                    Lightweight Directory Access Protocol (v3):
                            Technical Specification

Status of this Memo

   This document specifies an Internet standards track protocol for the
   Internet community, and requests discussion and suggestions for
   improvements. Please refer to the current edition of the "Internet
   Official Protocol Standards" (STD 1) for the standardization state
   and status of this protocol. Distribution of this memo is unlimited.

Abstract

   This document specifies the set of RFCs comprising the Lightweight
   Directory Access Protocol Version 3 (LDAPv3), and addresses the "IESG
   Note" attached to RFCs 2251 through 2256.

1. Background and Motivation

   The specification for the Lightweight Directory Access Protocol
   version 3 (LDAPv3) nominally comprises eight RFCs which were issued
   in two distinct subsets at separate times -- RFCs 2251 through 2256
   first, then RFCs 2829 and 2830 following later.

   RFC 2251 through 2256 do not mandate the implementation of any
   satisfactory authentication mechanisms and hence were published with
   an "IESG Note" discouraging implementation and deployment of LDAPv3
   clients or servers implementing update functionality until a Proposed
   Standard for mandatory authentication in LDAPv3 is published.

   RFC 2829 was subsequently published in answer to the IESG Note.

   The purpose of this document is to explicitly specify the set of RFCs
   comprising LDAPv3, and formally address the IESG Note through
   explicit inclusion of RFC 2829.

2. Specification of LDAPv3

   The Lightweight Directory Access Protocol version 3 (LDAPv3) is
   specified by this set of nine RFCs:

      [RFC2251] Lightweight Directory Access Protocol (v3) [the
                 specification of the LDAP on-the-wire protocol]

      [RFC2252] Lightweight Directory Access Protocol (v3): Attribute
                 Syntax Definitions

      [RFC2253] Lightweight Directory Access Protocol (v3): UTF-8
                 String Representation of Distinguished Names

      [RFC2254] The String Representation of LDAP Search Filters

      [RFC2255] The LDAP URL Format

      [RFC2256] A Summary of the X.500(96) User Schema for use with
                 LDAPv3

      [RFC2829] Authentication Methods for LDAP

      [RFC2830] Lightweight Directory Access Protocol (v3): Extension
                 for Transport Layer Security

      And, this document (RFC3377).

   The term "LDAPv3" is often used informally to refer to the protocol
   specified by the above set of RFCs, or subsets thereof. However, the
   LDAPv3 protocol suite, as defined here, should be formally identified
   in other documents by a normative reference to this document.

3. Addressing the "IESG Note" in RFCs 2251 through 2256

   The IESG approved publishing RFCs 2251 through 2256 with an attendant
   IESG Note included in each document. The Note begins with:

      This document describes a directory access protocol that provides
      both read and update access. Update access requires secure
      authentication, but this document does not mandate implementation
      of any satisfactory authentication mechanisms.

The Note ends with this statement:

> Implementors are hereby discouraged from deploying LDAPv3 clients
> or servers which implement the update functionality, until a
> Proposed Standard for mandatory authentication in LDAPv3 has been
> approved and published as an RFC.

[RFC2829] is expressly the "Proposed Standard for mandatory
authentication in LDAPv3" called for in the Note. Thus, the IESG
Note in [RFC2251], [RFC2252], [RFC2253], [RFC2254], [RFC2255], and
[RFC2256] is addressed.

4. Security Considerations

This document does not directly discuss security, although the
context of the aforementioned IESG Note is security related, as is
the manner in which it is addressed.

Please refer to the referenced documents, especially [RFC2829],
[RFC2251], and [RFC2830], for further information concerning LDAPv3
security.

5. Acknowledgements

The authors thank Patrik Faltstrom, Leslie Daigle, Thomas Narten, and
Kurt Zeilenga for their contributions to this document.

6. References

   [RFC2251] Wahl, M., Kille, S. and T. Howes, "Lightweight Directory
              Access Protocol (v3)", RFC 2251, December 1997.

   [RFC2252] Wahl, M., Coulbeck, A., Howes, T. and S. Kille,
              "Lightweight Directory Access Protocol (v3): Attribute
              Syntax Definitions", RFC 2252, December 1997.

   [RFC2253] Kille, S., Wahl, M. and T. Howes, "Lightweight Directory
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              Distinguished Names", RFC 2253, December 1997.

   [RFC2254] Howes, T., "The String Representation of LDAP Search
              Filters", RFC 2254, December 1997.

   [RFC2255] Howes, T. and M. Smith, "The LDAP URL Format", RFC 2255,
              December 1997.

   [RFC2256] Wahl, M., "A Summary of the X.500(96) User Schema for use
              with LDAPv3", RFC 2256, December 1997.

    [RFC2829]   Wahl, M., Alvestrand, H., Hodges, J. and R. Morgan,
                "Authentication Methods for LDAP", RFC 2829, May 2000.

    [RFC2830]   Hodges, J., Morgan, R. and M. Wahl, "Lightweight Directory
                Access Protocol (v3): Extension for Transport Layer
                Security", RFC 2830, May 2000.

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