IETF Directory Working Group Scope (Version 3)

S.E. Kille

December 22, 1990

Abstract

This document defines the scope for the IETF OSI Directory Services Working Group (OSI-DS).

The OSI-DS group works on issues relating to building an OSI Directory Service using X.500 and its deployment on the Internet. Whilst this group is not directly concerned with piloting, the focus is practical, and technical work needed as a pre-requisite to deployment of an open Directory will be considered.

1 X.500 Infrastructure

The major goal of this WG is to provide the technical framework for a Directory Service infrastructure on the Internet. This infrastructure should be based on the OSI Directory (X.500). It is intended that this infrastructure can be used by many applications. Whilst this WG is not directly concerned with operation of services, close liaison is expected with those groups which do operate pilots and services.

X.500 (1984) / ISO 9594 does not have sufficient functionality for full deployment on the Internet. This group should identify areas where extensions are required. This may lead to two things

- Service requirements on implementations, to be provided by implementations specific techniques. For example, this might be appropriate for access control.
- Specification of Internet procedures for operation. For example, this might be appropriate for replication

It is a basic aim of the group to be aligned to appropriate base standards and functional standards. Any activity should be undertaken in the light of ongoing standardisation activity. Areas which should be examined include:

- Replication
- Knowledge Representation

- Schema Management
- Access Control
- Authentication
- Distributed operations for partially connected DSAs
- Presentation Address Handling

A Schema (Naming Architecture) should be defined for the Internet. A requirement for a schema should be defined, and inputs evaluated. Various approaches to specification of Schema from a user and system standpoint should be considered, including update mechanisms. The THORN and RARE Naming architecture, as used in the European Pilots and PSI WP Service should be considered as a basis for this work, and evolution into a joint RARE and Internet Naming Architecture considered.

There is a requirement for representation of Directory Names, as these will need to be communicated "out of band". An Internet approach to this should be defined.

This work will lead to a series of RFCs, which define how to provide the Internet Directory Infrastructure. It is aimed to have this in place by March 1991.

2 Application of the Directory

The directory can be used to support a wide range of applications. For most applications, this will be the concern of the applications. Examples of applications which might define how to use the X.500 include:

- X.400
- Key Management and Authentication for use by:
  - Privacy Enhanced Mail
  - Policy Based Routing
- FTAM (and other OSI Applications requiring Application Entity Title to presentation address mapping)
- RFC 1148/987
- Yellow pages and general searching
- Library Lookup
- NTP Support

Two applications of the directory are of special interest, and will be tackled directly by the WG.

1. Use of the directory to provide a White Pages service, to locate users and services. This will be developed in conjunction with the basic infrastructure.
2. Relationship of the OSI Directory to the Domain Name Scheme. The group will develop a working document which examines possible interrelationships between these two services.

Other applications are currently beyond the scope of this group. However, it is expected that other functions will be added to the group later. It is critical to develop applications of the directory as well as providing the basic infrastructure.

3 Liaison

Liaisons should be established as appropriate. In particular:

RARE WG3 To harmonise work with European activities

NIST To co-ordinate with the Directory SIG (OSI Implementors Workshop)

CCITT/ISO IEC To co-ordinate with ongoing standardisation.

North American Directory Forum To liaise with service developments in North America.

A Charter of the OSI-DS Group

This appendix gives the official IETF charter of the group.

```
OSI DS (osids)

Charter

Chair(s):

     Steve Kille, S.Kille@cs.ucl.ac.uk

Mailing Lists:
     General Discussion:  ietf-osi-ds@cs.ucl.ac.uk
     To Subscribe:  ietf-osi-ds-request@cs.ucl.ac.uk

Description of Working Group:

     The OSI-DS group works on issues relating to building an OSI Di-
     rectory Service using X.500 and its deployment on the Internet. Whilst
     this group is not directly concerned with piloting, the focus is practi-
     cal, and technical work needed as a pre-requisite to deployment of an
     open Directory will be considered.


Goals and Milestones:



March 91       Definition of a Technical Framework for Provision of
      a Directory Infrastructure on the Internet, using X.500.
      This task may later be broken into subtasks.  A series of
      RFCs will be produced.

March 91       Study the relationship of the OSI Directory to the Domain
      Name Service.

Ongoing        Maintain a Schema for the OSI Directory on the Internet

Ongoing        Liaisons should be established as appropriate.  In
               particular:  RARE WG3, NIST, CCITT/ISO IEC, North American
      Directory Forum,
```