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Structural object class 'namedObject' for LDAP/X.500 draft-furuseth-ldap-untypedobject-02.txt

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Abstract

This document defines an 'namedObject' structural object class for the Lightweight Directory Access Protocol (LDAP) and X.500. This is useful for entries with no natural choice of structural object class, e.g. if an entry must exist even though its contents are uninteresting.

1. Introduction

An entry in a Lightweight Directory Access Protocol (LDAP) [LDAPV3] or [X.500] directory must have a structural object class, such as 'person' or 'country'. However, an entry may lack a natural choice of structural object class. For example, the desired structure of a directory tree might require an entry to exist for grouping purposes even though it describes no real-world object. This document defines an 'namedObject' structural object class for this use.

As 'namedObject' structural object class doesn't have any mandatory attributes, it can also be used in combination with arbitrary auxiliary object classes. For example, the posixGroup object class [LDAP-NIS] is an auxiliary object class that may be used to overlay POSIX group identification on an existing group of distinguished names. In this case, it is suggested that the groupOfUniqueNames object class be used as a structural object class. However, this may sometimes be inappropriate: that groupOfUniqueNames requires at least one member may make it impossible to migrate existing group information. [LDAP-NIS] could define a specific structural object class for this case (say, structuralPosixGroup), but this would unnecessarily add to the proliferation of redundant schema.

2. Object class definition

namedObject is defined as follows. The definition uses the BNF form of ObjectClassDescription from [MODEL], but with lines folded for readability.

```
( IANA-ASSIGNED-OID NAME 'namedObject'
     DESC 'Entry of no particular type [RFC XXXX]'
     SUP top STRUCTURAL
     MAY ( cn $ o $ ou $ 1 $ c $ st $ street $
           description $ owner $ seeAlso ) )
<<pre><<Reuse Luke's OID: 1.3.6.1.4.1.5322.13.1.1?>>
```

The attribute types are defined in [SCHEMA].

The name of an entry with this object class will normally be a cn, but attributes o through street are allowed as well in case the entry name relates to the name of something else. Of these, only the one used for naming is intended to be used in the entry. Use of the others may be an indication that the entry should have a more descriptive object class instead of or in addition to this one.

3. Example

In a directory with entries named as follows, the entries with RDNs cn=people etc. can use namedObject:

uid=john, cn=people, dc=example, dc=com
uid=john, cn=users, cn=system, dc=example, dc=com
cn=www, cn=filegroups, cn=system, dc=example, dc=com

4. Security Considerations

Attributes of directory entries are used to provide descriptive information about the real-world objects they represent, which can be people, organizations or devices. Most countries have privacy laws regarding the publication of information about people.

<<TBD>>

5. IANA Considerations

It is requested that the Internet Assigned Numbers Authority (IANA) register the following upon Expert Review:

Subject: Request for LDAP OID Registration

Person & email address to contact for further information:

Hallvard B Furuseth <h.b.furuseth@usit.uio.no>

Specification: RFC XXXX

Author/Change Controller: IESG

Comments:

OID of structural object class 'namedObject'.

Subject: Request for LDAP Descriptor Registration

Descriptor (short name): namedObject Object Identifier: IANA-ASSIGNED-OID

Person & email address to contact for further information:

Luke Howard <lukeh@padl.com>

Usage: Object class Specification: RFC XXXX

Author/Change Controller: IESG

Comments:

Structural object class for entries of no particular type.

[Editor: Here and in <u>Section 2</u>, replace IANA-ASSIGNED-OID with the assigned OID and XXXX with the RFC number assigned this document.]

6. References

6.1. Normative References

[MODEL] Zeilenga, K., "Lightweight Directory Access Protocol (LDAP): Directory Information Models", RFC 4512, June 2006.

[SCHEMA] Sciberras, A., "Lightweight Directory Access Protocol (LDAP): Schema for User Applications", RFC 4519,
June 2006.

6.2. Informative References

[LDAP-NIS] Howard, L., "An Approach for Using LDAP as a Network Information Service", <u>RFC 2307</u>, March 1998.

[Note to the RFC editor: 2307bis gets approved as RFC before this document, relace the reference above: L. Howard, M. Ansari, "An Approach for Using LDAP as a Network Information Service".

[LDAPV3] Zeilenga, K., "Lightweight Directory Access Protocol (LDAP): Technical Specification Road Map", RFC 4510, June 2006.

[STRING-DN] Zeilenga, K., "Lightweight Directory Access Protocol (LDAP): String Representation of Distinguished Names", RFC 4514, June 2006.

[X.500] The Directory, ITU-T Recommendations X.500-X.525, 1993.

7. Author's Address

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8. Acknowledgments

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Appendix A: Notes on choices made for the object class

(This section will be deleted in the final RFC.)

The c through uid attributes (for naming of entries) match the table of naming attributes in [STRING-DN] (UTF-8 String Representation of Distinguished Names), in case the entry's RDN needs to match the RDN of something else.

The description, owner and seeAlso attributes seem good to offer for "nothing in particular"-kind of entries, since such entries might not contain anything else which indicates what they are for and who is responsible for them.

Appendix B: Issues for consideration

(This section will be deleted in the final RFC.)

Is the name of this object class properly reflects its purpose?

Is the choice of naming attributes good?

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