

## The Internet and the Millennium Problem (Year 2000)

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### Abstract

The Year 2000 Working Group(WG) has conducted an investigation into the millennium problem as it regards Internet related protocols. This investigation only targeted the protocols as documented in the Request For Comments Series (RFCs). This investigation discovered little reason for concern with regards to the functionality of the protocols. A few minor cases of older implementations still using two digit years (ala [RFC 850](#)) were discovered, but almost all Internet protocols were given a clean bill of health. Several cases of 'period' problems were discovered, where a time field would 'roll over' as the size of field was reached. In particular, there are several protocols, which have [32](#) bit, signed integer representations of the number of seconds since January 1, 1970 which will turn negative at Tue Jan 19 03:14:07 GMT [2038](#). Areas whose protocols will be effected by such problems have been notified so that new revisions will remove this limitation.

### [1](#). Introduction

According to the trade press billions of dollars will be spend the upcoming years on the year 2000 problem, also called the millennium problem (though the third millennium will really start in 2001). This problem consists of the fact that many software packages and some

protocols use a two-digit field for the year in a date field. Most of the problems seem to be in administrative and financial programs, or in the hardcoded microcomputers found in electronic equipment. A lot of organizations are now starting to make an inventory of which software and tools they use will suffer from the millennium problem.

With the increasing popularity of the Internet, more and more organizations use the Internet as a serious business tool. This means that most organizations will want to analyze the millennium problems due to the use of Internet protocols and popular Internet software. In the trade press the first articles suggest that the Internet will collapse at midnight the 31st of December 1999.

To counter these suggestions, and to avoid having countless companies redo the same investigation, this effort was undertaken by the IETF. The Year 2000 WG has made an inventory of all-important Internet protocols that have been documented in the Request for Comments (RFC) series. Only protocols directly related to the Internet will be considered.

This document is divided into a number of sections. [Section 1](#) is the Introduction which you are now reading. [Section 2](#) is a disclaimer about the completeness of this effort. [Section 3](#) describes areas in which millenium problems have been found, while [Section 4](#) describes a few other "period" problems. [Section 5](#) describes potential fixes to problems that have been identified. [Section 6](#) describes the methodology used in the investigation. Sections [7](#) through [22](#) are devoted to the 15 different groupings of protocols and RFCs. [Section 23](#) discusses security considerations, [Section 24](#) is devoted to references, and [Section 25](#) is the author contact information. [Appendix A](#) is the list of RFCs examined broken down by category. [Appendix B](#) is a PERL program used to make a first cut identification of problems, and [Appendix C](#) is the output of that PERL program.

The editor of this document would like to acknowledge the critical contributions of the follow for direct performance of research and the provision of text: Alex Latzko, Robert Elz, Erik Huizer, Gillian Greenwood, Barbara Jennings, R.E. (Robert) Moore, David Mills, Lynn Kubinec, Michael Patton, Chris Newman, Erik-Jan Bos, Paul Hoffman, and Rick H. Wesson. The pace with which this group has operated has only been achievable by the intimate familiarity of the contributors with the protocols and ready access to the collective knowledge of the IETF.

## [2. Disclaimer](#)

This RFC is not complete. It is an effort to analyze the Y2K impact on hundreds of protocols but is likely to have missed some protocols and misunderstood others. Organizations should not attempt to claim

any legitimacy or approval for any particular protocol based on this document. The efforts have concentrated on the identification of potential problems, rather than solutions to any of the problems that have been identified. Any proposed solutions are only that: proposed. A formal engineering review should take place before any solution is adopted.

It should also be noted that the research was performed on RFCs 1 through 2128. At that time the IESG was charted with not allowing any new RFCs to be published that had any Year 2000 issues. Since that cutoff time there has been work to correct issues discovered by this Working Group. In particular, RWhois as documented by [RFC 1714](#) has been updated to fix the problems found. [RFC 2167](#) now documents a fixed version of the RWhois protocol. The work of this group was to look backwards, and hence new RFC's which supplant the old are expected to make the information in this RFC obsolete. The work of this group will truly be complete when this document is completely obsolete.

A number of people have suggested looking into other "special" dates. For example, the first leap year, the first "double digit" day (January 10, 2000), January 1, 2001, etc. There is not one place where days have been used in the protocols defined by the RFC series so there is little reason to believe that any of these special dates will have any impact.

### [3. Summary of Year 2000 Problems](#)

Here is a brief description of all the Millennium issues discovered in the course of this research. Note that many of the RFCs are unclear on the issue. They mandate the use of UTCTime but do not specify whether the two-digit or four-digit year representation should be used.

#### [3.1 "Directory Services"](#)

- [rfc1274.txt](#) - References UTC date/time
- [rfc1276.txt](#) - References UTC date/time for version control.
- [rfc1488.txt](#) - References UTC Time as printable strings.
- [rfc1608.txt](#) - Refers to uTCTimeSyntax
- [rfc1609.txt](#) - Refers to uTCTimeSyntax
- [rfc1778.txt](#) - Refers to uTCTimeSyntax

#### [3.2 "Information Services and File Transfer"](#)

HTTP 1.1, as defined in [RFC 2068](#), requires all newly generated date stamps to conform to [RFC 1123](#) date formats which are Year 2000 compliant, but it also requires acceptance of the older non-compliant [RFC850](#) formats. Some specific recommendations have been passed to the HTTP WG.

HTML 2.0, as defined in [RFC 1866](#), could allow a very subtle Year 2000 problem, but once again this recommendation has been passed on the HTML WG.

[RFC 1778](#) on String Representations of Standard Attribute Syntax's define UTC Time in [Section 2.21](#) and uses that definition in [Section 2.25](#) on User Certificates. Since UTC Time is being used, there is a potential millennium issue.

[RFC 1440](#) on SIFT/UFT: Sender-Initiated/Unsolicited File Transfer defines an optional DATE command in [Section 5](#) of the form mm/dd/yy which is subject to millennium issues.

### [3.3](#) "Electronic Mail"

After reviewing all mail-related RFCs, it was discovered that while some obsolete standards required two-digit years, all currently used standards require four-digit years and are thus not prone to typical Year 2000 problems.

RFCs 821 and 822, the main basis for SMTP mail exchange and message format, originally required two-digit years. However, both of these RFCs were later modified by [RFC 1123](#) in 1989, which strongly recommended 4-digit years.

### [3.4](#) "Name Serving"

While not a protocol issue, there is a common habit of writing serial numbers for DNS zone files in the form YYXXXXXX. The only real requirement on the serial numbers is that they be increasing (see [RFC 1982](#) for a complete description) and a change from 99XXXXXX to 00XXXXXX cause a failure. See the section on "Name Serving" for a complete description of the issues.

### [3.5](#) "Network Management"

Version 2 of SNMP's MIB definition language (SMIv2) specifies the use of UCTTimes for time stamping MIB modules. Even though these time stamps do not flow in any network protocols, there could be an issue with management applications, depending on implementations.

### [3.6](#) "Network News"

There does exist a problem in both NNTP, [RFC 977](#), and the Usenet News Message Format, [RFC 10336](#). They both specify two-digit year format. A working group has been formed to update the network news protocols in general, and addressing this problem is on their list of work items.

### [3.7](#) "Real-Time Services"

A Year 2000 problem does occur in the Simple Network Paging Protocol, versions 2 & 3. Both define a HOLDuntil option which uses a YYMMDDHHMMSS+/-GMT field. Version 3 also defines a MStatus command, which is required to store, dates and times as YYMMDDHHMMSS+/-GMT.

There is a small Year 2000 issue in [RFC 1786](#) on the Representation of IP Routing Policies in the ripe-81++ Routing Registry. In Appendices C the "changed" object parameter defines a format of <email-address> YYMMDD, and similarly in [Appendix D](#) "withdrawn" object identifier has the format of YYMMDD. Since these are only identifiers there should be little operational impact. Some application software may need to be modified.

### [3.8](#) "Security"

[RFC 1507](#) on Distributed Authentication Security Services (DASS) use UTCTime. Because of the imprecision of the UTC time definition there could be problems with this protocol.

RFCs 1421-1424 specifies that PEM uses UTC time formats which could have a Millennium issue.

## [4.](#) Summary of Other "Periodicity" Problems

By far, the largest area of "period" problems occurs in the year [2038](#). Many protocols use a 32-bit field to record the number of seconds since January 1, 1970.

### [4.1](#) "Name Services"

DNS Security uses 32-bit timestamps which will roll over in 2038. This issue has been referred to the appropriate Working Group so that the details of rollover can be established.

### [4.2](#) "Routing"

IDPR suffers from the classic Year 2038 problem, by having a timestamp counter which rolls over at that time.

## [5.](#) Suggested Solutions

The real solution to the problem is to use 4 digit year fields for applications and hardware systems. For counters that key off of a certain time (January 1, 1970 for example) need to either: define a wrapping solution, or to define a larger number space (greater than 32-bits), or to make more efficient use of the 32-bit space. However, it will be impossible to completely replace currently deployed systems, so solutions for handling problems are in order.

## [5.1](#) Fixed Solution

A number of organizations and groups have suggested a fixed solution to the problem of two digit years. Given a two-digit year YY, if YY is greater than or equal to 50, the year shall be interpreted as 19YY; and where YY is less than 50, the year shall be interpreted as 20YY.

While a simple and straightforward solution, it only pushes the problem off 40 to 50 years, until the artificially generated Year [2050](#) problem needs to be addressed. However, it is easy to implement and deploy, so it might be the most commonly adopted solution.

## [5.2](#) Sliding Window

Another solution is the "sliding window" approach. In this approach, some value N is selected, and any two digit year that is less than or equal to the current two digit year plus N is considered the future, while any other two digit year is considered in the past.

For example, choosing N equal to 10, If the current year is 2012, and I get a two digit year that is any of 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 or 22, assume it is 20YY (i.e. the future), otherwise consider it to be in the past(1923-1999, 2000-2011).

This solution has two advantages. First, no new fixed year problems are introduced. Second, different applications and protocols could choose different values of N. The drawback is that this solution is harder to implement, and to work well the value of N will need to be constant across different implementations.

## [6.](#) Methodology

The first task was dividing the types of RFC's into logical groups rather than the strict numeric publishing order. Sixteen specific areas were identified. They are: "Autoconfiguration" , "Directory Services", "Disk Sharing", "Games and Chat" ,"Information Services & File Transfer", "Network & Transport Layer", "Electronic Mail", "NTP", "Name Serving", "Network Management", "News", "Real Time Services", "Routing", "Security", "Virtual Terminal", and "Other". In addition to these categories, many hundreds of RFC's were immediately eliminated based on content. That is not to say that all Informational RFC's were not considered, many did contain some technical content or overview which demanded scrutiny.

Each area was assigned to a team for investigation. Although each team used whatever additional investigation techniques which seemed appropriate (including completely reading each RFC, and in some cases the source code for the reference implementation) at minimum each team

used an automatic scanning system to search for the following items (case insensitively) in each RFC:

- date
- GMT
- UTCTime
- year
- yy (that is not part of yyyy)
- two-digit, 2-digit, 2digit
- century
- 1900 & 2000

Note that all of these strings except "UTCTime" may occur in conjunction with a date format that accommodates the Year 2000 crossing, as well as with one that does not. So "hits" on these string do not necessarily indicate Year 2000 problems: they simply identify elements that need to be examined.

After the documents were scanned, therefore, each "hit" was examined individually. Those that cause no Year 2000 problems (e.g., those that encode the year as a two-byte integer, or as a four-character display string) are not discussed here. Those that do cause Year 2000 problems are identified in this document, and the nature and impact of the problems they cause are described.

## [7. Autoconfiguration](#)

### [7.1 Summary](#)

The RFC's which were categorized into this group were primarily the BOOT Protocol (BOOTP) and the Dynamic Host Configuration Protocol (DHCP) for both IP version four and six.

Examination of the BOOTP protocols and most popular implementations show no year 2000 problems. All times are references as 32 bit integers in seconds of UTC time. An investigation of all DHCP and the IPv6 Autoconfiguration mechanisms produced no year 2000 problems. All references to time, in particular lease lengths, are 32 bit integers in seconds, allowing lease times of well over 100 years.

### [7.2 Specifics](#)

The following RFCs were examined for possible millennium problems: 906, 951, 1048, 1084, 1395, 1497, 1531, 1532, 1533, 1534, 1541, 1542, 1970, & 1971. [RFC 951](#)'s only reference to time or dates is a two-byte field in the packet, which is number of second since the hosts, was booted. RFC's 1048, 1084, 1395, 1497, 1531, & 1532 have either no references to dates and time, or they are the same as the RFCs, which

obsoleted them, discussed in the next paragraph.

[RFC 1533](#) enumerates all the known DHCP field types and a number of these have to do with time. [Section 3.4](#) defines a "Time Offset" field which specifies the offset of the clients subnet in seconds from UTC. This 4 byte field has no millennium issues. [Section 9.2](#) defines the IP Address Lease Time field which is used by clients to request a specific lease time. This four byte field is an unsigned integer containing a number of seconds. [Section 9.9](#) defines a Renewal Time Value field, [Section 9.10](#) defines a Rebinding Time Value, both of which are similarly 32 bit fields, which have no millennium issues.

[RFC 1534](#) has no references to times or dates.

[RFC 1541](#) has two mentions of times/dates. The first is the "secs" field which, similarly to [RFC 951](#), is a 16-bit field for the number of seconds since the host has booted. There is also a discussion in [section 3.3](#) about "Interpretation and Representation of Time Values" which while clearly states that there is no millennium or period problems.

