Directory Schemas
Identity Management Workshop

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Overview

1. **Definitions**

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1 **Definitions**

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Schema

The Schema
the directory constitution

The schema defines the contents of a directory

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- The organization of attributes in object classes

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- The ordering of attribute values

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- The organization of attributes in object classes
- The values of the attributes
- The ordering of attribute values
- How those values can be matched

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- The organization of attributes in object classes
- The values of the attributes
- The ordering of attribute values
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- If attributes are required or not

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Base $=$ Just for inheritance

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    Base = Just for inheritance

    Structural = the main class of an object

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  Base $=$ Just for inheritance

  Structural $=$ the main class of an object

  Auxiliary $=$ for extra attributes

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OIDs
the identity of objects

An OID is a number that uniquely identity an schema element
They look like 1.3.6.1.4.1.25178 (the TERENA object)

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  for example: phone = telephoneNumber = 2.5.4.20

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Internet2 effort for an standard schema

- Coordinated effort in Internet2, through MACE,
  for a common higher education person schema definition

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- It is developed with inputs from the global
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- MACE-dir list (by invitation) is the forum for
  eduPerson related discussion

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  - "the advanced networking consortium in US"

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  - Runs MACE-dir, the directory working group, defines eduPerson

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- Middleware Architecture Committee for Education
  - Runs MACE-dir, the directory working group, defines eduPerson
  - MACE has members also from outside the US

SCHema for ACademia
the European effort for a common education schema

- Many european countries had local schemas
- eduPerson some local extensions for Europe
- There is real need for a common european schema
  - Eduroam
  - Bologna process
  - eduGAIN (GN2 AAI)

SCHAC
The players

- **TERENA**
  - Coordinates task forces, tf-emc^2 for middleware
  - Provides logistics for collaboration
  - tf-emc^2 has an activity on directories, responsible for SCHAC
- **EUNIS**
  - Has connections to the policy side of the equation
  - Provides Bologna know-how
- **European NRENs**
  - Promote the schema amongst their constituencies
  - Provide input from their national schemas
  - Adapt their national schemas to SCHAC

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Taking local needs into account

- No wheel reinvention, please

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- If you need to extend, register an OID
- Then, follow the standards: RFCs, IETF
- Where possible, use a common language (English)
- Do not use local language attribute names
- Publish your schema, maybe useful for others

Some URLs

IANA OID registry http://pen.iana.org/pen/PenApplication.page

eduPerson http://www.nmi-edit.org/eduPerson/draft-internet2-mace-dir-eduperson-latest.html

SCHAC http://www.terena.org/activities/tf-emc2/schac.html

Esquema IRIS http://www.rediris.es/ldap/esquemas/iris.schema

tf-emc^2 http://www.terena.org/activities/tf-emc2/

MACE http://middleware.internet2.edu/MACE/