AAI Attributes

SWITCHaai Team
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Agenda

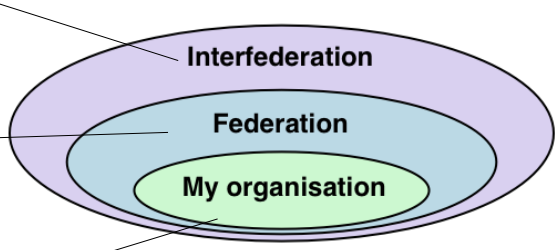
- attribute usage
- attribute scope
- user identifier attributes

Attribute usage

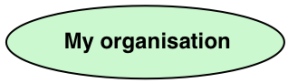
- identification
- authorisation
  - Access decision based on attribute values
  - individual or role based access control
- additional user information
  - Portal personalization e.g. preferred language

Attribute scopes

- Interfederation attributes
- SWITCHaai
  - Core
  - Other
- Local



Attribute examples



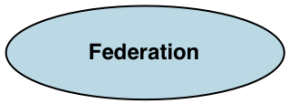
Local scope:

Group membership at the Uni Lausanne

SAML2 Name:
urn:oid:2.16.756.1.2.5.1.1.1003

SAML1 Name: urn:mace:switch.ch:SWITCHaai:unil.ch:unilMemberOf

Attribute examples



SWITCHaai scope:

Study branch 1 (swissEduPersonStudyBranch1)
Study branch of a student, first level of classification

SAML2 Name:
urn:oid:2.16.756.1.2.5.1.1.6

SAML1 Name:
urn:mace:switch.ch:attribute-def:swissEduPersonStudyBranch1

SWITCHaai Attributes

Federation

Personal
- Unique Identifier
- Surname
- Given name
- E-mail
- Persistent ID
- User ID
- Matriculation number
- Employee number
- Address(es)
- Phone number(s)
- Preferred language
- Date of birth
- Card UID

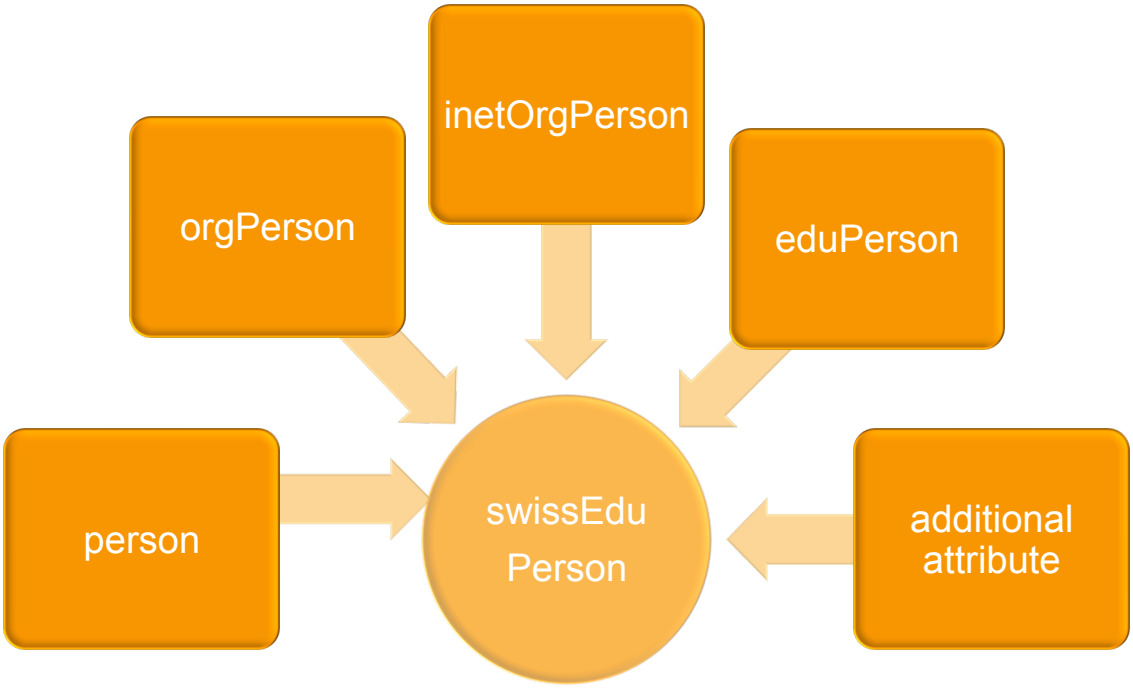
Group Membership
- Home Organization Name
- Home Organization Type
- Affiliation
- Study branch
- Study level
- Staff category
- Group membership
- Organization Path
- Organizational Unit Path

Implementation of Attributes
- Core Attributes
- Other Attributes

https://switch.ch/aai/attributes
https://www.switch.ch/aai/docs/AAI_Attr_Specs.pdf

swissEduPerson definition

Federation



Attribute examples

Federation

SWITCHaai scope:

Affiliation (eduPersonAffiliation)

SAML2 Name:
urn:oid:1.3.6.1.4.1.5923.1.1.1.1

Since 2012:
The **member** affiliation MUST be asserted for people carrying one or more of the following affiliations: faculty or staff or student.

