**Getting rid of the cruft: Report from an experiment in identifying and
reclassifying obsolete standards documents
draft-ietf-newtrk-decruft-experiment-03.txt**

Status of this Memo

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Abstract

   This memo documents an experiment to review and classify Proposed
   Standards as not reflecting documented practice within the world
   today. The results identify a set of documents that were marked as
   Proposed Standards that are now reclassified as Historic.

1. Introduction and history

RFC 2026, and RFC 1602 before it, specified timelines for review of
immature (draft or proposed) standards. The purpose of such review
was to determine whether such documents should be advanced, retired,
or developed further.[1]

This procedure has never been followed in the history of the IETF.
Since this procedure has not been followed, members of the community
have suggested that the retiring of a document to Historic is a
significant event, which should be justified carefully - leading to
the production of documents such as RFC 2556 (OSI connectionless
transport services on top of UDP Applicability Statement for Historic
Status) and RFC 3166 (Request to Move RFC 1433 to Historic Status).

Such documents require significant time and effort on the part of
authors, area directors, and the RFC Editor.

2. Bulk Decommissioning Procedure

From the Fall of 2004 through the Spring of 2005 the authors
conducted an experiment to determine how many Proposed Standards
could be considered obsolete. The experiment was operated as
follows:
o Identify a group of documents that are standards.
o Assume by default that each document will be retired.
o Create a mailing list for discussion with a policy of open access.
o Allow any document to be removed from the list of those to be
   retired for virtually any reason, so long as a reason is provided.
o Present the list to the working group, IETF, and IESG for review.
o Revise list based on comments.
o Write up results.

The initial intent of the authors was to present a list of documents
to be reclassified as Historic. The NEWTRK working group supported
this view. The IESG, and the IETF as a community, makes the final
decision. We will discuss this further below.

3. Input, Mailing list, Output, and Observations

We started with our initial document set being all RFCs with numbers
less than 2000 and a status of Proposed Standard. The input we used,
starting Noevember 25, 2004, can be found in the Appendix. There
were some 125 documents in all.

A mailing list, old-standards@alvestrand.no, was created to discuss

and remove candidates from this list. A call for participation was
issued to the IETF-Announce list on or around the 15 Nov 2004. There
were 29 members of the mailing list. Approximately 244 messages were
sent to the list. People were encouraged to consider the question of
whether or not an implementer would either write a new implementation
or maintain an existing one.

After some months the list of documents to be considered was reduced
considerably. This list was then forwarded to the IETF discussion
list on 16 Dec 04 and to the NEWTRK working group list for wider
review.

During review RFCs 1518 and 1519 were removed, based on the fact that
work is ongoing to revise them. Similarly, RFCs 1381, 1382, 1471,
1472, 1473, 1582, and 1598 were removed based on the belief that they
were actively in use.

Here are the results:

   RFC1234 (Tunneling IPX traffic through IP networks)
   RFC1239 (Reassignment of experimental MIBs to standard MIBs)
   RFC1276 (Replication and Distributed Operations extensions to
   provide an Internet Directory using X.500)
   RFC1285 (FDDI Management Information Base)
   RFC1314 (A File Format for the Exchange of Images in the Internet)
   RFC1328 (X.400 1988 to 1984 downgrading)
   RFC1370 (Applicability Statement for OSPF)
   RFC1378 (The PPP AppleTalk Control Protocol (ATCP))
   RFC1397 (Default Route Advertisement In BGP2 and BGP3 Version of
   The Border Gateway Protocol)
   RFC1414 (Identification MIB)
   RFC1415 (FTP-FTAM Gateway Specification)
   RFC1418 (SNMP over OSI)
   RFC1419 (SNMP over AppleTalk)
   RFC1421 (Privacy Enhancement for Internet Electronic Mail: Part I:
   Message Encryption and Authentication Procedures)
   RFC1422 (Privacy Enhancement for Internet Electronic Mail: Part
   II: Certificate-Based Key Management)
   RFC1423 (Privacy Enhancement for Internet Electronic Mail: Part
   III: Algorithms, Modes, and Identifiers)
   RFC1424 (Privacy Enhancement for Internet Electronic Mail: Part
   IV: Key Certification and Related Services)
   RFC1461 (SNMP MIB extension for Multiprotocol Interconnect over
   X.25)
   RFC1469 (IP Multicast over Token-Ring Local Area Networks)
   RFC1474 (The Definitions of Managed Objects for the Bridge Network
   Control Protocol of the Point-to-Point Protocol)

