Publishing	Informit on-line service for Australian scholarly publications
TALIS Information	Talis Aspire – A reading list solution
Evolving Spaces (Vic)	Trobexis – A travel portal
Dotsec Pty Ltd	Hosted IdP for Queensland Health access to clinician databases
Masaryk University	Atlas of pathology images (clinical, macroscopic and microscopic)
BigPulse	Hosted voting solution in the cloud

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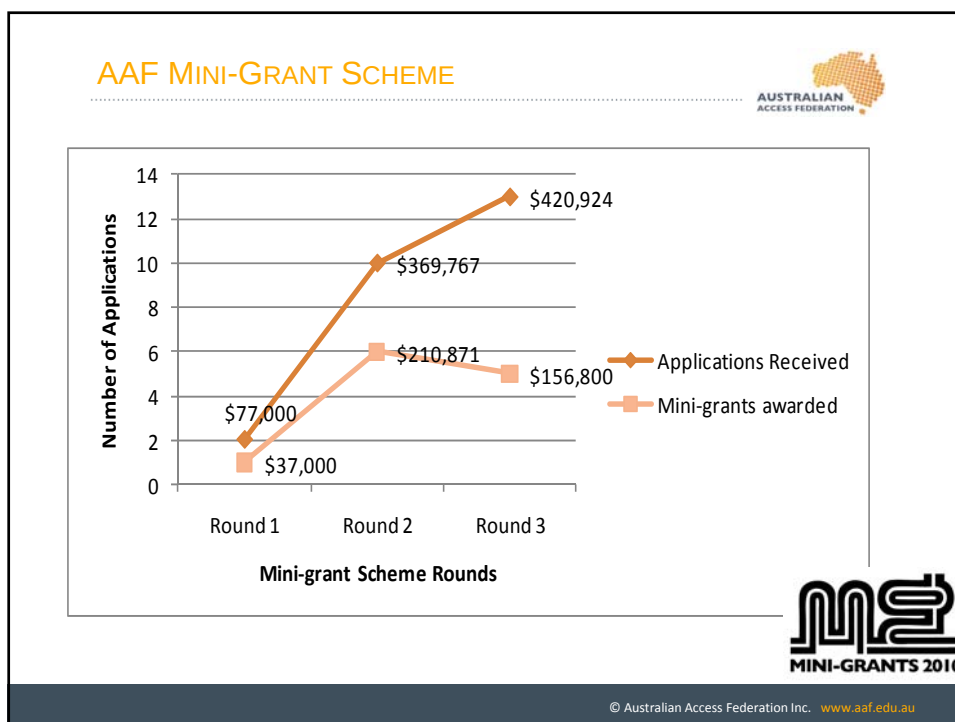
Expressed interest to Join as an Affiliate:

- John Wiley & Sons (Inc)
- Automated Patrol Telescopes Australia
- Elsevier

Expressed interest in the AAF generally:

- New Zealand Federation
- Hong Kong University

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AAF MINI-GRANT SCHEME



Phenomics Ontology Driven Data repository (PODD) supporting international biological research– AAF Enablement: University of Queensland (UQ) \$35,217

University IT Benchmarking System containing profile data including major systems in use and benchmarking data: University of South Australia (UniSA) \$20,000

Federating Access to AusStage to increase the number of researchers actively contributing data for the Australian Performing Arts: Flinders University \$40,000

Authenticated Annotation Services for E-Research (AASER) which will provide end users with the ability to securely attach annotations to virtually any web page: University of Queensland (UQ) \$39,700



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AAF MINI-GRANT SCHEME



Enhancing Access to ARCS' Nimrod Service which manages the execution of parameter sweeps, optimisation and experiment design across clusters and grids: Monash University \$40,000

TPAC digital Portal AAF Implementation to provide greater access to heterogeneous and geographically distributed ocean and climate datasets: Tasmanian Partnership for Advanced Computing \$40,000

Advanced Integration for auto provisioning integration tools with Blackboard: Queensland University of Technology (QUT) \$39,600

AAF Enable AuScope Grid Portal Infrastructure: CSIRO \$37,000

Informit on-line resource for Australian scholarly publications - removing the need for easyprozy: RMIT Publishing \$36,000



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AAF MINI-GRANT SCHEME



Connect *telescope-net* to the AAF to improve the user experience and streamline processes with a view to expanding the service to other Australian universities: The University of Southern Queensland (USQ) and Automated Patrol Telescopes Australia Pty Ltd \$37,500

Labshare Federated Access Project to create a nationally shared network of remote laboratories using the AAF to assist in identification and authorisation of students: University of Technology, Sydney (UTS) \$30,000