[RFC 1542](#) also references the "secs" field mentioned previously.

[RFC 1970](#) mentions a number of variables, which are time related. In [section 4.2](#) "Router Advertisement Message Format" the following fields are defined: Router Lifetime, Reachable Time, & Retrans Timer. In [section 4.6.2](#) "Prefix Information" the following are defined: Valid Lifetime, & Preferred Lifetime. In [section 6.2.1](#) "Router Configuration Variables" the following are defined: MaxRtrAdvInterval, MinRtrAdvInterval, AdvReachableTime, AdvRetransTimer, AdvDefaultLifetime, AdvValidLifetime, & AdvPreferredLifetime. All of these fields specify counters of some sort which have no millennium or periodicity problems.

[RFC 1971](#) has some discussion of preferred lifetimes, depreciated lifetimes and valid lifetimes of leases, but only discusses them in an expository way.

## [8. Directory Services](#)

### [8.1 Summary](#)

The RFC's which were categorized into this group were primarily X.500 related RFC's, Whois, Rwhois, Whois++, and the Lightweight Directory Access Protocol (LDAP).

Upon review of the Directory Services related RFC's, no serious year [2000](#) problems were discovered. Some minor issues were noted and explained below in the specific portion of this section.

### [8.2 Specifics](#)



RFCs that mentioned UTC Time or made reference to uTCTimeSyntax could fail to be Y2K compliant. These should be updated to specify the four year version of uTCTimeSyntax rather than giving the option of using a two-year date representation. The following RFCs fall into this category:

- [rfc1274.txt](#) - References UTC date/time
- [rfc1276.txt](#) - References UTC date/time for version control.
- [rfc1488.txt](#) - References UTC Time as printable strings.
- [rfc1608.txt](#) - Refers to uTCTimeSyntax
- [rfc1609.txt](#) - Refers to uTCTimeSyntax
- [rfc1778.txt](#) - Refers to uTCTimeSyntax

Two RFC's have unusual date specifications and specify their own date format. Both of these support Y2K compliant dates.

[RFC1714](#) (RWhois) specifies date formats that are not Y2K compliant, but it also supports dates that are. Implementers of the RWhois protocol should only use the %MY4 format

[RFC1834](#) (Whois++) requires the use of dates, but it didn't specify the format, syntax, or representation of the date string to be used.

## [9. Disk Sharing](#)

### [9.1 Summary](#)

The RFC's which were categorized into this group were those related to the Network File System (NFS). Other popular disk sharing protocols like SMB and AFS were referred to their respective trustee's for review.

After careful review, NFS has no year 2000 problems.

### [9.2 Specifics](#)

The references to time in this protocol are the times of file data modification, file access, and file metadata change (mtime, atime, and time, respectively). These times are kept as 32 bit unsigned quantities in seconds since 1970-01-01, and so the NFS protocol will not experience an Epoch event until the year 2106.

## [10. Games and Chat](#)

### [10.1 Summary](#)

The RFC's which were categorized into this group were related to the Internet Relay Chat Protocol (IRC). No millennium problems exist in the IRC protocol.

## [10.2](#) Specifics

There is only a single instance of time or date related information in the IRC protocol as specified by [RFC 1459](#). [Section 4.3.4](#) defines a TIME message type which queries a server for its local time. No mention is made of the format of the reply or how it is parsed, the assumption being specific implementations will handle the reply and parse it appropriately.

## [11](#). Information Services & File Transfer

### [11.1](#) Summary

The RFC's which were categorized into this group were divided among World Wide Web (WWW) protocols and File Transfer Protocols (FTP). WWW protocols include the Hypertext Transfer Protocol (HTTP), a variety of Uniform Resource formats (URL, URAs, etc.) and the HyperText Markup Language (HTML). FTP protocols include the well known FTP protocol, the Trivial File Transfer Protocol (TFTP) and a variety of extensions to these protocols. Other information services includes the Finger Protocol and the LPD protocol.

HTTP 1.1, as defined in [RFC 2068](#), requires all newly generated date stamps to conform to [RFC 1123](#) date formats which are Year 2000 compliant, but it also requires acceptance of the older non-compliant [RFC850](#) formats. Some specific recommendations are listed below and have been passed to the HTTP WG.

HTML 2.0, as defined in [RFC 1866](#), could allow a very subtle Year 2000 problem, but once again this recommendation has been passed on the HTML WG.

[RFC 1778](#) on String Representations of Standard Attribute Syntax's define UTC Time in [Section 2.21](#) and uses that definition in [Section 2.25](#) on User Certificates. Since UTC Time is being used, there is a potential millennium issue.

[RFC 1440](#) on SIFT/UFT: Sender-Initiated/Unsolicited File Transfer defines an optional DATE command in [Section 5](#) of the form mm/dd/yy which is subject to millennium issues.

### [11.2](#) Specifics

The main IETF standards-track document on the HTTP protocol is [RFC2068](#) on HTTP 1.1. It notes that historically three different date formats

have been used, and that one of them uses a two-digit year field. In [section 3.3.1](#) it requires HTTP 1.1 implementations to generate this [RFC1123](#) format:

Sun, 06 Nov 1994 08:49:37 GMT ; [RFC 822](#), updated by [RFC 1123](#)

instead of this [RFC850](#) format:

Sunday, 06-Nov-94 08:49:37 GMT ; [RFC 850](#), obsoleted by [RFC 1036](#)

Unfortunately, many existing servers, serving on the order of one fifth of the current HTTP traffic, send dates in the ambiguous [RFC850](#) format.

[Section 19.3](#) of the [RFC2068](#) says this:

- o HTTP/1.1 clients and caches should assume that an [RFC-850](#) date which appears to be more than 50 years in the future is in fact in the past (this helps solve the "year 2000" problem).

This avoids a "stale cache" problem, which would cause the user to see out-of-date data.

[RFC 1986](#) documents experiments with a simple file transfer program over radio links using Enhanced Trivial FTP (ETFTP). There are a number of timers defined which are all in seconds and have no year [2000](#) issues.

In [RFC 1866](#), on HTML 2.0, the <META> tag allows the embedding of recommended values for some HTTP headers, including Expires. E.g.

```
<META HTTP-EQUIV="Expires"
      CONTENT="Tue, 04 Dec 1993 21:29:02 GMT">
```

Servers should rewrite these dates into [RFC1123](#) format if necessary.

[RFC 1807](#) defines a format for bibliographic records and it specifies a DATE format, which requires 4 digit year fields.

[RFC 1788](#) defines ICMP Domain Name messages. [Section 3](#) defines a Domain Name Reply Packet, which contains a signed 32-bit integer. This timer is not Year 2000 reliant and is certainly large enough for its purposes.

[RFC 1784](#) on TFTP Timeout Intervals and Transfer Size Options uses a field for the number of seconds for the timeout. It is an ASCII value from 1 to 255 octets in length. There is no Y2K issue.

[RFC 1778](#) on String Representations of Standard Attribute Syntax's define UTC Time in [Section 2.21](#) and uses that definition in Section

[2.25](#) on User Certificates. Since UTC Time is being used, there is a potential millennium issue.

[RFC 1777](#) on LDAP defines a timelimit in [Section 4.3](#) which is expressed in seconds, but does not define any limits.

[RFC 1440](#) on SIFT/UFT: Sender-Initiated/Unsolicited File Transfer defines an optional DATE command in [Section 5](#) of the form mm/dd/yy, which is subject to millennium issues.

[RFC 1068](#) on the Background File Transfer Protocol (BFTP) defines two commands in Sections B.2.12 and B.2.13, the Submit and Time commands. >From the example usage's given in [Appendix C](#) it is clear that this protocol will function correctly though the year 9999.

[RFC 1037](#) on NFILE (a file access protocol) discusses the a Date representation in [Section 7.1](#) as the number of seconds since January 1, 1900, but does not limit the field size. There should be no Y2K issues.

[RFC 998](#) on NETBLT defines a Death time in [Section 8](#), which is the sender's death time in seconds.

[RFC 978](#) on the Voice File Interchange Protocol defines the Total Time of a message to be a 32-bit number of deci-seconds. This limits the size of a message but has no millennium issues.

[RFC 969](#) was obsoleted by [RFC 998](#).

[RFC 916](#) defines the Reliable Asynchronous Transfer Protocol (RATP). Three timers are discussed in an expository manner in [Section 5.4](#) and its subsections. There are no relevant issues.

RFCs 2122, 2056, 2055, 2054, 2044, 2016, 1960, 1959, 1874, 1865, 1862, 1843, 1842, 1823, 1815, 1808, 1798, 1785, 1783, 1782, 1779, 1766, 1738, 1737, 1736, 1729, 1728, 1727, 1639, 1633, 1630, 1625, 1554, 1545, 1530, 1529, 1528, 1489, 1486, 1436, 1415, 1413, 1350, 1345, 1312, 1302, 1288, 1278, 1241, 1235, 1196, 1194, 1179, 1123, 1003, 971, 965, 959, 949, 913, 887, 866, 865, 864, 863, 862, 797, 795, 783, 775, 765, 751, 743, 742, 740, 737, 725, 722, 707, 691, 683, 662, 640, 624, 614, 607, 599, 412, 411, 410, 407, and 406 were found to have no references to dates or times, and hence no millennium issues.

RFCs 712, 697, 633, 630, 622, 610, 593, 592, 589, 573, 571, 570, 553, 551, 549, 543, 535, 532, 525, 520, 514, 506, 505, 504, 501, 499, 493, 490, 487, 486, 485, 480, 479, 478, 477, 472, 468, 467, 463, 454, 451, 448, 446, 438, 437, 436, 430, 429, 418, 414, and 409 were not available for review.

RFCs below 400 were considered too obsolete to even consider.

## [12.](#) Network & Transport Layer

### [12.1](#) Summary

The RFC's which were categorized into this group were the Internet Protocol (IP) versions four and six, the Transmission Control Protocol (TCP), the User Datagram Protocol (UDP), the Point-to-Point Protocol (PPP) and its extensions, Internet Control Message Protocol (ICMP), the Address Resolution Protocol (ARP) and Remote Procedure Call (RPC) protocol. A variety of less known protocols were also examined.

After careful review of the nearly 400 RFC's in this category, no millennium or year 2000 problems were found.

### [12.2](#) Specifics

[RFC 2125](#) on the PPP Bandwidth Allocation Protocol (BAP) in [section 5.3](#) discusses the use of mandatory timers, but gives no mention as to how they are implemented.

[RFC 2114](#) on a Data Link Switching Client Access Protocol defines a retry timer of five seconds in [Section 3.4.1](#).

[RFC 2097](#) on the PPP NetBIOS Frame Control Protocol discusses several timer and timeouts in [Section 2.1](#), none of which suffers from a year 2000 problem.

[RFC 2075](#) on the IP Echo Host Service discusses timestamps and has no millennium issues.

[RFC 2005](#) on the Applicability for Mobile IP discusses using timestamps as a security measure to avoid replay attacks ([Section 3](#)), but does not quantify them. There are no expected issues.

[RFC 2002](#) on IP Mobility Support uses a 16-bit field for the lifetime of a connection and notes the 18.2 hour limitation that this imposes. [Section 5.6.1](#) on replay protection requires the use of 64-bit time fields, of a similar format to NTP packets.

[RFC 1981](#) on Path MTU Discovery for IPv6 discusses timestamps and their potential use to purge stale information in [section 5.3](#). There is no millennium issues in this use.

[RFC 1963](#) on the PPP Serial Data Transport Protocol defines a flow expiration time in [section 4.9](#) which has no year 2000 issues.

[RFC 1833](#) on Binding Protocols for ONC RPC Version 2 defines a variable in [Section 2.2.1](#) called RPCBPROC\_GETTIME which returns the local time in seconds since 1/1/1970. Since this value is not fields width

dependent, it may or may not wrap around the 32-bit value depending on the operating system parameters.

[RFC 1762](#) on the PPP DECnet Phase IV Control Protocol discusses a number of timers in [Section 5](#) (General Considerations). None of these timers experience any millennium issues.

[RFC 1761](#) on Snoop Version 2 Packet Capture File Format discusses two 32-bit timestamp values on [Section 4](#) on Packet Record Formats. The first of these may wrap in the year 2038, but should not effect anything of any import.

[RFC 1755](#) on ATM Signalling Support for IP Over ATM discusses timing issues in [Section 3.4](#) on VC Teardown. These limited timers have no year 2000 issues.

[RFC 1692](#) on the Transport Multiplexing Protocol (TMux) defines a TTL in [Section 2.3](#) and a timer in [Section 3.3](#). Neither of these suffer from any millennium or year 2000 issues.

[RFC 1661](#) on PPP defines three timers in [Section 4.6](#), none of which have any year 2000 issues.

[RFC 1644](#) on T/TCP (TCP Extensions for Transactions) mentions [RFC 1323](#) and the extended timers recommended in it.

[RFC 1575](#) defines an echo function for CNLP discusses in the narrative the use of the Lifetime Field in [Section 5.3](#). There is nothing to suggest that there is any year 2000 issues.

[RFC 1329](#) on Dual MAC FDDI Networks discusses ARP cache administration in [Section 9.3](#) and 9.4 and various timers to expire entries.

[RFC 1256](#) on ICMP Router Discovery Messages talks about lifetime fields in [Section 2](#) and defines three router configuration variables in [Section 4.1](#). None of these have any millennium issues.