   RFC1478 (An Architecture for Inter-Domain Policy Routing)
   RFC1479 (Inter-Domain Policy Routing Protocol Specification:
   Version 1)
   RFC1494 (Equivalences between 1988 X.400 and RFC-822 Message
   Bodies)
   RFC1496 (Rules for downgrading messages from X.400/88 to X.400/84)
   when MIME content-types are present in the messages
   RFC1502 (X.400 Use of Extended Character Sets)
   RFC1512 (FDDI Management Information Base)
   RFC1513 (Token Ring Extensions to the Remote Network Monitoring
   MIB)
   RFC1525 (Definitions of Managed Objects for Source Routing
   Bridges)
   RFC1552 (The PPP Internetworking Packet Exchange Control Protocol
   (IPXCP))
   RFC1553 (Compressing IPX Headers Over WAN Media (CIPX))
   RFC1584 (Multicast Extensions to OSPF)
   RFC1648 (Postmaster Convention for X.400 Operations)
   RFC1666 (Definitions of Managed Objects for SNA NAUs using SMIv2)
   RFC1692 (Transport Multiplexing Protocol (TMux))
   RFC1696 (Modem Management Information Base (MIB) using SMIv2)
   RFC1742 (AppleTalk Management Information Base II)
   RFC1747 (Definitions of Managed Objects for SNA Data Link Control
   (SDLC) using SMIv2)
   RFC1749 (IEEE 802.5 Station Source Routing MIB using SMIv2)
   RFC1755 (ATM Signaling Support for IP over ATM)
   RFC1763 (The PPP Banyan Vines Control Protocol (BVCP))
   RFC1764 (The PPP XNS IDP Control Protocol (XNSCP))
   RFC1828 (IP Authentication using Keyed MD5)
   RFC1835 (Architecture of the WHOIS++ service)
   RFC1848 (MIME Object Security Services)
   RFC1913 (Architecture of the Whois++ Index Service)
   RFC1914 (How to Interact with a Whois++ Mesh)

   One additional document, RFC 1829, the ESP DES-CBC transform, was
   suggested for Historic stauts, but in this case, the group consensus
   is that the community would benefit from a separate document
   describing the security implications of using this algorithm.

4. Discussion

   As one peruses this list one sees several classes of documents:
   o Multiprotocol functions for protocols that are obsolete, such as
      Appletalk or X.400.
   o Protocols that were defined but not used, such as PEM or Whois++

   In either case above a judgment is necessary as to whether or not a

protocol is both in use and likely to be supported. The parameters
of our experiment were sufficiently conservative to avoid cases where
protocols were likely to continue to be supported. That is, anyone
could remove a document from the list for any reason. In fact, in
some cases we may have been too conservative. Thus, it is also worth
considering the categories of documents that were removed from the
list:

o   specifications known to be in full use that should be considered
    for advancement
o   specifications that are currently under review within the IETF
    process
o   Specifications that were previously considered for deprecation and
    rejected.

The last category is exclusive to telnet options, which were reviewed
in the late 1990s. Arguably such options should be reconsidered for
deprecation. Realistically nobody is going to develop a new version
of telnet that supports the TACACS option, for instance.
Nevertheless, as a first cut we were still left with 61 documents
that could be reclassified.

In at least one case discussion of deprecation has spurred work on
documents. For instance, there is a CIDR update in progress.

5. Next Steps

As we mention in the introduction, the current process requires
reconsideration of immature standards, and this review currently does
not occur. This experiment has been an attempt at a procedure that
could ease that review. The final step was working group
consideration of what to do next. There were four options:

1. Accept the results of this experiment, issue a last call, and
    deprecate standards that remain on the list past last call. This
    is an aggressive approach that would preserve the intent of RFC
    2026.
2. Do not accept the results of this experiment and update RFC 2026
    to indicate a new practice.
3. Revise the procedure based on the results of this experiment,
    based on feedback from the IESG. This option might take into
    account the different types of old standards as described above.
4. Do nothing. This would leave the IETF and the IESG practice
    inconsistent with documented practice.

The working group chose the first option. The RFC Editor is
requested to mark the above listed standards as Historic.

[[NOTE IN DRAFT: This document is written after WG consensus was

established, but before IESG approval. If the IESG approves this
document, the RFC Editor is requested to remove this note before
publication. If the IESG does not approve, this is moot.]]

It should be pointed out that we only looked at proposed standards
and only those RFCs with numbers less than 2000. Should either the
first or third of the above options be accepted, draft standards and
those older than several years should be considered.

