Identity Data Schemas for the AAF

The auEduPerson Working Group

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- The Australian Access Federation (AAF).
  - What's it about?
- The auEduPerson Working Group.
  - Who the heck are they?
- The Tasks.
  - Common Attribute and Schema Policy.
  - Profiling the eduPerson schema for the AAF.
  - Creating an auEduPerson Schema for the AAF.
- Progress so far.

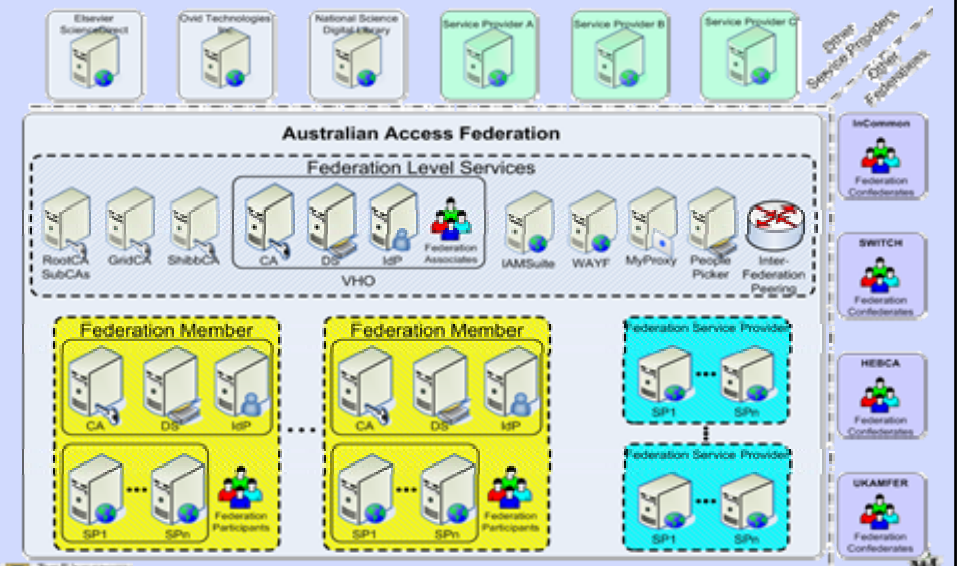
The Australian Access Federation

aaf australian access federation

- Trust Federation for the Australasian Higher Education and Research sector
  - Identity Providers (IdP) and Service Providers (SP)
    - each following common agreed policies and practices.
- SP provides content and applications which individuals and groups within the community desire to use.
- IdP provides to SP:
  - trusted IdM and authN services.
  - information (ie attributes) concerning these individuals.
    - so that the SP can make an informed authR decision
  - Levels of Assurance (LoAs) regarding these claims.

The Australian Access Federation

aaf australian access federation



The Australian Access Federation

- DEST funded project $4.7M
- Partners:
  - The University of Queensland
  - AusCERT
  - MELCOE, Macquarie University
- Progeny of:
  - eSecurity Framework Project. (DEST, SII, Merri round)
  - MAMS Project (DEST, SII, Frodo round)
  - CAUDIT PKI Project (DCITA, GrangeNet)
- Steering Committee:

- Nick Tate, Chair *(The University of Queensland)*
- James Dalziel *(Macquarie University)*
- Margot Bell *(DEST)*
- Peter Nicholson *(DEST)*
- Rhys Francis *(NCRIS)*
- Michael Dupe' *(AGIMO)*
- Richard Northam *(CAUDIT)*
- Viviani Paz *(AusCERT, AAF Project Manager)*
- Alan Bevan *(The Le@rning Federation)*
- Maxine Brodie (CAUL)

The auEduPerson Working Group

- The auEduPerson reports to the AAF Steering Committee
- Tasked with drafting and recommending data attribute schemas for use within the AAF
  - Based on community requirements
  - Interoperability with other national and international federations.

- Patty McMillan (Chair), UQ and MAPS Project
- Peter Austin, WALAP
- David Bannon, VPAC
- Neil James, New Zealand SCIT
- Rodney McDuff, UQ
- Viviani Paz, AusCERT
- Alex Reid, AARNet
- Leon Troeth, Monash
- Lyle Winton, PILIN and eFramework Projects
- Neil Witheridge, MAMS Project
- John Zornig, UQ
- Victoriano Girault, University of Malaga and TF-EMC2
- John Paschoud, London School of Economics
- Ian Young, UK Federation

The Tasks.