[RFC 792](#) on ICMP discusses Timestamps and Timestamp Reply messages which define a 32-bit timestamp which contains the number of milliseconds since midnight UT.

[RFC 791](#) on the Internet Protocol defines a packet type 68 which is an Internet Timestamp, which defines a 32-bit field which contains the number of milliseconds since midnight UT.

[RFC 781](#) was defines the same option which is codified in [RFC 791](#) as a packet type 68.

RFC's 2126, 2118, 2113, 2107, 2106, 2105, 2098, 2067, 2043, 2023, 2019, 2018, 2009, 2004, 2003, 2001, 1994, 1993, 1990, 1989, 1979, 1978, 1977, 1976, 1975, 1974, 1973, 1972, 1967, 1962, 1954, 1946,

1937, 1936, 1934, 1933, 1932, 1931, 1926, 1924, 1919, 1918, 1917, 1916, 1915, 1897, 1888, 1887, 1885, 1884, 1883, 1881, 1878, 1877, 1868, 1860, 1859, 1853, 1841, 1832, 1831, 1809, 1795, 1791, 1770, 1764, 1763, 1756, 1754, 1752, 1744, 1735, 1726, 1719, 1717, 1710, 1707, 1705, 1698, 1693, 1688, 1687, 1686, 1683, 1682, 1681, 1680, 1679, 1678, 1677, 1676, 1674, 1673, 1672, 1671, 1670, 1669, 1667, 1663, 1662, 1638, 1634, 1631, 1629, 1624, 1622, 1621, 1620, 1619, 1618, 1613, 1605, 1604, 1598, 1590, 1577, 1570, 1561, 1560, 1553, 1552, 1551, 1549, 1548, 1547, 1538, 1526, 1518, 1498, 1490, 1483, 1475, 1466, 1454, 1435, 1434, 1433, 1393, 1390, 1385, 1379, 1378, 1377, 1376, 1375, 1374, 1365, 1363, 1362, 1356, 1347, 1337, 1335, 1334, 1333, 1332, 1331, 1326, 1323, 1314, 1307, 1306, 1294, 1293, 1277, 1263, 1240, 1237, 1236, 1234, 1226, 1223, 1220, 1219, 1210, 1209, 1201, 1191, 1188, 1185, 1172, 1171, 1166, 1162, 1151, 1146, 1145, 1144, 1141, 1139, 1134, 1132, 1122, 1110, 1106, 1103, 1088, 1086, 1085, 1078, 1072, 1071, 1070, 1069, 1063, 1062, 1057, 1055, 1051, 1050, 1046, 1045, 1044, 1042, 1030, 1029, 1027, 1025, 1016, 1008, 1007, 1006, 1002, 1001, 994, 986, 983, 982, 970, 964, 963, 962, 955, 948, 942, 941, 940, 936, 935, 932, 926, 925, 924, 922, 919, 917, 914, 905, 903, 896, 895, 894, 893, 892, 891, 889, 879, 877, 874, 872, 871, 848, 829, 826, 824, 815, 814, 813, 801, 793, 789, 787, 777, 768, 761, 760, 759, 730, 704, 696, 695, 692, 690, 689, 687, 685, 680, 675, 674, 660, 632, 626, 613, 611 were reviewed but were found to have no millennium references.

RFC's 594, 591, 576, 550, 548, 528, 521, 489, 488, 473, 460, 459, 450, 449, 445, 442, 434, 426, 417, 398, 395, 394, 359, 357, 348, 347, 346, 343, 312, 301, 300, 271, 241, 210, 203, 202, 197, 190, 178, 176, 175, 166, 165, 161, 151, 150, 146, 145, 143, 142, 128, 127, 123, 122, 93, 91, 80, 79, 70, 67, 65, 62, 60, 59, 56, 55, 54, 53, 41, 38, 33, 23, 22, 20, 19, 17, 12 were deemed too old to be considered for millennium investigation.

## [13. Electronic Mail](#)

### [13.1 Summary](#)

The RFC's which were categorized into this group were the Simple Mail Transfer Protocol (SMTP), Internet Mail Access Protocol (IMAP), Post Office Protocol (POP), Multipurpose Internet Mail Exchange (MIME), and [X.400](#) to SMTP interaction.

After reviewing all mail-related RFCs, it was discovered that while some obsolete standards required two-digit years, all currently used standards require four-digit years and are thus not prone to typical Year 2000 problems.

## [13.2](#) Specifics

RFCs 821 and 822, the main basis for SMTP mail exchange and message format, originally required two-digit years. However, both of these RFCs were later modified by [RFC 1123](#) in 1989, which strongly recommended 4-digit years. Although there might be a few very old SMTP systems using two-digit years, it is believed that almost all mail sent over the Internet today uses four-digit years. Mail that contains two-digit years in its SMTP headers will not "fail", but might be mis-sorted in message stores and mail user agents. This problem is avoided entirely by taking the [RFC 1123](#) change as a requirement, rather than merely as a recommendation.

IMAP versions 1, 2, and 3 used two-digit years, but IMAP version 4 (defined in RFCs 1730 and 1732 in 1994) requires four-digit years. There are still a few IMAP 2 servers and clients in use on the Internet today, but IMAP version 4 has already taken over almost all of the IMAP market. Mail stored on an IMAP server or client with two-digit years will not "fail", but could possibly be mis-sorted or prematurely expired.

[RFC 1153](#) describes a format for digests of mailing lists, and uses two-digit dates. This format is not widely used. The use of two-digit dates could possibly cause missorting of stored messages.

[RFC 1327](#), which describes mapping between X.400 mail and SMTP mail, uses the UTCTime format.

[RFC 1422](#) describes the structure of certificates that were used in PEM (and are expected to be used in many other mail and non-mail services). Those certificates use dates in UTCTime format. Poorly written software might prematurely expire or validate a certificate based on comparisons of the date with the current date, although no current software is known to do this.

## [14.](#) Network Time Protocols

### [14.1](#) Summary

The RFC's which were categorized into this group were the Network Time Protocol (NTP), and the Time Protocol.

NTP has been certified year 2000 compliant, while the Time Protocol will "roll over" at Thu Feb 07 00:54:54 2036 GMT. Since NTP is the current defacto standard for network time this does not seem to be an issue.

### [14.2](#) Specifics



There is no reference anywhere in the NTP specification or implementation to any reference epoch other than 1 January 1900. In short, NTP doesn't know anything about the millennium.

>From the Time Protocol RFC (868):

S: Send the time as a 32 bit binary number.

...

The time is the number of seconds since 00:00 (midnight) 1 January 1900 GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT; this base will serve until the year 2036.

## [15.](#) Name Services

### [15.1](#) Summary

The RFC's which were categorized into this group were the Domain Name System (DNS), it's advanced add on features (Incremental Zone Transfer, etc.).

There have been no year 2000 relayed problems found with the DNS protocols, or common implementations of them.

### [15.2](#) Specifics

One is a common practice of writing serial numbers in zone files as if they represent a date, and using only two digits of the year. That practice cannot survive into the year 2000. This is not a protocol problem, the serial number is simply an integer, and any value is OK, provided it always increases (see [rfc1982](#) for a definition of what that means). In any case, a change from 97abcd (or similar) to 00abcd would be a decrease and so is not permitted. Zone file maintainers have two choices, one easy (though irrational) one would be to continue from 99 to 100 and so on. The other, is simply to switch, at any time between now and when the serial number first needs updating after the year 2000, to use 4 digits to represent the year instead of [2](#). As long as there are no more than 6 digits in the "abcd" part, and this is done sometime before the year 2100, this is always an increase, and therefore always safe. Should any zone files be of the form yyabcdefg (with 7 digits after a 2-digit year) then the procedures of [section 7 of rfc2182](#) should be adopted to convert the serial number to some other value.

The other item of note is related to timestamps in DNS security. Those are represented as 32 bit counts of seconds, based in 1970, and hence have no year 2000 problems. however, they do obviously have a natural end of life, and sometime before that time is reached, the

definitions of those fields need to be corrected, perhaps to allow them to represent the number of seconds elapsed since the base, modulo  $2^{32}$ , which is likely to be adequate for the purposes of DNS security (signatures and keys are unlikely to need to be valid for more than 70 years). In any case, more work is needed in this area in the not too far distant future.

## [16](#) Network Management

### [16.1](#) Summary

The RFC's which were categorized into this group were the Simple Network Management Protocol (SNMP), a large number of Management Information Bases (MIBs) and the Common Management Information Protocol over TCP/IP (CMOT).

Although a few discrepancies have been found and outlined below, none of them should have an impact on interoperability.

### [16.2](#) Specifics

#### [16.2.1](#) Use of GeneralizedTime in CMOT as defined in RFCs 1095 and 1189.

The standards for CMOT specify an unusual use for the GeneralizedTime type. (GeneralizedTime has a four-digit representation of the year.)

If the system generating the PDU does not have the current time, yet does have the time since last boot, then GeneralizedTime can be used to encode this information. The time since last boot will be added to the base time "0001 Jan 1 00:00:00.00" using the Gregorian calendar algorithm.

This is really a "Year 0" problem rather than a Year 2000 problem, and in any case, CMOT is not currently deployed.

#### [16.2.2](#) UTCTime in SNMP Definitions

UTCTime is an ASN.1 type that includes a two-digit representation of the year. There are several options for UTCTime in ASN.1, that vary in precision and in local versus GMT, but these options all have two-digit years. The standards for SNMP definitions specify one particular format:

YYMMDDHHMMZ

The first usage of UTCTime in the standards for SNMP definitions goes all the way back to [RFC 1303](#). It has persisted unchanged up through the current specifications in [RFC 1902](#). The role of UTCTime in SNMP definitions is to record the history of an SNMP MIB module in the

module itself, via two ASN.1 macros:

- o LAST-UPDATED
- o REVISION

Management applications that store and use MIB modules need to be smart about interpreting these UTCTimes, by prepending a "19" or a "20" as appropriate.

### [16.2.3](#) Objects in the Printer MIB ([RFC 1559](#))

There are two objects in the Printer MIB that allow use of a date as an object value with no explicit guidance for formatting the value. The objects are prtInterpreterLangVersion and prtInterpreterVersion. Both are defined with a syntax of OCTET STRING. The descriptions for the objects allow the object value to contain a date, version code or other product specific information to identify the interpreter or language. The descriptions do not include an explicit statement recommending use of a four-digit year when a date is used as the object value.

### [16.2.4](#) Dates in Mobile Network Tracing Records ([RFC 2041](#))

The RFC specifies trace headers and footers with date fields that are character arrays of size 32. While 32 characters certainly provide enough room for a four-digit year, there's no explicit statement that these years must be represented with four digits.

## [17](#) Network News

### [17.1](#) Summary

The RFC's which were categorized into this group were related to the Network News Protocol (NNTP).

There does exist a problem in both NNTP, [RFC 977](#), and the Usenet News Message Format, [RFC 10336](#). They both specify two-digit year format. A working group has been formed to update the network news protocols in general, and addressing this problem is on their list of work items.

### [17.2](#) Specifics

The NNTP transfer protocols defined in [RFC 977](#). Sections [3.7.1](#), the definition of the NEWGROUPS command, and [3.8.1](#), the NEWNEWS command, that dates must be specified in YYMMDD format.

The format for USENET news messages is defined in [RFC 1036](#). The Date line is defined in [section 2.1.2](#) and it is specified in [RFC-822](#)

format. It specifically disallows the standard UNIX ctime(3) format, which would allow for four digit years. [Section 2.2.4](#) on Expires also mandates the same two-digit year format.

## [18.](#) Real Time Services

### [18.1](#) Summary

The RFC's which were categorized into this group were related to IP Multicast, RTP, and Internet Stream Protocol. A Year 2000 problem does occur in the Simple Network Paging Protocol, versions 2 & 3. Both define a HOLDuntil option which uses a YYMMDDHHMMSS+/-GMT field. Version 3 also defines a MStatus command, which is required to store, dates and times as YYMMDDHHMMSS+/-GMT.

### [18.2](#) Specifics

[RFC 2102](#) discusses Multicast support for NIMROD and has no mention of dates or time. [RFC 2090](#) on TFTP Multicast options is also free from any date/time references.

[RFC 2038](#) on RTP MPEG formats has three references to time: a Presentation Time Stamp (PTS), a Decoding Time Stamp (DTS), and a System Clock (SC) reference time. Each RTP packet contains a timestamp derived from the sender 90 kHz clock reference. Each of the header fields are defined in [section 2.1](#), 3, and 3.3 are 32 bit fields. No mention is made of a "zero" start time, so it is presumed that this format will be valid until at least 2038.

Similarly [RFC 2035](#) on the RTP JPEG format defines the same timestamp in [section 3](#). [RFC 2032](#) on RTP H.261 video streams uses a calculated time based on the original frame so once again there is no millennium issue. [RFC 2029](#) on the RTP format for Sun's CellB video encoding mentions the RTP timestamp in [section 2.1](#).

[RFC 2022](#) defines support for multicast over UNI 3.0/3.1 based ATM networks. [Section 5](#). defines a timeout value for connections between one and twenty minutes. [Section 5.1.1](#) discusses several timers that are bound between five and ten seconds, while 5.1.3 requires an inactivity timer, which should also run between one and twenty minutes. Sections [5.1.5](#), [5.1.5.1](#), [5.1.5.2](#), [5.2.2](#), [5.4](#), [5.4.1](#), [5.4.2](#), [5.4.3](#), [6.1.3](#) and [Appendix E](#) all defines numerous timers, none of which have any millennium issues.