Finally, should NEWTRK deliver a new document classification system,
these documents may provide a basis for one or more new categories of
that.

6. IANA Considerations

[RFC Editor - please do not remove this section.] The IANA databases
contain references to many of these documents. The documents are
still the normative definitions for these values, and the IANA
databases do not contain information about the status of the RFCs
referred to.

Therefore, the IANA should not need to do anything based on this
document.

7. Security Considerations

Documents that have security problems may require special attention
and individual documents to indicate what concerns exist, and when or
in what ways an implementation can be deployed to alleviate concerns.

8. Acknowledgments

This experiment would have been completely useless without
participation of the members of the old-standards mailing list. Most
notably, Pekka Savalo, Bob Braden, and John Klensin were very active
contributors to the discussions.

9. Normative References

[1]   Bradner, S., "The Internet Standards Process -- Revision 3",
      BCP 9, RFC 2026, October 1996.

Appendix A. Input RFCs

RFC0698 (Telnet extended ASCII option)
RFC0726 (Remote Controlled Transmission and Echoing Telnet option)
RFC0727 (Telnet logout option)
RFC0735 (Revised Telnet byte macro option)
RFC0736 (Telnet SUPDUP option)
RFC0749 (Telnet SUPDUP-Output option)
RFC0779 (Telnet send-location option)
RFC0885 (Telnet end of record option)
RFC0927 (TACACS user identification Telnet option)
RFC0933 (Output marking Telnet option)
RFC0946 (Telnet terminal location number option)
RFC0977 (Network News Transfer Protocol)
RFC1041 (Telnet 3270 regime option)
RFC1043 (Telnet Data Entry Terminal option: DODIIS implementation)
RFC1053 (Telnet X.3 PAD option)
RFC1073 (Telnet window size option)
RFC1079 (Telnet terminal speed option)
RFC1091 (Telnet terminal-type option)
RFC1096 (Telnet X display location option)
RFC1144 (Compressing TCP/IP headers for low-speed serial links)
RFC1195 (Use of OSI IS-IS for routing in TCP/IP and dual)
RFC1234 (Tunneling IPX traffic through IP networks)
RFC1239 (Reassignment of experimental MIBs to standard MIBs)
RFC1256 (ICMP Router Discovery Messages)
RFC1269 (Definitions of Managed Objects for the Border Gateway
Protocol: Version 3)
RFC1274 (The COSINE and Internet X.500 Schema)
RFC1276 (Replication and Distributed Operations extensions to
provide an Internet Directory using X.500)
RFC1277 (Encoding Network Addresses to Support Operation over Non-
OSI Lower Layers)
RFC1285 (FDDI Management Information Base)
RFC1314 (A File Format for the Exchange of Images in the Internet)
RFC1323 (TCP Extensions for High Performance)
RFC1328 (X.400 1988 to 1984 downgrading)
RFC1332 (The PPP Internet Protocol Control Protocol (IPCP))
RFC1370 (Applicability Statement for OSPF)
RFC1372 (Telnet Remote Flow Control Option)
RFC1377 (The PPP OSI Network Layer Control Protocol (OSINLCP))
RFC1378 (The PPP AppleTalk Control Protocol (ATCP))
RFC1381 (SNMP MIB Extension for X.25 LAPB)
RFC1382 (SNMP MIB Extension for the X.25 Packet Layer)
RFC1397 (Default Route Advertisement In BGP2 and BGP3 Version of
The Border Gateway Protocol)
RFC1413 (Identification Protocol)
RFC1414 (Identification MIB)

