

LDAP representations of eduCourse attributes and an auxiliary object class

internet2-mace-courseid-educourse-ldap-200505

Status of this Memo

The (200505) version of the eduCourse object class specification is described in this document. This version is appropriate for adoption in a production enterprise directory service environment.

Abstract

Course-related information is used in learning management systems and in other systems that support the learning mission of higher education institutions. The eduCourse information model [1] defines two attributes that provide a standardized way of referring to course offerings and peoples' roles with respect to course offerings. This draft specifies a recommended binding for those two attributes, "eduCourseOffering" and "eduCourseMember," to the LDAP protocol to facilitate their incorporation in enterprise directories.

1. Context and assumptions

Context

This document defines LDAP representations of eduCourseOffering and eduCourseMember, two attributes defined in the eduCourse data model [1]. These attributes are intended to be carried in person or other structural entry types in an LDAP directory.

2. Specification

eduCourse is an auxiliary object class intended to carry attributes that might apply to multiple types of directory entries. As of this time, it includes only two attributes: eduCourseOffering and eduCourseMember. By including the eduCourse object class in an enterprise directory schema along with the attributes eduCourseOffering and eduCourseMember, values for those attributes can be added to any directory entry at will.

```
objectclass ( 1.3.6.1.4.1.5923.1.6.2.2
NAME 'eduCourse'
AUXILIARY
MAY ( eduCourseOffering $ eduCourseMember
)
```

An eduCourseOffering attribute associated with a directory entry is a collection of values each of which identifies a course offering with which that entry is associated.

```
attributetype ( 1.3.6.1.4.1.5923.1.6.1.1
NAME 'eduCourseOffering'
DESC 'identifiers for course offerings per the eduCourse data model'
```

EQUALITY caseExactMatch
SYNTAX '1.3.6.1.4.1.1466.115.121.1.15')

Application utility class: standard; **# of values:** multi

Definition

The values of eduCourseOffering are identifiers for course offerings with which the containing entity has an association. One common use of this attribute would be in a person's directory entry where it would list the course offerings with which the person is associated.

Permissible values (if controlled)

Any string. If the context requires global uniqueness, well-formed URIs are recommended.

Notes

The companion draft document, "Globally unique identifiers for course offerings" [2], offers guidance on how to form globally unique values for eduCourseOffering identifiers. eduCourseOffering is defined as an optional (MAY) attribute in the auxiliary object class "eduCourse". This means that the attribute can be added to any entry, regardless of that entry's structural class, provided that eduCourse is defined in the directory schema.

When eduCourseOffering occurs in a person entry, it lists the course offerings with which that person has any role. The companion eduCourse attribute, eduCourseMember (defined below), carries the specific role the person has with each course offering, e.g., Learner or Instructor.

When eduCourseOffering occurs in a directory entry whose purpose is to represent a specific course offering, it lists the course offering identifier(s) for that course offering.

An equality index of the eduCourseOffering attribute should facilitate searches for persons having a relationship with a specified course offering and searches for a directory entry representing a specified course offering.

Semantics

The presence of a course offering identifier as a value of "eduCourseOffering" implies that the containing entity is associated with that course offering.

Example applications for which this attribute would be useful

controlling access to resources, learning management system reporting, provisioning

Example (LDIF Fragment)

```
eduCourseOffering: urn:mace:uchicago.edu:classes:autumn2004:phys12100.003
```

Syntax: directoryString

An eduCourseOffering attribute associated with a person's directory entry is a collection of values each of which identifies a role that person has in relation to a given course offering.

attributetype (1.3.6.1.4.1.5923.1.6.1.2
 NAME 'eduCourseMember'
 DESC 'role-in-course offering per the eduCourse data model'
 EQUALITY caseExactMatch
 SYNTAX '1.3.6.1.4.1.1466.115.121.1.15')

Application utility class: standard; **# of values:** multi

Definition

Each value of the eduCourseMember attribute asserts that the person in whose entry the attribute appears has the specified role in relation to the given course offering.

Permissible values (if controlled)

eduCourseMember value = role "@" eduCourseOffering

role = "Learner" / "Instructor" / "ContentDeveloper" / "Member" / "Manager" / "Mentor" / "Administrator" / "TeachingAssistant" or other role string as defined in alignment with the eduCourse data model [1]. Note that the eduCourse data model constrains the role part of eduCourseMember to the limited vocabulary specified as IMS roleTypes. These are case sensitive values.

The eduCourseOffering substring to the right of the "@" must be a legal value of an eduCourseOffering attribute.

Notes

eduCourseMember is defined as an optional (MAY) attribute in the auxiliary object class "eduCourse". This means that the attribute can be added to any entry, regardless of that entry's structural class provided that eduCourse is defined in the directory schema.

When eduCourseMember occurs in a person entry, it lists the relationships that person has with course offerings.

An equality index of the eduCourseMember attribute should facilitate searches for persons having a specific relationship with a given course offering, e.g., to list all Learners in the course offering 'foo'.

Although current IMS roleTypes are usually thought of as being applicable to people (who are the Instructors, Learners, etc., associated with a course offering), nothing in the eduCourse data model or this LDAP binding specification prevents their assignment to other types of objects that may have such a relationship with a course offering.

Semantics

The presence of a role-in-course offering value of "eduCourseMember" implies that the containing person has the specified role in the identified course offering.

Example applications for which this attribute would be useful

controlling access to resources, learning management system reporting, provisioning

Example (LDIF Fragment)

eduCourseMember: Instructor@http://wisc.edu/course/offering/2004fall/physics1101

Syntax: directoryString

3. References

- [1] "eduCourse Data Model", <http://middleware.internet2.edu/courseid/docs/draft-internet2-courseID-eduCourse-03.html>
- [2] "Globally unique identifiers for course offerings", <http://middleware.internet2.edu/courseid/docs/draft-courseid-offering-unique-id-03.htm>

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