[RFC 1890](#) on RTP profiles for audio and video conferences discusses a sampling frequency which has no issues. [RFC 1889](#) on RTP discusses time formats in [section 4](#), as the same 64 bit unsigned integer format that NTP uses. There is a "period" problem, which will occur in the year 2106. [Section 5.1](#) is a more formalized discussion of the

timestamp properties, while [Section 6.3.1](#) discusses a variety of different timers all using the 64 bit field format, or a compressed 32-bit version of the inner octet of bytes. [Section 8.2](#) discusses loop detection and how the various timers are used to determine if looping occurs.

[RFC 1861](#) on Version 3 of the Simple Network Paging Protocol does have a Year 2000 problem. The protocol defines a HOLDuntil command in [section 4.5.6](#) and a MStatus command in [section 4.6.10](#), both of which require dates/times to be stored as YYMMDDHHMMSS+/-GMT. Clearly this format will be invalid after the end of 1999.

[RFC 1821](#) has no date/time references. [RFC 1819](#) on Version 2 of the Internet Stream Protocol defines a HELLO message format in [section 6.1.2](#), which does contain a timer which is updated every millisecond. No year 2000 problems exist with this protocol.

[RFC 1645](#) on Version 2 of the Simple Network Paging Protocol contains the same HOLDuntil field problem as version 3. The definition is contained [section 4.4.6](#).

[RFC 1458](#) on the Requirements of Multicast Protocols discusses a retransmission timer in [section 4.23](#). and a general discussion of timer expiration in [section 5](#), neither of which have any millennium concerns. [RFC 1301](#) on the Multicast Transport Protocol defines a heartbeat interval of time in [section 2.1](#), as well as retention and windows. Formal definitions for each are contained in sections [2.2.7](#), [2.2.8](#) and [2.2.9](#). The heartbeat is a 32 bit unsigned field, while the Window and Retention are both 16 bit unsigned fields. [Section 3.4.2](#) gives examples values for these fields, which indicate no millennium issues.

[RFC 1193](#) on Client Requirements for Real Time Services talks about time in [section 4.4](#), but there are no Year 2000 issues. [RFC 1190](#) have been obsoleted by [RFC 1819](#), but the hello timer issues are similar.

RFCs 1789, 1768, 1703, 1614, 1569, 1568, 1546, 1469, 1453, 1313, 1257, 1197, 1112, 1054, 988, 966, 947, 809, 804, 803, 798, 769, 741, 511, 508, 420, 408 and 251 contain no date or time references.

## [19](#). Routing

### [19.1](#) Summary

The RFC's which were categorized into this group were Routing Information Protocol (RIP), the Open Shortest Path First (OSPF) protocol, Classless InterDomain Routing (CIDR), the Border Gateway Protocol (BGP), and the InterDomain Routing Protocol (IDRP).

After careful examination both BGP and RIP have been found Year 2000

compliant.

There is a small Year 2000 issue in [RFC 1786](#) on the Representation of IP Routing Policies in the ripe-81++ Routing Registry. In Appendices C the "changed" object parameter defines a format of <email-address> YYMMDD, and similarly in [Appendix D](#) "withdrawn" object identifier has the format of YYMMDD. Since these are only identifiers there should be little operational impact. Some application software may need to be modified.

IDPR suffers from the classic Year 2038 problem, by having a timestamp counter which rolls over at that time.

## [19.2](#) Specifics

[RFC 2091](#) on Extensions to RIP to Support Demand Circuits defines three required and one optional timers in [section 6](#). The Database Timer (6.1), the Hold down Timer (6.2), the Retransmission Time (6.3) and the Over-Subscription Timer (6.4) are all counters, which have no millennium issues. [RFC 2081](#) on the applicability of RIPng discusses deletion of routes for a variety of issues, one of which is the garbage-collection timer exceeds 120 seconds. There are no Year 2000 issues. [RFC 2080](#) on RIPng for IPv6, discusses various times in [section 2.6](#), none of which have any millennium problems.

[RFC 1987](#) on Ipsilon's General Switch Management protocol there is a Duration field defined in [section 4](#), which has no relevant problems. [Section 8.2](#) defines the procedure for dealing with timers. [RFC 1953](#) on Ipsilon's Flow Management Specification for IPv4 defines the same procedure in [section 3.2](#), as well as a lifetime field in the Redirect Message ([Section 4.1](#)). There are no millennium issues in either case.

There is a small Year 2000 issue in [RFC 1786](#) on the Representation of IP Routing Policies in the ripe-81++ Routing Registry. In Appendices C the "changed" object parameter defines a format of <email-address> YYMMDD, and similarly in [Appendix D](#) "withdrawn" object identifier has the format of YYMMDD. Since these are only identifiers there should be little operational impact. Some application software may need to be modified.

[RFC 1771](#) defines the Border Gateway Protocol (BGP). BGP does not have knowledge of absolute time, only relative time. There are five timers defined: Hold Timer, ConnectRetry Timer, KeepAlive Timer, MinRouteAdvertisementInterval and MinASOriginationInterval. There are no known issues regarding BGP and the millennium.

In [RFC 1584](#), which defines Multicast Extensions to OSPF, three timers are defined in [section 8.2](#): IGMPPollingInterval, IGMPTimeout, and IGMP polling timer. [Section 8.4](#) defines an age parameter for the local groups database and [section 9.3](#) outlines how to implement that age

parameter. It is not expected that any connections lifetime will be long enough to cause any issues with these timers.

[RFC 1583](#), OSPF, there are two types of timers defined in [section 4.4](#), single-shot timers and interval timers. There are a number of timers defined in [Section 9](#) including: HelloInterval, RouterDeadInterval, InfTransDelay, Hello Timer, Wait Timer and RxmtInterval. [Section 10](#) also defines the Inactivity Timer. No millennium problem exists for any of these timers.

[RFC 1582](#) is an earlier version of [RFC 2091](#). [Section 7](#) documents the same timers as noted above, with the same lack of a millennium issue.

[RFC 1504](#) on Appletalk Update-Based Routing Protocol defines a 10-second period in [Section 3](#), and hence has no relevant issues.

[RFC 1479](#) which specifies IDPR Version 1, defines a timestamp field in [section 1.5.1](#), which is a 32 bit unsigned integer number of seconds since January 1, 1970. The authors recognize the problem of timestamp exhaustion in 2038, but feel that the protocol will not be in use for that period. Sections [1.7](#), [2.1](#), and [4.3.1](#) also discuss the timestamp field. [RFC 1478](#) on the IDPR Architecture, also discusses the same timestamp field in [section 3.3.4](#). [RFC 1477](#) again refers to the IDPR timestamp in [section 4.2](#). Thus IDPR has no Year 2000 issue, but does have a period problem in the year 2038.

[RFC 1075](#) on Distance Vector Multicast Routing Protocol devotes [section 7](#) to time values. None of the timers have any millennium issues. [RFC 1074](#), on the NFSNET backbone SPF IGP defines several hardcoded timer values in [section 5](#).

[RFC 1058](#) on RIP discusses the 30-second timers in [section 3.3](#). There is no millennium issues related to RIP.

[RFC 995](#) on the Requirements for Internet Gateways has extensive discussions of timers in [section 7.1](#) and throughout A.1 and A.2. None of these timers suffer from the millennium problem.

[RFC 911](#) on EGP on Berkeley Unix recommend timer values of 30 and 120 seconds.

[RFC 904](#) which defines the Exterior Gateway Protocol (EGP). There are a number of timers discussed in sections [4.1.1](#) and [4.1.4](#). None of these timers suffer from any relevant problems.

RFCs 2103, 2092, 2073, 2072, 2042, 2008, 1998, 1997, 1992, 1966, 1955, 1940, 1930, 1925, 1923, 1863, 1817, 1812, 1793, 1787, 1774, 1773, 1772, 1765, 1753, 1745, 1723, 1722, 1721, 1716, 1702, 1701, 1668, 1656, 1655, 1654, 1587, 1586, 1585, 1581, 1520, 1519, 1517, 1482, 1476, 1439, 1403, 1397, 1388, 1387, 1383, 1380, 1371, 1370, 1364, 1338, 1322, 1268, 1267, 1266, 1265, 1264, 1254, 1246, 1245, 1222, 1195, 1164, 1163, 1142, 1136, 1133, 1126, 1125, 1124, 1104, 1102, 1092,

1009, 985, 981, 975, 950, 898, 890, 888, 875, and 823 contain no date or time references.

## [20. Security](#)

### [20.1 Summary](#)

The RFC's which were categorized into this group were kerberos authentication protocol, Remote Authentication Dial In User Service (RADIUS), One Time Password System (OTP), Privacy Enhanced Mail (PEM), security extensions to a variety of protocols including (but not limited to) RIPv2, HTTP, MIME, PPP, IP, Telnet and FTP. Encryption and authentication algorithms are also examined.

[RFC 1507](#) on Distributed Authentication Security Services (DASS) discusses time and secure time in an expository manner in Sections [1.2.2](#), [1.4.4](#) and [2.1](#). [Section 3.6](#) defines absolute time as an UTC time with a precision of 1 second, and [Section 4.1](#) discusses ANS.1 encoding of time values. Because of the imprecision of the UTC time definition there could be problems with this protocol.

RFCs 1421-1424 specifies that PEM uses UTC time formats which could have a Millennium issue since the year specification only provides the last two digits of the year.

### [20.2 Specifics](#)

[RFC 2082](#) on RIP-2 MD5 Authentication requires storage of security keys for a specified lifetime in sections [4.1](#) and [4.2](#). There are no millennium issues in this protocol.

[RFC 2078](#) on the GSSAPI Version 2 defines numerous calls that use timers for inputs and outputs. Sections [2.1.1](#), [2.1.3](#), [2.1.4](#), [2.1.5](#), [2.2.1](#), [2.2.2](#), [2.2.5](#) and [2.2.6](#) all use the lifetime\_rec field, which is defined as an integer counter in seconds. There should be no relevant problems with this protocol.

[RFC 2069](#) on Digest Authentication for HTTP, defines a 'date' and a 'last-modified' field in [Section 2.1.2](#). Both are required to be RFC [1123](#) formats which is not subject to millennium issues. [Section 3.2](#) discusses dates and times in the context of thwarting replay attacks, but have no relevant issues.

[RFC 2065](#) on DNS Security extensions first discusses time in section [2.3.3](#). The SIG RDATA format is defined in [Section 4.1](#) discusses "time signed" field and defines it to be a 32 bit unsigned integer number of seconds since January 1, 1970. There will be a period problem in 2038 because of rollover. [Section 4.5](#) on the file representations of SIG RRs specifies the time field is expressed as YYYYMMDDHHMMSS which is clearly Year 2000 compliant.



[RFC 2059](#) on RADIUS account formats defines a "time" attribute, which is optional which is a 32 bit unsigned integer number of seconds since January 1, 1970. Likewise [RFC 2058](#) on RADIUS also defines this optional attribute in the same way. There will be a potential period problem that occurs on 2038.

[RFC 2035](#) on the Simple Public Key GSSAPI Mechanism talks about secure timestamps in the background and overview sections only in an expository manner.

[RFC 1969](#) on the PPP DES Encryption Protocol uses time as an example in [Section 4](#) when discussing how to encrypt the first packet of a stream. It is suggested that the first 32 bits be used for the number of seconds since January 1, 1970. There could thus be a potential operations problem in 2038.

[RFC 1898](#) on the CyberCash Credit Card Protocol provides an example message in [Section 2.7](#) which uses a date field of the form YYYYMMDDHHMM that is clearly Y2K compliant.

[RFC 1510](#), which defines Kerberos Version 5, makes extensive use of times in the security model. There are discussions in the Introduction, as well as Sections [1.2](#), and [3.1.3](#). Kerberos uses ASN.1 definitions to abstract values, and hence defines a base definition for KerberosTime which is a generalized time format in [Section 5.2](#). >From the text: "Example: The only valid format for UTC time 6 minutes, [27](#) seconds after 9 p.m. on 6 November 1985 is 19851106210627Z." A side note is that the MIT reference implementation of the Kerberos, by default set the expiration of tickets to December 31, 1999. This is not protocol related but could have some operational impacts.

[RFC 1509](#) on GSSAPI C-bindings makes a single reference that all counters are in seconds and assigned as 32 bit unsigned integers. Hence GSSAPI mechanisms may have problems in 2038.

[RFC 1507](#) on Distributed Authentication Security Services (DASS) discusses time and secure time in an expository manner in Sections [1.2.2](#), [1.4.4](#) and [2.1](#). [Section 3.6](#) defines absolute time as an UTC time with a precision of 1 second, and [Section 4.1](#) discusses ANS.1 encoding of time values. Because of the imprecision of the UTC time definition there could be problems with this protocol.

[RFC 1424](#) on PEM Part IV defines a self-signed certificate request in [Section 3.1](#). The validity period start and end times are both suggested to be January 1, 1970. [RFC 1422](#) on PEM Part II defines the validity period for a certificate in [Section 3.3.6](#). It is recommended that UTC Time formats are used, and notes the lack of a century so that comparisons between different centuries must be done with care. No suggestions on how to do this are included. Sections [3.5.2](#) also discusses validity period in PEM CRLs. [RFC 1421](#) on PEM Part I

discusses validity periods in an expository way. PEM as a whole could have problems after December 31, 1999 based on its use of UTC Time.