RFC1415 (FTP-FTAM Gateway Specification)
RFC1418 (SNMP over OSI)
RFC1419 (SNMP over AppleTalk)
RFC1420 (SNMP over IPX)
RFC1421 (Privacy Enhancement for Internet Electronic Mail: Part I:
Message Encryption and Authentication Procedures)
RFC1422 (Privacy Enhancement for Internet Electronic Mail: Part
II: Certificate-Based Key Management)
RFC1423 (Privacy Enhancement for Internet Electronic Mail: Part
III: Algorithms, Modes, and Identifiers)
RFC1424 (Privacy Enhancement for Internet Electronic Mail: Part
IV: Key Certification and Related Services)
RFC1461 (SNMP MIB extension for Multiprotocol Interconnect over
X.25)
RFC1469 (IP Multicast over Token-Ring Local Area Networks)
RFC1471 (The Definitions of Managed Objects for the Link Control
Protocol of the Point-to-Point Protocol)
RFC1472 (The Definitions of Managed Objects for the Security
Protocols of the Point-to-Point Protocol)
RFC1473 (The Definitions of Managed Objects for the IP Network
Control Protocol of the Point-to-Point Protocol)
RFC1474 (The Definitions of Managed Objects for the Bridge Network
Control Protocol of the Point-to-Point Protocol)
RFC1478 (An Architecture for Inter-Domain Policy Routing)
RFC1479 (Inter-Domain Policy Routing Protocol Specification:
Version 1)
RFC1494 (Equivalences between 1988 X.400 and RFC-822 Message
Bodies)
RFC1496 (Rules for downgrading messages from X.400/88 to X.400/84)
RFC1502 (X.400 Use of Extended Character Sets)
RFC1510 (The Kerberos Network Authentication Service (V5))
RFC1512 (FDDI Management Information Base)
RFC1513 (Token Ring Extensions to the Remote Network Monitoring
MIB)
RFC1517 (Applicability Statement for the Implementation of
Classless Inter-Domain Routing (CIDR))
RFC1518 (An Architecture for IP Address Allocation with CIDR)
RFC1519 (Classless Inter-Domain Routing (CIDR): an Address
Assignment and Aggregation Strategy)
RFC1525 (Definitions of Managed Objects for Source Routing
Bridges)
RFC1552 (The PPP Internetworking Packet Exchange Control Protocol)
RFC1553 (Compressing IPX Headers Over WAN Media (CIPX))
RFC1570 (PPP LCP Extensions)
RFC1572 (Telnet Environment Option)
RFC1582 (Extensions to RIP to Support Demand Circuits)

RFC1584 (Multicast Extensions to OSPF)
RFC1598 (PPP in X.25)
RFC1618 (PPP over ISDN)
RFC1628 (UPS Management Information Base)
RFC1648 (Postmaster Convention for X.400 Operations)
RFC1663 (PPP Reliable Transmission)
RFC1666 (Definitions of Managed Objects for SNA NAUs using SMIv2)
RFC1692 (Transport Multiplexing Protocol (TMux))
RFC1696 (Modem Management Information Base (MIB) using SMIv2)
RFC1697 (Relational Database Management System (RDBMS) Management)
RFC1731 (IMAP4 Authentication Mechanisms)
RFC1734 (POP3 AUTHentication command)
RFC1738 (Uniform Resource Locators (URL))
RFC1740 (MIME Encapsulation of Macintosh Files - MacMIME)
RFC1742 (AppleTalk Management Information Base II)
RFC1747 (Definitions of Managed Objects for SNA Data Link Control)
RFC1749 (IEEE 802.5 Station Source Routing MIB using SMIv2)
RFC1752 (The Recommendation for the IP Next Generation Protocol)
RFC1755 (ATM Signaling Support for IP over ATM)
RFC1763 (The PPP Banyan Vines Control Protocol (BVCP))
RFC1764 (The PPP XNS IDP Control Protocol (XNSCP))
RFC1767 (MIME Encapsulation of EDI Objects)
RFC1793 (Extending OSPF to Support Demand Circuits)
RFC1808 (Relative Uniform Resource Locators)
RFC1812 (Requirements for IP Version 4 Routers)
RFC1828 (IP Authentication using Keyed MD5)
RFC1829 (The ESP DES-CBC Transform)
RFC1831 (RPC: Remote Procedure Call Protocol Specification Version
2)
RFC1833 (Binding Protocols for ONC RPC Version 2)
RFC1835 (Architecture of the WHOIS++ service)
RFC1847 (Security Multiparts for MIME: Multipart/Signed and
Multipart/Encrypted)
RFC1848 (MIME Object Security Services)
RFC1913 (Architecture of the Whois++ Index Service)
RFC1914 (How to Interact with a Whois++ Mesh)
RFC1928 (SOCKS Protocol Version 5)
RFC1929 (Username/Password Authentication for SOCKS V5)
RFC1961 (GSS-API Authentication Method for SOCKS Version 5)
RFC1962 (The PPP Compression Control Protocol (CCP))
RFC1964 (The Kerberos Version 5 GSS-API Mechanism)
RFC1968 (The PPP Encryption Control Protocol (ECP))
RFC1973 (PPP in Frame Relay)
RFC1982 (Serial Number Arithmetic)
RFC1985 (SMTP Service Extension for Remote Message Queue Starting)
RFC1995 (Incremental Zone Transfer in DNS)

RFC1996 (A Mechanism for Prompt Notification of Zone Changes (DNS
NOTIFY))
RFC1997 (BGP Communities Attribute)

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