- Requirement: All actors in AAF to have a common understanding of:
  - the semantics of the attributes.
  - the semantics and syntax of the value(s) of an attribute.
  - Attribute/value pairs provide an AAF common language.
    - SPs trust IdP's vocabulary is same as its own.
  - AAF can assist in providing this LoA by requiring common policy amongst IdPs.
- Common Attribute and Schema Policy.
- Profiling eduPerson for use with the AAF.
- Creating an auEduPerson Identity schema.
- Requirement: Need all stakeholders to have input.
  - Policies must be community consensus.
  - But how to communicate to *all* stakeholders?
    - Surveys targeting different community groups.

Common Attribute and Schema Policy

- Problem: SP needs to know which attributes are available to base authR decision.
  - Should (at least) be consistent across IdPs in AAF.
- Common Identity schemas are:
  - Person, organizationPerson, inetOrgPerson and eduPerson
- Solution: auEduPerson WG recommends policy which defines required, recommended and optional attribute sets from these schemas.
  - Communication plan to ensure community is consulted and has input into recommendation.
- Complication: Attribute may exist but not released.
  - Attribute Release Policies (ARP) can be defined at each IdP for each federation and each SP.
  - If an IdP doesn't release an attribute, user pressure may encourage IdP to define per-SP ARP.
  - But at least the attribute is there to be released.

Profiling eduPerson for the AAF

- Problem: Aspects of eduPerson are intentionally left very vague. Example:
  - eduPersonAffiliation. Attempt to specify the relationship that a person has to their institution. Controlled vocabulary is
    - faculty
    - student
    - staff
    - alum
    - member. *(Intended to include faculty, staff, student, and other persons with a basic set of privileges that go with membership in the university community)*
    - affiliate. *(Intended to apply to people with whom the university has dealings, but to whom no general set of "community membership" privileges are extended)*
    - employee

Profiling eduPerson for the AAF

- Moreover eduPerson spec states:
  - “Each institution decides the criteria for membership in each affiliation classification”.
  - “A reasonable person should find the listed relationships commonsensical”.
  - In reality there would be 38+ conflicting criteria in AAF.
- Solution: auEduPerson WG recommends policy to define a common AAF approach to eduPersonAffiliation.
  - Based on community consultation and input.
- Issue: 7 buckets are unlikely to fit all affiliations the AAF community may wish to express.
  - May require an auEduPerson version of affiliation.
  - Still need to sort out eduPersonAffiliation for inter-federation needs.

Creating an auEduPerson Schema for the AAF

- Many international HE & R communities have investigated their need for an extended identity schema. Example attributes:
  - usPerson
    - accessibilityProfile: Base64 encoded XML from IMS AccessForAll schema
    - authnLoa: Transport (NIST 800-63 based) LoA to SP.
      - http://www.cio.gov/eauthentication/usperson/authnloa#nist-sp-800-63-{1,2,3,4}
    - citizenship: ISO3166 Country codes
  - UKEduPerson. Both XML and LDAP schemas.
    - UKeduPersonCategory: Ref. HESA codes and "Central Categories for AuthR".
      - http://www.hesa.ac.uk/manuals/03026/fe011.htm#01
        - » Grade Structure: Lecturer
      - http://www.angel.ac.uk/SECURe/UKeduPerson/UKeduPerson_schema.pdf#consortium#http://www.uklibrariesplus.ac.uk/
        - » Member of the UK Libraries Plus consortium
  - swissEduPerson
    - swissEduPersonStudyBranch{1,2,3}: From catalog of study branches by Swiss University Information System of the Swiss Federal Statistical Office
    - swissEduPersonStudyLevel: Level of student in Study Branch
    - swissEduPersonStaffCategory: 1xx=Teaching,2xx=Research,3xx=Admin,etc

Creating an auEduPerson Schema for the AAF

- Problem: Does the Australian Higher Education and Research sector need an extended identity schema?
- Solution: Well, ask the community.
  - Step 1: Create simple use case template.
  - Step 2: auEduPerson WG authors a series of candidate use cases.
  - Step 3: Invite community to author their own candidate use cases based on template and candidate use cases from step 2.
  - Step 4: Collate and redact responses.
  - Step 5: Survey community to determine which use cases to include.
  - Step 6: Create auEduPerson schema.
- Issue: How to get input from all groups with the community?

The Tasks.
Progress so far.

- Common Attribute and Schema Policy.
  - Draft CASP developed.
  - Created CASP survey instrument to seek community input.
  - Survey sent on 18/6/07 to CAUDIT members to give to their technical directory manager.
- Profiling eduPerson for use with the AAF.
  - Draft semantics of eduPersonAffiliation controlled vocabulary in progress.
- Creating an auEduPerson Identity schema
  - Developed use case template.
  - Developing initial set of candidate use cases.