Providing access to the Sakai Service via the AAF : to enable seamless access to resources and secure communication to support collaboration between users: Australian Research Collaboration Service (ARCS) \$9,600



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USE THE AAF TO ACCESS EXISTING SERVICES



ARCS Data Fabric
ARCS Compute Cloud and Grid Services



The ANDS Publish My Data Service (research collections)
<http://ands.org.au/services/publish-my-data.html>

The eGrad School for post-grad researchers
<http://www.egradschool.edu.au/>



e-Grad School

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EXAMPLES OF HOW OTHERS ARE USING THE AAF



Australian Synchrotron Virtual Beamline (VBL) allows researchers using the macromolecular crystallography, micro crystallography and powder diffraction beamlines to view experiments from a remote location.



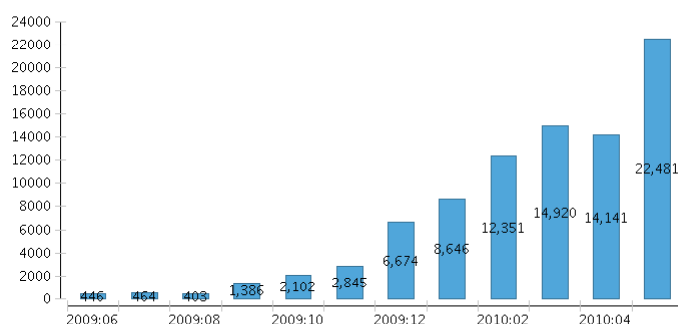
The Australian Integrated Marine Observation System (IMOS): Authorised people are identified and authenticated through the Australian Access Federation (AAF), which enables IMOS to easily coordinate access privileges for users from many institutions.

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2010- GROWTH STATISTICS



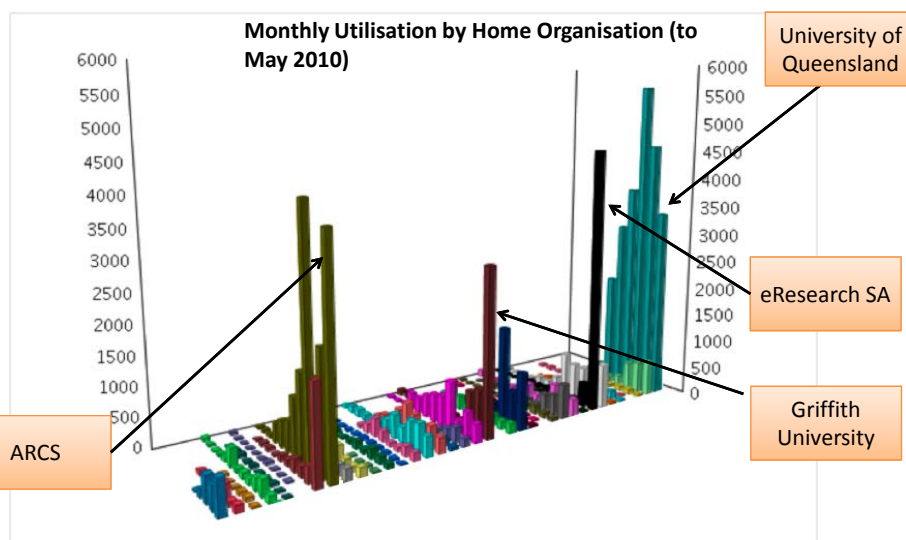
AAF Monthly Utilisation (to May 2010)



There was a slight drop off during April, which could be attributed to Easter, Anzac day public holiday and university semester breaks.

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2010- GROWTH STATISTICS



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2011- SUBSCRIPTION FEES



Members	2011	Description
One-time joining fee	\$3,500	A one-time joining fee levied to each new Participant from 1 January 2011.
Basic annual fee	\$3,560	A base annual fee for each Member. This includes the provision for one Identity Provider (IdP) and up to ten (10) services.
Fee per FTE	\$1.55	A fee calculated on the number of Full Time Equivalent Staff employed at the Member's institution.
Extra service fee	\$2,500	An additional fee per extra 10 services that the Member wishes to make available through the Federation.
Extra IdP fee	\$4,500	An additional fee per extra IdP that the Member has in the federation.