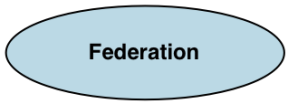
Standardized Attributes

Interfederation

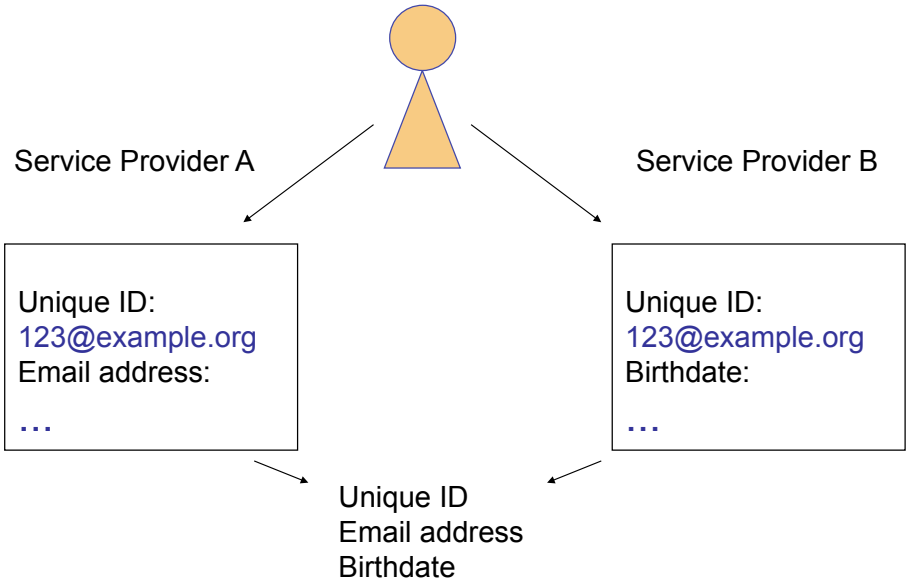
- Relevant for communication with entities from other federation via eduGAIN (or on bilateral basis)

Friendly name	Defined in	Example
displayName	eduPerson	Beatrice Huber
common name (cn)	eduPerson	Beatrice Huber
mail	eduPerson	bea.huber@switch.ch
eduPersonAffiliation eduPersonScopedAffiliation	eduPerson	staff staff@switch.ch
eduPersonPrincipalName	eduPerson	234cd8z239@switch.ch
schacHomeOrganization	SCHAC	switch.ch
schacHomeOrganizationType	SCHAC	urn:mace:terena.org:schac:homeOrganizationType:int:NREN
persistent Name ID/ eduPersonTargetedID	eduPerson	https://aai-logon.switch.ch/idp/shibboleth! https://aai-viewer.switch.ch/interfederation-test/shibboleth! OV8woGYuxOafzuCSqvcl5S5NdlU=

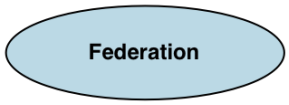
User identifier attributes



- Using account linking, the data is worth even more.

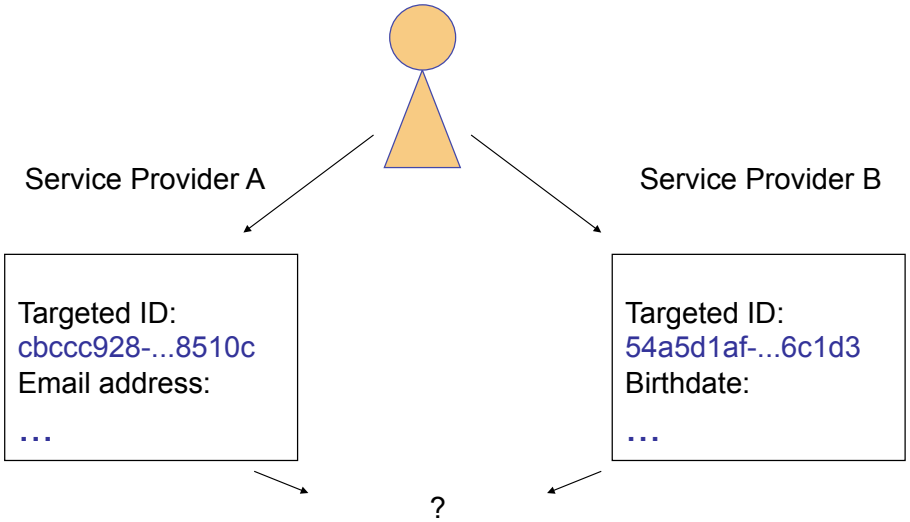


persistent ID (eduPersonTargetedID)

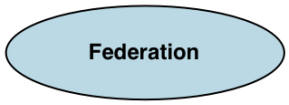


Example persistent ID

```
https://idp.example.org/idp/shibboleth!
  https://sp.example.org/shibboleth!
  f74698d6-854c-480c-b566-702006318cc3c
```



Email vs persistent ID vs Unique ID



Properties	Email	Unique ID	persistent ID
scoped	✓	✓	✓
persistent	✓	✓	✓
opaque	✗	✓	✓
non-reusable	✗	✓	✓
targeted	✗	✗	✓
revocable	✗	✗	✓