RFCs 1113, 1114, and 1115 specify the original version of PEM and have been obsoleted by 1421, 1422, 1423, & 1424.

RFCs 2104, 2085, 2084, 2057, 2040, 2015, 1984, 1968, 1964, 1961, 1949, 1948, 1938, 1929, 1928, 1858, 1852, 1851, 1829, 1828, 1827, 1826, 1825, 1824, 1760, 1751, 1750, 1704, 1675, 1579, 1535, 1511, 1492, 1457, 1455, 1423, 1416, 1412, 1411, 1409, 1408, 1321, 1320, 1319, 1281, 1244, 1186, 1170, 1156, 1108, 1004, 972, 931, 927, 912, and 644 contain no date or time references.

## [21.](#) Virtual Terminal

### [21.1](#) Summary

The RFC's which were categorized into this group were Telnet and its many extensions, as well as the Secure SHell (SSH) protocol. The X window system was not considered since it is not an IETF protocol. Official acknowledgement by the trustee's of the X window system was given that they will examine the protocol.

Unencrypted Telnet and TN3270 have both been found to be Year 2000 Compliant. The SSH protocols are also Year 2000 compliant.

### [21.2](#) Specifics

[RFC 1013](#) on the X Windows version 11 alpha protocol defines a 32 bit unsigned integer timestamp in [Section 4](#).

RFCs 2066, 1647, 1576, 1572, 1571, 1372, 1282, 1258, 1221, 1205, 1184, 1143, 1116, 1097, 1096, 1091, 1080, 1079, 1073, 1053, 1043, 1041, 1005, 946, 933, 930, 929, 907, 885, 884, 878, 861, 860, 859, 858, 857, 856, 855, 854, 851, 818, 802, 782, 779, 764, 749, 748, 747, 746, 736, 735, 734, 732, 731, 729, 728, 727, 726, 721, 719, 718, 701, 698, 658, 657, 656, 655, 654, 653, 652, 651, 647, 636, 431, 399, 393, 386, 365, 352, 340, 339, 328, 311, 297, 231, and 215 contain no date or time references.

RFCs 703, 702, 688, 679, 669, 659, 600, 596, 595, 587, 563, 562, 560, 559, 513, 495, 470, 466, 461, 447, 435, 377, 364, 318, 296, 216, 206, 205, 177, 158, 139, 137, 110, 97 were unavailable.

## [22.](#) Other

### [22.1](#) Summary

This grouping was a hodge-podge of informational RFCs, April Fool's Jokes, IANA lists, and experimental RFCs. None were found to have any millennium issues.

## [22.2](#) Specifics

RFCs 2123, 2036, 2014, 2000, 1999, 1958, 1935, 1900, 1879, 1855, 1822, 1814, 1810, 1799, 1776, 1718, 1715, 1700, 1699, 1640, 1627, 1610, 1607, 1601, 1600, 1599, 1594, 1580, 1578, 1574, 1550, 1540, 1539, 1527, 1499, 1463, 1462, 1438, 1410, 1402, 1401, 1391, 1367, 1366, 1360, 1359, 1358, 1349, 1340, 1336, 1325, 1324, 1300, 1291, 1287, 1261, 1250, 1249, 1206, 1200, 1199, 1177, 1175, 1174, 1152, 1149, 1140, 1135, 1127, 1118, 1111, 1100, 1099, 1077, 1060, 1039, 1020, 1019, 999, 997, 992, 990, 980, 960, 945, 944, 943, 939, 909, 902, 900, 899, 873, 869, 846, 845, 844, 843, 842, 840, 839, 838, 837, 836, 835, 834, 833, 832, 831, 820, 817, 800, 776, 774, 770, 766, 762, 758, 755, 750, 745, 717, 637, 603, 602, 590, 581, 578, 529, 527, 526, 523, 519, 518, 496, 491, 432, 404, 403, 401, 372, 363, 356, 345, 330, 329, 327, 317, 316, 313, 295, 282, 263, 242, 239, 234, 232, 225, 223, 213, 209, 204, 198, 195, 173, 170, 169, 167, 154, 149, 148, 147, 140, 138, 132, 131, 130, 129, 126, 121, 112, 109, 107, 100, 95, 90, 68, 64, 57, 52, 51, 46, 43, 37, 27, 25, 21, 15, 10, and 9 were examined and none were found to have any date or time references, let alone millennium or Year [2000](#) issues.

## [23](#). Security Considerations

Although this document does consider the implications of various security protocols, there is no need for additional security considerations. The effect of a potential year 2000 problem may cause some security problems, but those problems are more of specific applications rather than protocol deficiencies introduced in this document.

## [24](#). References

Because of the exhaustive nature of this investigation, the reader is referred to the list of published RFC's available from the IETF Secretariat or the RFC Editor, rather than republishing them here.

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## Appendix A: List of RFC's for each Area

The following list contains the RFC's grouped by area that were searched for year 2000 problems.

Each line contains three fields are separated by '::'. The first field is the RFC number, the second field is the type of RFC (S = Standard, DS = Draft Standard, PS = Proposed Standard, E = Experimental, H = Historical, I = Informational, BC = Best Current Practice, '' = No Type), and the third field is the Title.

### [A.1](#) Autoconfiguration

1971:: PS:: IPv6 Stateless Address Autoconfiguration  
1970:: PS:: Neighbor Discovery for IP Version 6 (IPv6)  
1542:: PS:: Clarifications and Extensions for the Bootstrap Protocol  
1541:: PS:: Dynamic Host Configuration Protocol  
1534:: PS:: Interoperation Between DHCP and BOOTP  
1533:: PS:: DHCP Options and BOOTP Vendor Extensions  
1532:: PS:: Clarifications and Extensions for the Bootstrap Protocol  
1531:: PS:: Dynamic Host Configuration Protocol  
1497:: DS:: BOOTP Vendor Information Extensions  
1395:: DS:: BOOTP Vendor Information Extensions  
1084:: DS:: BOOTP vendor information extensions  
1048:: DS:: BOOTP vendor information extensions  
951:: DS:: Bootstrap Protocol  
906:: :: Bootstrap loading using TFTP

### [A.2](#) Directory Services

2120:: E :: Managing the X.500 Root Naming Context  
2079:: PS:: Definition of X.500 Attribute Types and an Object Class to Hold Uniform Resource Identifiers (URIs)  
1943:: I:: Building an X.500 Directory Service in the US  
1914:: PS:: How to interact with a Whois++ mesh  
1913:: PS:: Architecture of the Whois++ Index Service  
1838:: E:: Use of the X.500 Directory to support mapping between X.400 and [RFC 822](#) Addresses  
1837:: E:: Representing Tables and Subtrees in the X.500 Directory  
1836:: E:: Representing the O/R Address hierarchy in the X.500 Directory Information Tree  
1835:: PS:: Architecture of the WHOIS++ service  
1834:: I:: Whois and Network Information Lookup Service Whois++  
1781:: PS:: Using the OSI Directory to Achieve User Friendly Naming  
1714:: I:: Referral Whois Protocol (RWhois)

```

1684:: I:: Introduction to White Pages services based on X.500
1637:: E:: DNS NSAP Resource Records
1632:: I:: A Revised Catalog of Available X.500 Implementations
1617:: I:: Naming and Structuring Guidelines for X.500 Directory Pilots
1609:: E:: Charting Networks in the X.500 Directory
1608:: E:: Representing IP Information in the X.500 Directory
1588:: I:: WHITE PAGES MEETING REPORT
1562:: I:: Naming Guidelines for the AARNet X.500 Directory Service
1491:: I:: A Survey of Advanced Usages of X.500
1488:: PS:: The X.500 String Representation of Standard Attribute
          Syntaxes
1487:: PS:: X.500 Lightweight Directory Access Protocol
1485:: PS:: A String Representation of Distinguished Names
1484:: E:: Using the OSI Directory to achieve User Friendly Naming
1430:: I:: A Strategic Plan for Deploying an Internet X.500
          Directory Service
1400:: I:: Transition and Modernization of the Internet Registration
          Service
1384:: I:: Naming Guidelines for Directory Pilots
1355:: I:: Privacy and Accuracy Issues in Network Information
          Center Databases
1330:: I:: Recommendations for the Phase I Deployment of OSI
          Directory Services (X.500) and OSI Message Handling
          Services (X.400) within the ESnet Community
1309:: I:: Technical Overview of Directory Services Using the
          X.500 Protocol
1308:: I:: Executive Introduction to Directory Services Using the
          X.500 Protocol
1292:: I:: A Catalog of Available X.500 Implementations
1279::  :: X.500 and Domains
1276:: PS:: Replication and Distributed Operations extensions to
          provide an Internet Directory using X.500
1275:: I:: Replication Requirements to provide an Internet Directory
          using X.500
1274:: PS:: The COSINE and Internet X.500 Schema
1255:: I:: A Naming Scheme for c=US
1218::  :: A Naming Scheme for c=US
1202:: I:: Directory Assistance Service
1107::  :: Plan for Internet directory services
 954:: DS:: NICNAME/WHOIS
 953:: H:: Hostname Server
 812::  :: NICNAME/WHOIS
 756::  :: NIC name server - a datagram-based information utility
 752::  :: Universal host table
=====
Disk Sharing
1813:: I:: NFS Version 3 Protocol Specification
1094:: H:: NFS: Network File System Protocol specification
=====
Games and Chat
1459:: E:: Internet Relay Chat Protocol

```

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=====
Information Services & File Transfer
2122:: PS:: VEMMI URL Specification
2070:: PS:: Internationalization of the Hypertext Markup Language
2068:: PS:: Hypertext Transfer Protocol -- HTTP/1.1
2056:: PS:: Uniform Resource Locators for Z39.50
2055:: I:: WebNFS Server Specification
2054:: I:: WebNFS Client Specification
2044:: I:: "UTF-8, a transformation format of Unicode and ISO 10646"
2016:: E:: Uniform Resource Agents (URAs)
1986:: E:: Experiments with a Simple File Transfer Protocol for
        Radio Links using Enhanced Trivial File Transfer
        Protocol (ETFTP)

1980:: I:: A Proposed Extension to HTML: Client-Side Image Maps
1960:: PS:: A String Representation of LDAP Search Filters
1959:: PS:: An LDAP URL Format
1945:: I:: Hypertext Transfer Protocol -- HTTP/1.0
1942:: E:: HTML Tables
1874:: E:: SGML Media Types
1867:: E:: Form-based File Upload in HTML
1866:: PS:: Hypertext Markup Language - 2.0
1865:: I:: EDI Meets the Internet: Frequently Asked Questions
        about Electronic Data Interchange (EDI) on the Internet
1862:: I:: "Report of the IAB Workshop on Internet Information
        Infrastructure, October 12-14, 1994"
1843:: I:: HZ - A Data Format for Exchanging Files of Arbitrarily
        Mixed Chinese and ASCII characters
1842:: I:: ASCII Printable Characters-Based Chinese Character
        Encoding for Internet Messages
1823:: I:: The LDAP Application Program Interface
1815:: I:: Character Sets ISO-10646 and ISO-10646-J-1
1808:: PS:: Relative Uniform Resource Locators
1807:: I:: A Format for Bibliographic Records
1798:: PS:: Connection-less Lightweight Directory Access Protocol
1788:: E:: ICMP Domain Name Messages
1785:: I:: TFTP Option Negotiation Analysis
1784:: PS:: TFTP Timeout Interval and Transfer Size Options
1783:: PS:: TFTP Blocksize Option
1782:: PS:: TFTP Option Extension
1779:: DS:: A String Representation of Distinguished Names
1778:: DS:: The String Representation of Standard Attribute Syntaxes
1777:: DS:: Lightweight Directory Access Protocol
1766:: PS:: Tags for the Identification of Languages
1738:: PS:: Uniform Resource Locators (URL)
1737:: I:: Functional Requirements for Uniform Resource Names
1736:: I:: Functional Requirements for Internet Resource Locators
1729:: I:: Using the Z39.50 Information Retrieval Protocol in the
        Internet Environment
1728:: I:: Resource Transponders
1727:: I:: A Vision of an Integrated Internet Information Service
1639:: E:: FTP Operation Over Big Address Records (FOOBAR)