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2011- SUBSCRIPTION FEES



Affiliates	2011	Description
One-time joining fee	\$3,500	A one-time joining fee levied to each new Participant from 1 January 2011.
Annual fee per service	\$3,000	This is a flat fee per service connected to the federation.
Annual fee per IdP	\$10,000	A flat fee per Affiliate IdP in the Federation

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CURRENT STATUS – AAF CORE



AAF Core Infrastructure

- Test and production instances
- Core functions
 - Resource Registry
 - Discovery Service (WAYF)
 - Metadata generation and distribution
 - Virtual Identity Provider
- Auxiliary functions
 - Web site
 - Wiki
 - Nagios Monitoring
 - Utilization reporting
 - Mail lists



Infrastructure Refresh

- Upgrade / refresh all components
- Improved Configuration documentation
- Moving some services to the cloud

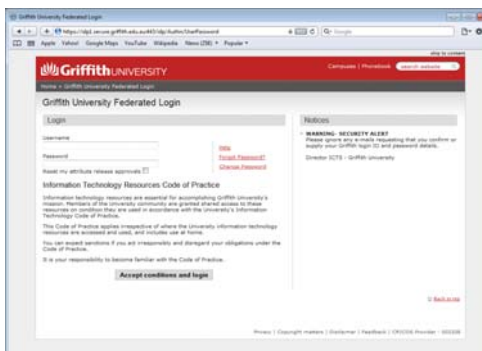
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CURRENT STATUS - PARTICIPANTS



Regular reviews of IdPs and SPs

- moving all to same level then continually improving
- Ongoing activity
- Branding, look and feel – AAF Style Guide available
- Version updating and patching (All IdP to latest version)
- Compliance with the AAF Rules



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ROAD MAP – USER CONSENT



Privacy and the AAF

- Discussion paper to circulate soon
- Verification of Requirements
- Acceptable timeframes



Options

uApprove.au
uApprove.jp
Shibboleth V3 – consent engine
simpleSAMLphp

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ROAD MAP - AUTHORIZATION



Federation Authorisation

- Attributes to define groups → virtual organizations
- Management of VOs
- Attaching attributes to users

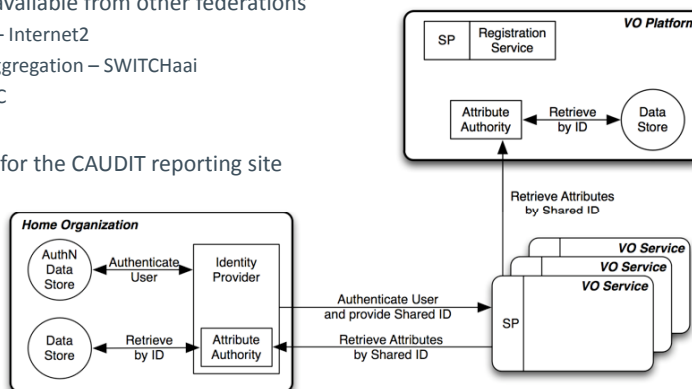
Several options available from other federations

- Comanage – Internet2
- Attribute aggregation – SWITCHaai
- GFIVO – JISC

Example

- UniSA solution for the CAUDIT reporting site

September workshops:
Sydney and Melbourne



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ROAD MAP - CO FEDERATION



What does co-federations really mean?

Working with New Zealand

Options

Services and IdP registered in multiple federations

KALMAR2 - Union is a cross-Nordic authentication

eduGAIN - Pan-European



Many issues to work through

- State, political and legal boundaries
- Privacy and user consent
- Inconsistent meaning of Attribute values
 - What does STAFF, FACULTY, MEMBER mean?
- Merging of Metadata –
 - performance and keeping large metadata file current

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ROAD MAP - TOOLS



Tool for local deployment

- Attribute reflector
- Self service Import and export of the auEduPersonSharedToken
- Who is this person (Security)
- Log viewer
- Additional tools to supporting Privacy within the AAF
 - View attribute release history

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ROAD MAP – MANAGEMENT TOOLS



Federation Registry

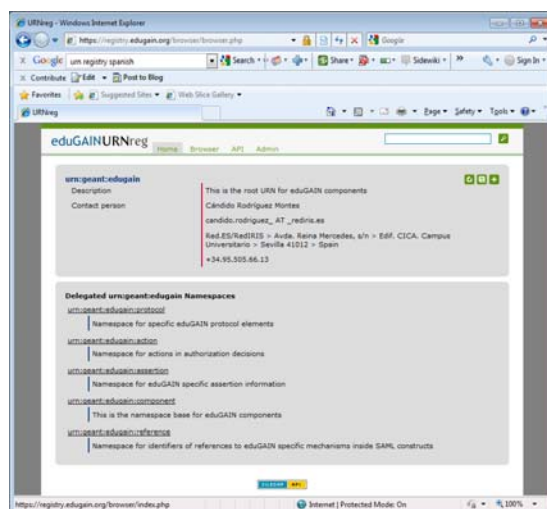
- New management tool for the federation
- Based on concepts from the SWITCHaai Resource Registry built around the AAF Business model rather than a purely technical solution – Organisation centric rather than IdP and Resource centric.
- Improve UI over the current AAF Resource Registry
- Components available in Test federation now *[provide URL]*

