

LDAP Subentry Schema

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2. Abstract

This document describes an object class called LDAPsubEntry which MAY be used to indicate operations and management related entries in the directory, called LDAP Subentries.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119](#) [[RFC2119](#)]. The sections below reiterate these definitions and include some additional ones.

3. Definition

3.1 LDAPsubEntry Class

```
( 1.3.6.1.4.1.1466.115.121.1.?? NAME 'LDAPsubEntry'  
  DESC 'LDAP Subentry class, named by cn'  
  SUP top STRUCTURAL  
  MUST ( cn ) )
```

The class LDAPsubEntry is intended to be used as a super class when defining other structural classes to be used as LDAP Subentries. The presence of LDAPsubEntry in the list of super-classes of an entry in the directory makes that entry an LDAP Subentry. Object classes derived from LDAPsubEntry are themselves considered LDAPsubEntry classes, for the purpose of this discussion.

LDAP Subentries MAY be named by their commonName attribute [[LDAPv3](#)]. Other naming attributes are also permitted.

LDAP Subentries MAY be containers, unlike their [[X.500](#)] counterparts.

LDAP Subentries MAY be contained by, and will usually be located in the directory information tree immediately subordinate to, administrative points and/or naming contexts [[LDUPINFO](#)]. Further (unlike X.500 subentries), LDAP Subentries MAY be contained by other LDAP Subentries (the way organizational units may be contained by other organizational units). Deep nestings of LDAP Subentries are discouraged, but not prohibited.

LDAP Subentries SHOULD be treated as "operational objects" in much the same way that "operational attributes" are not regularly provided in search results and read operations when only user attributes are requested).

NOTE: No special treatment of LDAP Subentries by applications is required, but it might be worth considering creating an LDAPv3 control to indicate when LDAP Subentries are desired to be returned (subject to access controls and search filters, of course) for LDAP search operations.

4. Security Considerations

LDAP Subentries will frequently be used to hold data which reflects

either the actual or intended behavior of the directory service. As such, permission to read such entries MAY need to be restricted to

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authorized users. More importantly, IF a directory service treats the information in an LDAP Subentry as the authoritative source of policy to be used to control the behavior of the directory, then permission to create, modify, or delete such entries MUST be carefully restricted to authorized administrators.

5. References

[LDUPINFO] _ E. Reed, "LDUP Replication Information Model", draft-ietf-ldup-infomod-01.txt

[LDAPv3] Kille, S., Wahl, M., and T. Howes, "Lightweight Directory Access Protocol (v3)", [RFC 2251](#), December 1997

[X.500] ITU-T Rec. X.501, "The Directory: Models", 1993

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7. Acknowledgements

The use of subEntry object class to store Replica and Replication Agreement information is due primarily to the lucid explanation by Mark Wahl, Innosoft, of how they could be used and extended.

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