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1633:: I:: Integrated Services in the Internet Architecture  
1630:: I:: Universal Resource Identifiers in WWW  
1625:: I:: WAIS over Z39.50-1988  
1558:: I:: A String Representation of LDAP Search Filters  
1554:: I:: ISO-2022-JP-2: Multilingual Extension of ISO-2022-JP  
1545:: E:: FTP Operation Over Big Address Records (FOOBAR)  
1530:: I:: Principles of Operation for the TPC.INT Subdomain:  
General Principles and Policy  
1529:: I:: Principles of Operation for the TPC.INT Subdomain:  
Remote Printing -- Administrative Policies  
1528:: E:: Principles of Operation for the TPC.INT Subdomain:  
Remote Printing -- Technical Procedures  
1489:: I:: Registration of a Cyrillic Character Set  
1486:: E:: An Experiment in Remote Printing  
1440:: E:: SIFT/UFT: Sender-Initiated/Unsolicited File Transfer  
1436:: I:: The Internet Gopher Protocol (a distributed document  
search and retrieval protocol)  
1415:: PS:: FTP-FTAM Gateway Specification  
1413:: PS:: Identification Protocol  
1350:: S:: THE TFTP PROTOCOL (REVISION 2)  
1345:: I:: Character Mnemonics & Character Sets  
1312:: E:: Message Send Protocol  
1302:: I:: Building a Network Information Services Infrastructure  
1288:: DS:: The Finger User Information Protocol  
1278:: I:: A String Encoding of Presentation Address  
1241:: E:: A Scheme for an Internet Encapsulation Protocol: Version 1  
1235:: E:: The Coherent File Distribution Protocol  
1196:: DS:: The Finger User Information Protocol  
1194:: DS:: The Finger User Information Protocol  
1179:: I:: Line Printer Daemon Protocol  
1123:: S:: Requirements for Internet hosts - application and support  
1068:: :: Background File Transfer Program BFTP  
1037:: H:: NFILE - a file access protocol  
1003:: :: Issues in defining an equations representation standard  
998:: E:: NETBLT: A bulk data transfer protocol  
978:: :: Voice File Interchange Protocol VFIP  
971:: :: Survey of data representation standards  
969:: :: NETBLT: A bulk data transfer protocol  
965:: :: Format for a graphical communication protocol  
959:: S:: File Transfer Protocol  
949:: :: FTP unique-named store command  
916:: H:: Reliable Asynchronous Transfer Protocol RATP  
913:: H:: Simple File Transfer Protocol  
887:: E:: Resource Location Protocol  
866:: S:: Active users  
865:: S:: Quote of the Day Protocol  
864:: S:: Character Generator Protocol  
863:: S:: Discard Protocol  
862:: S:: Echo Protocol  
797:: :: Format for Bitmap files  
795:: :: Service mappings

783:: DS:: TFTP Protocol revision 2  
775:: :: Directory oriented FTP commands  
765:: :: File Transfer Protocol specification  
751:: :: Survey of FTP mail and MLFL  
743:: :: FTP extension: XRSQ/XRCP  
742:: PS:: NAME/FINGER Protocol  
740:: H:: NETRJS Protocol  
737:: :: FTP extension: XSEN  
725:: :: RJE protocol for a resource sharing network  
722:: :: Thoughts on interactions in distributed services  
712:: :: Distributed Capability Computing System DCCS  
707:: :: High-level framework for network-based resource sharing  
697:: :: CWD command of FTP  
691:: :: One more try on the FTP  
683:: :: FTPSRV - Tenex extension for paged files  
662:: :: Performance improvement in ARPANET file transfers  
from Multics  
640:: :: Revised FTP reply codes  
633:: :: IMP/TIP preventive maintenance schedule  
630:: :: FTP error code usage for more reliable mail service  
624:: :: Comments on the File Transfer Protocol  
622:: :: Scheduling IMP/TIP down time  
614:: :: "Response to [RFC 607](#): ""Comments on the File Transfer  
Protocol"""  
610:: :: Further datalanguage design concepts  
607:: :: Comments on the File Transfer Protocol  
599:: :: Update on NETRJS  
593:: :: Telnet and FTP implementation schedule change  
592:: :: Some thoughts on system design to facilitate resource  
sharing  
589:: :: CCN NETRJS server messages to remote user  
573:: :: Data and file transfer: Some measurement results  
571:: :: Tenex FTP problem  
570:: :: Experimental input mapping between NVT ASCII and UCSB  
On Line System  
553:: :: Draft design for a text/graphics protocol  
551:: :: "[Letter from Feinroth re: NYU, ANL, and LBL entering  
the net, and FTP protocol]"  
549:: :: "Minutes of Network Graphics Group meeting, 15-17  
July 1973"  
543:: :: Network journal submission and delivery  
542:: :: File Transfer Protocol  
535:: :: Comments on File Access Protocol  
532:: :: UCSD-CC Server-FTP facility  
525:: :: MIT-MATHLAB meets UCSB-OLS -an example of resource sharing  
520:: :: Memo to FTP group: Proposal for File Access Protocol  
514:: :: Network make-work  
506:: :: FTP command naming problem  
505:: :: Two solutions to a file transfer access problem  
504:: :: Distributed resources workshop announcement  
501:: :: "Un-muddling ""free file transfer"""



499:: :: Harvard's network RJE  
 493:: :: "E.W., Jr Graphics Protocol"  
 490:: :: Surrogate RJS for UCLA-CCN  
 487:: :: Free file transfer  
 486:: :: Data transfer revisited  
 485:: :: MIX and MIXAL at UCSB  
 480:: :: Host-dependent FTP parameters  
 479:: :: Use of FTP by the NIC Journal  
 478:: :: FTP server-server interaction - II  
 477:: :: Remote Job Service at UCSB  
 472:: :: Illinois' reply to Maxwell's request for graphics  
 information NIC 14925  
 468:: :: FTP data compression  
 467:: :: Proposed change to Host-Host Protocol:Resynchronization  
 of connection status  
 463:: :: FTP comments and response to [RFC 430](#)  
 454:: :: File Transfer Protocol - meeting announcement and a new  
 proposed document  
 451:: :: Tentative proposal for a Unified User Level Protocol  
 448:: :: Print files in FTP  
 446:: :: Proposal to consider a network program resource notebook  
 438:: :: FTP server-server interaction  
 437:: :: Data Reconfiguration Service at UCSB  
 436:: :: Announcement of RJS at UCSB  
 430:: :: Comments on File Transfer Protocol  
 429:: :: Character generator process  
 418:: :: Server file transfer under TSS/360 at NASA Ames  
 414:: :: File Transfer Protocol FTP status and further comments  
 412:: :: User FTP documentation  
 411:: :: New MULTICS network software features  
 410:: :: Removal of the 30-second delay when hosts come up  
 409:: :: Tenex interface to UCSB's Simple-Minded File System  
 407:: H:: Remote Job Entry Protocol  
 406:: :: Scheduled IMP software releases  
 396:: :: Network Graphics Working Group meeting - second iteration  
 387:: :: Some experiences in implementing Network Graphics  
 Protocol Level 0  
 385:: :: Comments on the File Transfer Protocol  
 382:: :: Mathematical software on the ARPA Network  
 374:: :: IMP system announcement  
 373:: :: Arbitrary character sets  
 368:: :: "Comments on ""Proposed Remote Job Entry Protocol"""  
 367:: :: Network host status  
 366:: :: Network host status  
 361:: :: Daemon processes on host 106  
 360:: :: Proposed Remote Job Entry Protocol  
 354:: :: File Transfer Protocol  
 351:: :: Graphics information form for the ARPANET graphics  
 resources notebook  
 342:: :: Network host status  
 338:: :: EBCDIC/ASCII mapping for network RJE

336:: :: Level 0 Graphic Input Protocol  
335:: :: New interface - IMP/360  
332:: :: Network host status  
325:: :: Network Remote Job Entry program - NETRJS  
324:: :: RJE Protocol meeting  
314:: :: Network Graphics Working Group meeting  
310:: :: Another look at Data and File Transfer Protocols  
309:: :: Data and File Transfer workshop announcement  
307:: :: Using network Remote Job Entry  
306:: :: Network host status  
299:: :: Information management system  
298:: :: Network host status  
294:: :: "On the use of ""set data type"" transaction in  
File Transfer Protocol"  
293:: :: Network host status  
292:: :: "E.W., Jr Graphics Protocol: Level 0 only"  
288:: :: Network host status  
287:: :: Status of network hosts  
286:: :: Network library information system  
285:: :: Network graphics  
283:: :: NETRJT: Remote Job Service Protocol for TIPS  
281:: :: Suggested addition to File Transfer Protocol  
268:: :: Graphics facilities information  
267:: :: Network host status  
266:: :: Network host status  
265:: :: "File Transfer Protocol"  
264:: :: "Data Transfer Protocol"  
255:: :: Status of network hosts  
252:: :: Network host status  
250:: :: Some thoughts on file transfer  
238:: :: Comments on DTP and FTP proposals  
217:: :: "Specifications changes for OLS, RJE/RJOR, and SMFS"  
199:: :: Suggestions for a network data-tablet graphics protocol  
192:: :: Some factors which a Network Graphics Protocol must  
consider  
191:: :: Graphics implementation and conceptualization at  
Augmentation Research Center  
189:: :: Interim NETRJS specifications  
184:: :: Proposed graphic display modes  
183:: :: EBCDIC codes and their mapping to ASCII  
181:: :: Modifications to [RFC 177](#)  
174:: :: UCLA - computer science graphics overview  
172:: :: File Transfer Protocol  
163:: :: Data transfer protocols  
141:: :: Comments on [RFC 114](#): A File Transfer Protocol  
134:: :: Network Graphics meeting  
133:: :: File transfer and recovery  
125:: :: Response to [RFC 86](#): Proposal for network standard format  
for a graphics data stream  
114:: :: File Transfer Protocol  
105:: :: Network specifications for Remote Job Entry and Remote

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        Job Output Retrieval at UCSB
98::    :: Logger Protocol proposal
94::    :: Some thoughts on network graphics
88::    :: NETRJS: A third level protocol for Remote JobEntry
86::    :: Proposal for a network standard format for a data stream
        to control graphics display
83::    :: Language-machine for data reconfiguration
=====
Internet & Network Layer
2126:: PS:: ISO Transport Service on top of TCP (ITOT)
2125:: PS:: The PPP Bandwidth Allocation Protocol (BAP) The PPP
        Bandwidth Allocation Control Protocol (BACP)
2118:: I::  Microsoft Point-To-Point Compression (MPPC) Protocol
2114:: I::  Data Link Switching Client Access Protocol
2113:: PS:: IP Router Alert Option
2107:: I::  Ascend Tunnel Management Protocol - ATMP
2106:: I::  Data Link Switching Remote Access Protocol
2105:: I::  Cisco Systems' Tag Switching Architecture Overview
2098:: I::  Toshiba's Router Architecture Extensions for ATM:Overview
2097:: PS:: The PPP NetBIOS Frames Control Protocol (NBFCP)
2075:: I::  IP Echo Host Service
2067:: DS:: IP over HIPPI
2043:: PS:: The PPP SNA Control Protocol (SNACP)
2023:: PS:: IP Version 6 over PPP
2019:: PS:: Transmission of IPv6 Packets Over FDDI
2018:: PS:: TCP Selective Acknowledgment Options
2009:: E::  GPS-Based Addressing and Routing
2005:: PS:: Applicability Statement for IP Mobility Support
2004:: PS:: Minimal Encapsulation within IP
2003:: PS:: IP Encapsulation within IP
2002:: PS:: IP Mobility Support
2001:: PS:: "TCP Slow Start, Congestion Avoidance, Fast Retransmit,
        and Fast Recovery Algorithms"
1994:: DS:: PPP Challenge Handshake Authentication Protocol (CHAP)
1993:: I::  PPP Gandalf FZA Compression Protocol
1990:: DS:: The PPP Multilink Protocol (MP)
1989:: DS:: PPP Link Quality Monitoring
1981:: PS:: Path MTU Discovery for IP version 6
1979:: I::  PPP Deflate Protocol
1978:: I::  PPP Predictor Compression Protocol
1977:: I::  PPP BSD Compression Protocol
1976:: I::  PPP for Data Compression in Data Circuit-Terminating
        Equipment (DCE)
1975:: I::  PPP Magnalink Variable Resource Compression
1974:: I::  PPP Stac LZS Compression Protocol
1973:: PS:: PPP in Frame Relay
1972:: PS:: A Method for the Transmission of IPv6 Packets over
        Ethernet Networks
1967:: I::  PPP LZS-DCP Compression Protocol (LZS-DCP)
1963:: I::  PPP Serial Data Transport Protocol (SDTP)
1962:: PS:: The PPP Compression Control Protocol (CCP)

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1954:: I:: Transmission of Flow Labelled IPv4 on ATM Data Links  
Ipsilon Version 1.0

1946:: I:: Native ATM Support for ST2+

1937:: I:: Local/Remote Forwarding Decision in Switched Data  
Link Subnetworks

1936:: I:: Implementing the Internet Checksum in Hardware

1934:: I:: Ascend's Multilink Protocol Plus (MP+)

1933:: PS:: Transition Mechanisms for IPv6 Hosts and Routers

1932:: I:: IP over ATM: A Framework Document

1931:: I:: Dynamic RARP Extensions and Administrative Support for  
Automatic Network Address Allocation

1926:: I:: An Experimental Encapsulation of IP Datagrams on  
Top of ATM

1924:: I:: A Compact Representation of IPv6 Addresses

1919:: I:: Classical versus Transparent IP Proxies

1918:: BC:: Address Allocation for Private Internets

1917:: BC:: An Appeal to the Internet Community to Return Unused  
IP Networks (Prefixes) to the IANA

1916:: I:: Enterprise Renumbering

1915:: BC:: Variance for The PPP Connection Control Protocol and  
The PPP Encryption Control Protocol

1897:: E:: IPv6 Testing Address Allocation

1888:: E:: OSI NSAPs and IPv6

1887:: I:: An Architecture for IPv6 Unicast Address Allocation

1885:: PS:: Internet Control Message Protocol (ICMPv6) for the Internet Protocol

1884:: PS:: IP Version 6 Addressing Architecture

1883:: PS:: "Internet Protocol, Version 6 (IPv6) Specification"

1881:: I:: IPv6 Address Allocation Management

1878:: I:: Variable Length Subnet Table For IPv4

1877:: I:: PPP Internet Protocol Control Protocol Extensions for  
Name Server Addresses