Have a look at:

<https://manager.test.aaf.edu.au/federationregistry>

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ROAD MAP – UNIQUE NAMES



URN Registry

Tool for managing URNs (*Uniform Resource Name*) within the AAF

Based on tool from the Spanish federation -



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OTHER ACTIVITIES – WITHIN THE AAF



AAF Federation tools – in the cloud

- ZENDesk, provides support desk solution for AAF <http://support.aaf.edu.au>
- Gmail – Investigating from QUT's in house email
- Github - Software repository
- Monitoring – Options under investigation

Monitoring

- Various aspects of IdP and SP deployments
- Core AAF components

Improved utilization reporting

- Services being utilized by IdP
- IdPs that are utilizing a service
- Open access to federation wide reporting

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OTHER ACTIVITIES - WORLDWIDE



Shibboleth V3

- Not a major rewrite
- Adding functionality that require changes to the API
- Changes to configuration
- Consent engine built in (based in uApprove)
- No release date yet...

Project Moonshot

- Addressing federation for non HTTP apps
- Technical feasibility done - moving to pilot

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OTHER ACTIVITIES - REFEDs



REFEDs (Research and Education FEDerations) are moving to the next level...

The purpose of REFEDs is to serve the mutual needs of the worldwide community of Research and Education Identity Federations. Collaboration in this area is needed:

- To align policies in order to facilitate inter-federation working;
- To reach outside the Research and Education (R&E) community to enable federated access in the larger world;
- To create community best-practices and promote them;
- To support emerging R&E federations.

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COMMON FEDERATION ENABLED APPS

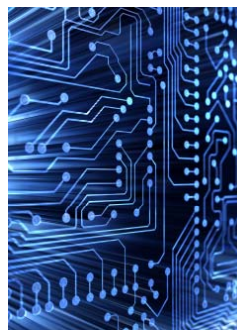


Domesticated applications

Activity underway within REFEDs to provide and maintain list of applications and services that operate within a SAML2 federation.

Examples include:

- Atlassian confluence wiki
- Drupal
- Google apps & email
- Media wiki
- Moodle
- Plone
- Twiki
- Wordpress
- + growing number of others...



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1:1 HELP AVAILABLE NOW

Book a time with an AAF technical expert while at QUESTnet 2010



Need some one-on-one time with an AAF technical expert?
AAF staff are available Wednesday, Thursday and Friday morning during the QUESTnet conference to meet with you to discuss your needs. Make an appointment NOW!

For further information on the AAF, its benefits and how to join, visit:
www.aaf.edu.au

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search for Australian Access Federation on Facebook



GO INTO THE DRAW TO WIN

One AAF Polo Shirt Drawn each day during the QUESTnet Conference



Toss your business card into the bowl at the AAF booth for an opportunity to win an AAF polo shirt. As soon as possible, our colleagues at the TERESA Conference in May this year will be open to model for us.

For further information on the AAF, its benefits and how to join, visit:
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QUESTIONS?

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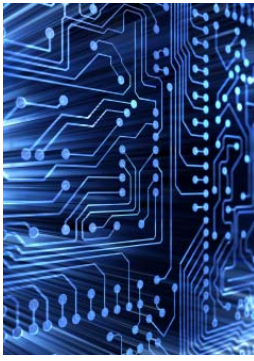
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CORE ATTRIBUTES

Identity Providers assert user information to Service Providers as attributes.
 Full attribute specification at :
<https://wiki.caudit.edu.au/confluence/display/aafaueduperson/Home>.

- **auEduPersonSharedToken** – unique, persistent ID
- **eduPersonTargetedID** – privacy-preserving ID targeted to a particular SP
- **eduPersonAffiliation** and **eduPersonScopedAffiliation** – e.g. student or staff
- **eduPersonEntitlement** – string arranged with SP to grant a particular entitlement
- **eduPersonAssurance** – URN indicating one of 4 levels of identity assurance
- **AuthenticationMethod** – URN indicating one of 4 levels of authentication assurance
- **displayName** and **cn** – contain the user's name
- **mail** – the user's email address
- **o** – the name of the organisation



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