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Connection-less Lightweight Directory Access Protocol (CLDAP) to Historic Status

Status of this Memo

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Abstract

The Connection-less Lightweight Directory Access Protocol (CLDAP) technical specification, RFC 1798, was published in 1995 as a Proposed Standard. This document discusses the reasons why the CLDAP technical specification has not been furthered on the Standard Track. This document recommends that RFC 1798 be moved to Historic status.

1. Background

Connection-less Lightweight Directory Access Protocol (CLDAP) [RFC1798] was published in 1995 as a Proposed Standard. The protocol was targeted at applications which require lookup of small amounts of information held in the directory. The protocol avoids the overhead of establishing (and closing) a connection and the session bind and unbind operations needed in connection-oriented directory access protocols. The CLDAP was designed to complement version 2 of the Lightweight Directory Access Protocol (LDAPv2) [RFC1777], now Historic [HISTORIC].

In the seven years since its publication, CLDAP has not become widely deployed on the Internet. There are a number of probable reasons for this:

- Limited functionality:
    + anonymous only,
    + read only,
    + small result sizes only, and

- Insufficient security capabilities:
  + no integrity protection,
  + no confidentiality protection
- Inadequate internationalization support;
- Insufficient extensibility; and
- Lack of multiple independently developed implementations.

The CLDAP technical specification has normative references to multiple obsolete technical specifications including X.501(88), X.511(88), RFC 1487 (the predecessor to RFC 1777, the now Historic LDAPv2 technical specification). Unless the technical specification were to be updated, CLDAP cannot remain on the standards track because of the Normative reference to a Historic RFC.

The community recognized in the mid-1990s that CLDAP needed to be updated. In response to this, the IETF chartered the LDAP Extensions Working Group (LDAPext WG) in 1997 to undertake this update. The LDAPext WG is concluding without producing an update to CLDAP. Currently, there is no standardization effort to update CLDAP.

It should be noted that the community still has interest in developing a "connection-less" directory access protocol. However, based on operational experience, has determined that further experimentation is necessary to address outstanding technical issues. In particular, security considerations associated with "connection-less" services need to be addressed.

2. Recommendation

As there is no viable standardization effort to update CLDAP as necessary to keep it on the standards track and the community currently considers this an area requiring further experimentation, RFC 1798 must be moved to Historic status.

It is recommended that those interested in connection-less access to X.500-based directory services experiment with [LDAPUDP] and other alternatives which might become available.

3. Security Considerations

The security of the Internet will not be impacted by the retirement of CLDAP.

4. Acknowledgment

The author would like to thank the designers of CLDAP for their contribution to the Internet community.

5. Normative References

[HISTORIC] Zeilenga, K., "Lightweight Directory Access Protocol version 2 (LDAPv2) to Historic Status", RFC 3494, February 2003.

[CLDAP] Young, A. "Connection-less Lightweight Directory Access Protocol," RFC 1798, June 1995.

6. Informative References

[LDAPUDP] Johansson, L. and R. Hedberg, "Lightweight Directory Access Protocol over UDP/IP," Work in Progress.

[RFC1777] Yeong, W., Howes, T. and S. Kille, "Lightweight Directory Access Protocol", RFC 1777, March 1995.

[RFC3377] Hodges, J. and R. Morgan, "Lightweight Directory Access Protocol (v3): Technical Specification", RFC 3377, September 2002.

[X501] The Directory: Models. CCITT Recommendation X.501 ISO/IEC JTC 1/SC21; International Standard 9594-2, 1988.

[X511] The Directory: Abstract Service Definition. CCITT Recommendation X.511, ISO/IEC JTC 1/SC21; International Standard 9594-3, 1988.

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