1868:: E:: ARP Extension - UNARP

1860:: I:: Variable Length Subnet Table For IPv4

1859:: I:: ISO Transport Class 2 Non-use of Explicit Flow Control  
over TCP [RFC1006](#) extension

1853:: I:: IP in IP Tunneling

1841:: I:: PPP Network Control Protocol for LAN Extension

1833:: PS:: Binding Protocols for ONC RPC Version 2

1832:: PS:: XDR

1831:: PS:: RPC

1809:: I:: Using the Flow Label Field in IPv6

1795:: I:: "Data Link Switching

1791:: E:: TCP And UDP Over IPX Networks With Fixed Path MTU

1770:: I:: IPv4 Option for Sender Directed Multi-Destination Delivery

1764:: PS:: The PPP XNS IDP Control Protocol (XNSCP)

1763:: PS:: The PPP Banyan Vines Control Protocol (BVCP)

1762:: DS:: The PPP DECnet Phase IV Control Protocol (DNCP)

1761:: I:: Snoop Version 2 Packet Capture File Format

1756:: E:: REMOTE WRITE PROTOCOL - VERSION 1.0

1755:: PS:: ATM Signaling Support for IP over ATM

1754:: I:: IP over ATM Working Group's Recommendations for the

ATM Forum's Multiprotocol BOF Version 1

1752:: PS:: The Recommendation for the IP Next Generation Protocol

1744:: I:: Observations on the Management of the Internet Address Space

1735:: E:: NBMA Address Resolution Protocol (NARP)

1726:: I:: Technical Criteria for Choosing IP

1719:: I:: A Direction for IPng

1717:: PS:: The PPP Multilink Protocol (MP)

1710:: I:: Simple Internet Protocol Plus White Paper

1707:: I:: CATNIP

1705:: I:: Six Virtual Inches to the Left

1698:: I:: Octet Sequences for Upper-Layer OSI to Support Basic Communications Applications

1693:: E:: An Extension to TCP

1692:: PS:: Transport Multiplexing Protocol (TMux)

1688:: I:: IPng Mobility Considerations

1687:: I:: A Large Corporate User's View of IPng

1686:: I:: IPng Requirements

1683:: I:: Multiprotocol Interoperability In IPng

1682:: I:: IPng BSD Host Implementation Analysis

1681:: I:: On Many Addresses per Host

1680:: I:: IPng Support for ATM Services

1679:: I:: HPN Working Group Input to the IPng Requirements Solicitation

1678:: I:: IPng Requirements of Large Corporate Networks

1677:: I:: Tactical Radio Frequency Communication Requirements for IPng

1676:: I:: INFN Requirements for an IPng

1674:: I:: A Cellular Industry View of IPng

1673:: I:: Electric Power Research Institute Comments on IPng

1672:: I:: Accounting Requirements for IPng

1671:: I:: IPng White Paper on Transition and Other Considerations

1670:: I:: Input to IPng Engineering Considerations

1669:: I:: Market Viability as a IPng Criteria

1667:: I:: Modeling and Simulation Requirements for IPng

1663:: PS:: PPP Reliable Transmission

1662:: S:: PPP in HDLC-like Framing

1661:: S:: The Point-to-Point Protocol (PPP)

1644:: E:: T/TCP -- TCP Extensions for Transactions Functional Specification

1638:: PS:: PPP Bridging Control Protocol (BCP)

1634:: I:: Novell IPX Over Various WAN Media (IPXWAN)

1631:: I:: The IP Network Address Translator (Nat)

1629:: DS:: Guidelines for OSI NSAP Allocation in the Internet

1626:: PS:: Default IP MTU for use over ATM AAL5

1624:: I:: Computation of the Internet Checksum via Incremental Update

1622:: I:: Pip Header Processing

1621:: I:: Pip Near-term Architecture

1620:: I:: Internet Architecture Extensions for Shared Media

1619:: PS:: PPP over SONET/SDH

1618:: PS:: PPP over ISDN  
1613:: I:: cisco Systems X.25 over TCP (XOT)  
1605:: I:: SONET to Sonnet Translation  
1604:: PS:: Definitions of Managed Objects for Frame Relay Service  
1598:: PS:: PPP in X.25  
1590:: I:: Media Type Registration Procedure  
1577:: PS:: Classical IP and ARP over ATM  
1575:: DS:: An Echo Function for CLNP (ISO 8473)  
1570:: PS:: PPP LCP Extensions  
1561:: E:: Use of ISO CLNP in TUBA Environments  
1560:: I:: The MultiProtocol Internet  
1553:: PS:: Compressing IPX Headers Over WAN Media (CIPX)  
1552:: PS:: The PPP Internetwork Packet Exchange Control  
Protocol (IPXCP)  
1551:: I:: Novell IPX Over Various WAN Media (IPXWAN)  
1549:: DS:: PPP in HDLC Framing  
1548:: DS:: The Point-to-Point Protocol (PPP)  
1547:: I:: Requirements for an Internet Standard  
Point-to-Point Protocol  
1538:: I:: Advanced SNA/IP  
1526:: I:: Assignment of System Identifiers for TUBA/CLNP Hosts  
1518:: PS:: An Architecture for IP Address Allocation with CIDR  
1498:: I:: On the Naming and Binding of Network Destinations  
1490:: DS:: Multiprotocol Interconnect over Frame Relay  
1483:: PS:: Multiprotocol Encapsulation over ATM Adaptation Layer 5  
1475:: E:: TP/IX  
1466:: I:: Guidelines for Management of IP Address Space  
1454:: I:: Comparison of Proposals for Next Version of IP  
1435:: I:: IESG Advice from Experience with Path MTU Discovery  
1434:: I:: Data Link Switching  
1433:: E:: Directed ARP  
1393:: E:: Traceroute Using an IP Option  
1390:: S:: Transmission of IP and ARP over FDDI Networks  
1385:: I:: EIP  
1379:: I:: Extending TCP for Transactions -- Concepts  
1378:: PS:: The PPP AppleTalk Control Protocol (ATCP)  
1377:: PS:: The PPP OSI Network Layer Control Protocol (OSINLCP)  
1376:: PS:: The PPP DECnet Phase IV Control Protocol (DNCP)  
1375:: I:: Suggestion for New Classes of IP Addresses  
1374:: PS:: IP and ARP on HIPPI  
1365:: I:: An IP Address Extension Proposal  
1363:: E:: A Proposed Flow Specification  
1362:: I:: Novell IPX Over Various WAN Media (IPXWAN)  
1356:: PS:: Multiprotocol Interconnect on X.25 and ISDN in the  
Packet Mode  
1347:: I:: "TCP and UDP with Bigger Addresses (TUBA), A Simple  
Proposal for Internet Addressing and Routing"  
1337:: I:: TIME-WAIT Assassination Hazards in TCP  
1335:: :: A Two-Tier Address Structure for the Internet  
1334:: PS:: PPP Authentication Protocols  
1333:: PS:: PPP Link Quality Monitoring

1332:: PS:: The PPP Internet Protocol Control Protocol (IPCP)  
 1331:: PS:: The Point-to-Point Protocol (PPP) for the Transmission  
 of Multi-protocol Datagrams over Point-to-Point Links  
 1329:: I:: Thoughts on Address Resolution for Dual MAC FDDI Networks  
 1326:: I:: Mutual Encapsulation Considered Dangerous  
 1323:: PS:: TCP Extensions for High Performance  
 1314:: PS:: A File Format for the Exchange of Images in the Internet  
 1307:: E:: Dynamically Switched Link Control Protocol  
 1306:: I:: Experiences Supporting By-Request Circuit-Switched T3  
 Networks  
 1294:: PS:: Multiprotocol Interconnect over Frame Relay  
 1293:: PS:: Inverse Address Resolution Protocol  
 1277:: PS:: Encoding Network Addresses to Support Operation Over  
 Non-OSI Lower Layers  
 1263:: I:: TCP Extensions Considered Harmful  
 1256:: PS:: ICMP Router Discovery Messages  
 1240:: PS:: OSI Connectionless Transport Services on top of UDP  
 1237:: PS:: Guidelines for OSI NSAP Allocation in the Internet  
 1236:: :: IP to X.121 Address Mapping for DDN  
 1234:: PS:: Tunneling IPX Traffic through IP Networks  
 1226:: E:: Internet Protocol Encapsulation of AX.25 Frames  
 1223:: :: OSI CLNS and LLC1 Protocols on Network Systems HYPERchannel  
 1220:: PS:: Point-to-Point Protocol Extensions for Bridging  
 1219:: :: On the Assignment of Subnet Numbers  
 1210:: :: "Network and Infrastructure User Requirements for  
 Transatlantic Research Collaboration - Brussels,  
 July 16-18, and Washington July 24-25, 1990"  
 1209:: DS:: The Transmission of IP Datagrams over the SMDS Service  
 1201:: H:: Transmitting IP Traffic over ARCNET Networks  
 1191:: DS:: Path MTU Discovery  
 1188:: DS:: A Proposed Standard for the Transmission of IP Datagrams  
 over FDDI Networks  
 1185:: E:: TCP Extension for High-Speed Paths  
 1172:: PS:: The Point-to-Point Protocol (PPP) Initial Configuration  
 Options  
 1171:: DS:: The Point-to-Point Protocol for the Transmission of  
 Multi-Protocol Datagrams Over Point-to-Point Links  
 1166:: :: Internet Numbers  
 1162:: :: Connectionless Network Protocol (ISO 8473) and End  
 System to Intermediate System (ISO 9542) Management  
 Information Base  
 1151:: E:: Version 2 of the Reliable Data Protocol (RDP)  
 1146:: E:: TCP Alternate Checksum Options  
 1145:: E:: TCP Alternate Checksum Options  
 1144:: PS:: Compressing TCP/IP headers for low-speed serial links  
 1141:: :: Incremental Updating of the Internet Checksum  
 1139:: PS:: Echo function for ISO 8473  
 1134:: PS:: Point-to-Point Protocol  
 1132:: S:: Standard for the transmission of 802.2 packets over  
 IPX networks  
 1122:: S:: Requirements for Internet hosts - communication layers

1110:: :: Problem with the TCP big window option  
 1106:: :: TCP big window and NAK options  
 1103:: PS:: Proposed standard for the transmission of IP datagrams over FDDI Networks  
 1088:: S:: Standard for the transmission of IP datagrams over NetBIOS networks  
 1086:: :: ISO-TP0 bridge between TCP and X.25  
 1085:: :: ISO presentation services on top of TCP/IP based internets  
 1078:: :: TCP port service Multiplexer TCPMUX  
 1072:: E:: TCP extensions for long-delay paths  
 1071:: :: Computing the Internet checksum  
 1070:: :: Use of the Internet as a subnetwork for experimentation with the OSI network layer  
 1069:: :: Guidelines for the use of Internet-IP addresses in the ISO Connectionless-Mode Network Protocol  
 1063:: :: IP MTU Discovery options  
 1062:: :: Internet numbers  
 1057:: I:: RPC  
 1055:: S:: Nonstandard for transmission of IP datagrams over serial lines  
 1051:: S:: Standard for the transmission of IP datagrams and ARP packets over ARCNET networks  
 1050:: H:: RPC  
 1046:: :: Queuing algorithm to provide type-of-service for IP links  
 1045:: E:: VMTP  
 1044:: S:: Internet Protocol on Network System's HYPERchannel  
 1042:: S:: Standard for the transmission of IP datagrams over IEEE 802 networks  
 1030:: :: On testing the NETBLT Protocol over diverse networks  
 1029:: :: More fault tolerant approach to address resolution for a Multi-LAN system of Ethernets  
 1027:: :: Using ARP to implement transparent subnet gateways  
 1025:: :: TCP and IP bake off  
 1016:: :: Something a host could do with source quench  
 1008:: :: Implementation guide for the ISO Transport Protocol  
 1007:: :: Military supplement to the ISO Transport Protocol  
 1006:: S:: ISO transport services on top of the TCP  
 1002:: S:: Protocol standard for a NetBIOS service on a TCP/UDP transport  
 1001:: S:: Protocol standard for a NetBIOS service on a TCP/UDP transport  
 994:: :: "Final text of DIS 8473, Protocol for Providing the Connectionless-mode Network Service"  
 986:: :: Guidelines for the use of Internet-IP addresses in the ISO Connectionless-Mode Network Protocol [Working draft]  
 983:: :: ISO transport arrives on top of the TCP  
 982:: :: Guidelines for the specification of the structure of the Domain Specific Part DSP of the ISO standard NSAP address  
 970:: :: On packet switches with infinite storage  
 964:: :: Some problems with the specification of the Military Standard Transmission Control Protocol



