Network Working Group
INTERNET–DRAFT

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A proposed strategy for deploying an OSI Internet Directory

Status of this Memo

This document is a first cut at describing an overall strategy for deploying an OSI Directory on the Internet. This is a draft document, and does not carry any implications of agreement on policy.

This draft document will be submitted to the RFC editor as an informational document. Distribution of this memo is unlimited. Please send comments to the author or to the discussion group <osi-ds@CS.UCL.AC.UK>.

1 Background

There is substantial interest in establishing an OSI Directory Service on the Internet. There is pressure to establish a number of services on the Internet, including:

- White Pages lookup of users.
- Support for OSI Applications.
- Support for X.509 Authentication for a range of application, including Privacy Enhanced Mail [Lin89].

The OSI Directory is viewed as the best basis for achieving these services, for both technical and political reasons.

Add some more general notes, or delete this section??

2 Strategy

The first issue is to define *what* is needed. This is the target to be reached in five years. The target is straightforward: A directory infrastructure used by all Internet members, which interworks with non-Internet X.500 services. It should be used for:

- Lookup of users and related white pages services such as committee support
- Support of management of the internet infrastructure
- Support of all OSI Applications on the Internet, especially X.400
- Support of Internet Security activities (X.509), by providing access to public-key certificates.
- Use of X.500 directory should be a mandatory requirement for all Internet sites. A transition plan from DNS to X.500 should be in place. This gives a scaling target of order of millions or tens of millions of entries.

There are are a number of aspects of deployment in order to achieve this. These are:

1. Technical issues. Which specifications and agreements are needed in order to make things work.
2. Implementations. What implementations are available, and what are needed. What steps are being taken to fill the gaps.

3. Operations. What central initiatives are needed. What is needed locally.

These are discussed in the remainder of this document.

3 Technical Issues

The technical issues relating to this activity are being dealt with by the IETF WG on OSI Directories (OSI-DS). The work of this group is summarised in an RFC [Kil90].

4 Implementations

An effective pilot will need to have

- Two independent DSA implementations, as a verification of openness.
- DUA implementations for all systems participating in the pilot
- Suppprt fo standard APIs.

There are currently some gaps. Should there be central funding?

5 Operations

The initial operation of the Internet Pilot is under the ægis of two activities:

PSI Pilot
: This is a de facto pilot, which is operation X.500 on the Internet.

FOX
: Fielding Operational X.500, which is investigating deployment of X.500

PARADISE
: Piloting a ReseArch DIrectory Service in Europe. This will be a key project which will be closely coupled with Internet Activities.

These pilots should lead to identifying:

- What central services are needed to build a full service
- Requirements which must be palaced on end sites

6 Site Support

There is a need to plan the support which is needed, both for participating stes and users. This is being tackled by the Directory Information Services (pilot) Infrastructure Working Group (DISI) — joint OSI and User Services area.

7 Liaison

Some liaison of the overall activity is needed:

Other Pilots

To ensure a coherent international service.

Standards Bodies

To feed back experience gained from this activity

References

[Kil90] S.E. Kille. Building and internet directory using X.500, November 1990. Internet Draft: draft-ietf-osix500-directories-01.txt.

[Lin89] J. Linn. Privacy Enhancement for Internet Electronic Mail: Part 1 — Message Encipherment and Authentication Procedures. Request for Comments 1113, DDN Network Information Center, SRI International, August 1989.

8 Security Considerations

Security considerations are not discussed in this INTERNET–DRAFT .

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