963:: :: Some problems with the specification of the Military  
 Standard Internet Protocol  
 962:: :: TCP-4 prime  
 955:: :: Towards a transport service for transaction processing  
 applications  
 948:: :: Two methods for the transmission of IP datagrams over  
 IEEE 802.3 networks  
 942:: :: Transport protocols for Department of Defense data  
 networks  
 941:: :: Addendum to the networkservice definition covering  
 network layer addressing  
 940:: :: Toward an Internet standard scheme for subnetting  
 936:: :: Another Internet subnet addressing scheme  
 935:: :: Reliable link layer protocols  
 932:: :: Subnetwork addressing scheme  
 926:: :: Protocol for providing the connectionless mode network  
 services  
 925:: :: Multi-LAN address resolution  
 924:: :: Official ARPA-Internet protocols for connecting  
 personal computers to the Internet  
 922:: S:: Broadcasting Internet datagrams in the presence of subnets  
 919:: S:: Broadcasting Internet datagrams  
 917:: :: Internet subnets  
 914:: H:: Thinwire protocol for connecting personal computers to  
 the Internet  
 905:: :: ISO Transport Protocol specification ISO DP 8073  
 903:: S:: Reverse Address Resolution Protocol  
 896:: :: Congestion control in IP/TCP internetworks  
 895:: S:: Standard for the transmission of IP datagrams over  
 experimental Ethernet networks  
 894:: S:: Standard for the transmission of IP datagrams over  
 Ethernet networks  
 893:: :: Trailer encapsulations  
 892:: :: ISO Transport Protocol specification [Draft]  
 891:: S:: DCN local-network protocols  
 889:: :: Internet delay experiments  
 879:: :: TCP maximum segment size and related topics  
 877:: S:: Standard for the transmission of IP datagrams over  
 public data networks  
 874:: :: Critique of X.25  
 872:: :: TCP-on-a-LAN  
 871:: :: Perspective on the ARPANET reference model  
 848:: :: "Who provides the "little" TCP services?"  
 829:: :: Packet satellite technology reference sources  
 826:: S:: Ethernet Address Resolution Protocol  
 824:: :: CRONUS Virtual Local Network  
 815:: :: IP datagram reassembly algorithms  
 814:: :: "Name, addresses, ports, and routes"  
 813:: :: Window and acknowledgement strategy in TCP  
 801:: :: NCP/TCP transition plan  
 793:: S:: Transmission Control Protocol

792:: S:: Internet Control Message Protocol  
 791:: S:: Internet Protocol  
 789:: :: Vulnerabilities of network control protocols  
 787:: :: Connectionless data transmission survey/tutorial  
 781:: :: Specification of the Internet Protocol IP timestamp option  
 777:: :: Internet Control Message Protocol  
 768:: S:: User Datagram Protocol  
 761:: :: DOD Standard Transmission Control Protocol  
 760:: :: DoD standard Internet Protocol  
 759:: H:: Internet Message Protocol  
 730:: :: Extensible field addressing  
 704:: :: IMP/Host and Host/IMP Protocol change  
 696:: :: Comments on the IMP/Host and Host/IMP Protocol changes  
 695:: :: Official change in Host-Host Protocol  
 692:: :: Comments on IMP/Host Protocol changes RFCs 687 and 690  
 690:: :: Comments on the proposed Host/IMP Protocol changes  
 689:: :: Tenex NCP finite state machine for connections  
 687:: :: IMP/Host and Host/IMP Protocol changes  
 685:: :: Response time in cross network debugging  
 680:: :: Message Transmission Protocol  
 675:: :: Specification of Internet Transmission Control Program  
 674:: :: Procedure call documents - version 2  
 660:: :: Some changes to the IMP and the IMP/Host interface  
 632:: :: Throughput degradations for single packet messages  
 626:: :: On a possible lockup condition in IMP subnet due to  
 message sequencing  
 613:: :: Network connectivity  
 611:: :: Two changes to the IMP/Host Protocol to improve  
 user/network communications  
 594:: :: Speedup of Host-IMP interface  
 591:: :: Addition to the Very Distant Host specifications  
 576:: :: Proposal for modifying linking  
 550:: :: NIC NCP experiment  
 548:: :: Hosts using the IMP Going Down message  
 528:: :: Software checksumming in the IMP and network reliability  
 521:: :: Restricted use of IMP DDT  
 489:: :: Comment on resynchronization of connection status proposal  
 488:: :: NLS classes at network sites  
 476:: :: IMP/TIP memory retrofit schedule rev. 2  
 473:: :: MIX and MIXAL?  
 460:: :: NCP survey  
 459:: :: Network questionnaires  
 450:: :: MULTICS sampling timeout change  
 449:: :: Current flow-control scheme for IMPSYS  
 445:: :: IMP/TIP preventive maintenance schedule  
 442:: :: Current flow-control scheme for IMPSYS  
 434:: :: IMP/TIP memory retrofit schedule  
 426:: :: Reconnection Protocol  
 417:: :: Link usage violation  
 398:: :: ICP sockets  
 395:: :: Switch settings on IMPs and TIPs

394:: :: Two proposed changes to the IMP-Host Protocol  
 359:: :: Status of the release of the new IMP System  
 357:: :: Echoing strategy for satellite links  
 348:: :: Discard process  
 347:: :: Echo process  
 346:: :: Satellite considerations  
 343:: :: IMP System change notification  
 312:: :: Proposed change in IMP-to-Host Protocol  
 301:: :: "BBN IMP #5 and NCC schedule March 4, 1971"  
 300:: :: ARPA Network mailing lists  
 271:: :: IMP System change notifications  
 241:: :: Connecting computers to MLC ports  
 210:: :: Improvement of flow control  
 203:: :: Achieving reliable communication  
 202:: :: Possible deadlock in ICP  
 197:: :: Initial Connection Protocol - Reviewed  
 190:: :: DEC PDP-10-IMLAC communications system  
 178:: :: Network graphic attention handling  
 176:: :: "Comments on ""Byte size for connections"""  
 175:: :: "Comments on ""Socket conventions reconsidered"""  
 166:: :: Data Reconfiguration Service  
 165:: :: Proffered official Initial Connection Protocol  
 161:: :: Solution to the race condition in the ICP  
 151:: :: "Comments on a proffered official ICP  
 150:: :: Use of IPC facilities  
 146:: :: Views on issues relevant to data sharing on computer  
       networks  
 145:: :: Initial Connection Protocol control commands  
 143:: :: Regarding proffered official ICP  
 142:: :: Time-out mechanism in the Host-Host Protocol  
 128:: :: Bytes  
 127:: :: Comments on [RFC 123](#)  
 123:: :: Proffered official ICP  
 122:: :: Network specifications for UCSB's Simple-Minded File  
       System  
 93:: :: Initial Connection Protocol  
 91:: :: Proposed User-User Protocol  
 80:: :: Protocols and data formats  
 79:: :: Logger Protocol error  
 70:: :: Note on padding  
 67:: :: Proposed change to Host/IMP spec to eliminate marking  
 65:: :: Comments on Host/Host Protocol document #1  
 62:: :: Systems for interprocess communication in a resource  
       sharing computer network  
 60:: :: Simplified NCP Protocol  
 59:: :: Flow control - fixed versus demand allocation  
 56:: :: Third level protocol  
 55:: :: Prototypical implementation of the NCP  
 54:: :: Official protocol proffering  
 53:: :: Official protocol mechanism  
 41:: :: IMP-IMP teletype communication

38:: :: Comments on network protocol from NWG/RFC #36  
 33:: :: New Host-Host Protocol  
 23:: :: Transmission of multiple control messages  
 22:: :: Host-host control message formats  
 20:: :: ASCII format for network interchange  
 19:: :: Two protocol suggestions to reduce congestion at  
       swap bound nodes  
 17:: :: Some questions re  
 12:: :: IMP-Host interface flow diagrams

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## Mail

2112:: PS:: The MIME Multipart/Related Content-type  
 2111:: PS:: Content-ID and Message-ID Uniform Resource Locators  
 2110:: PS:: "MIME E-mail Encapsulation of Aggregate Documents, such  
       as HTML (MHTML)"  
 2109:: PS:: HTTP State Management Mechanism  
 2095:: PS:: IMAP/POP AUTHorize Extension for Simple Challenge/Response  
 2088:: PS:: IMAP4 non-synchronizing literals  
 2087:: PS:: IMAP4 QUOTA extension  
 2086:: PS:: IMAP4 ACL extension  
 2077:: PS:: The Model Primary Content Type for Multipurpose  
       Internet Mail Extensions  
 2076:: I:: Common Internet Message Headers  
 2062:: I:: Internet Message Access Protocol - Obsolete Syntax  
 2061:: I:: IMAP4 COMPATIBILITY WITH IMAP2BIS  
 2060:: PS:: INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1  
 2049:: DS:: Multipurpose Internet Mail Extensions (MIME) Part Five  
 2048:: BC:: Multipurpose Internet Mail Extensions (MIME) Part Four  
 2047:: DS:: MIME (Multipurpose Internet Mail Extensions) Part Three  
 2046:: DS:: Multipurpose Internet Mail Extensions (MIME) Part Two  
 2045:: DS:: Multipurpose Internet Mail Extensions (MIME) Part One  
 2034:: PS:: SMTP Service Extension for Returning Enhanced Error Codes  
 2033:: I:: Local Mail Transfer Protocol  
 2017:: PS:: Definition of the URL MIME External-Body Access-Type  
 1991:: I:: PGP Message Exchange Formats  
 1985:: PS:: SMTP Service Extension for Remote Message Queue Starting  
 1957:: I:: Some Observations on Implementations of the Post Office  
       Protocol (POP3)  
 1947:: I:: Greek Character Encoding for Electronic Mail Messages  
 1939:: S:: Post Office Protocol - Version 3  
 1927:: I:: Suggested Additional MIME Types for Associating Documents  
 1922:: I:: Chinese Character Encoding for Internet Messages  
 1911:: E:: Voice Profile for Internet Mail  
 1896:: I:: The text/enriched MIME Content-type  
 1895:: I:: The Application/CALS-1840 Content-type  
 1894:: PS:: An Extensible Message Format for Delivery Status  
       Notifications  
 1893:: PS:: Enhanced Mail System Status Codes  
 1892:: PS:: The Multipart/Report Content Type for the Reporting  
       of Mail System Administrative Messages  
 1891:: PS:: SMTP Service Extension for Delivery Status Notifications

1873:: E:: Message/External-Body Content-ID Access Type  
1872:: E:: The MIME Multipart/Related Content-type  
1870:: S:: SMTP Service Extension for Message Size Declaration  
1869:: S:: SMTP Service Extensions  
1864:: DS:: The Content-MD5 Header Field  
1854:: PS:: SMTP Service Extension for Command Pipelining  
1848:: PS:: MIME Object Security Services  
1847:: PS:: Security Multiparts for MIME  
1846:: E:: SMTP 521 reply code  
1845:: E:: SMTP Service Extension for Checkpoint/Restart  
1844:: I:: Multimedia E-mail (MIME) User Agent checklist  
1830:: E:: SMTP Service Extensions for Transmission of Large  
and Binary MIME Messages  
1820:: I:: Multimedia E-mail (MIME) User Agent Checklist  
1806:: E:: Communicating Presentation Information in Internet  
Messages  
1804:: E:: Schema Publishing in X.500 Directory  
1803:: I:: Recommendations for an X.500 Production Directory Service  
1801:: E:: MHS use of the X.500 Directory to support MHS Routing  
1767:: PS:: MIME Encapsulation of EDI Objects  
1741:: I:: MIME Content Type for BinHex Encoded Files  
1740:: PS:: MIME Encapsulation of Macintosh files - MacMIME  
1734:: PS:: POP3 AUTHentication command  
1733:: I:: DISTRIBUTED ELECTRONIC MAIL MODELS IN IMAP4  
1732:: I:: IMAP4 COMPATIBILITY WITH IMAP2 AND IMAP2BIS  
1731:: PS:: IMAP4 Authentication mechanisms  
1730:: PS:: INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4  
1725:: DS:: Post Office Protocol - Version 3  
1711:: I:: Classifications in E-mail Routing  
1685:: I:: Writing X.400 O/R Names  
1653:: DS:: SMTP Service Extension for Message Size Declaration  
1652:: DS:: SMTP Service Extension for 8bit-MIMEtransport  
1651:: DS:: SMTP Service Extensions  
1649:: I:: Operational Requirements for X.400 Management Domains  
in the GO-MHS Community  
1648:: PS:: Postmaster Convention for X.400 Operations  
1642:: E:: UTF-7 - A Mail-Safe Transformation Format of Unicode  
1641:: E:: Using Unicode with MIME  
1616:: I:: X.400(1988) for the Academic and Research Community  
in Europe  
1615:: I:: Migrating from X.400(84) to X.400(88)  
1563:: I:: The text/enriched MIME Content-type  
1557:: I:: Korean Character Encoding for Internet Messages  
1556:: I:: Handling of Bi-directional Texts in MIME  
1555:: I:: Hebrew Character Encoding for Internet Messages  
1544:: PS:: The Content-MD5 Header Field  
1524:: I:: A User Agent Configuration Mechanism For Multimedia  
Mail Format Information  
1523:: I:: The text/enriched MIME Content-type  
1522:: DS:: MIME (Multipurpose Internet Mail Extensions) Part Two  
1521:: DS:: MIME (Multipurpose Internet Mail Extensions) Part One

1506:: I:: A tutorial on gatewaying between X.400 and Internet mail  
 1505:: E:: Encoding Header Field for Internet Messages  
 1502:: PS:: X.400 Use of Extended Character Sets  
 1496:: PS:: Rules for downgrading messages from X.400/88 to X.400/84  
 when MIME content-types are present in the messages  
 1495:: PS:: Mapping between X.400 and [RFC-822](#) Message Bodies  
 1494:: PS:: Equivalences between 1988 X.400 and [RFC-822](#) Message Bodies  
 1468:: I:: Japanese Character Encoding for Internet Messages  
 1465:: E:: Routing coordination for X.400 MHS services within a  
 multi protocol / multi network environment Table Format  
 V3 for static routing  
 1460:: DS:: Post Office Protocol - Version 3  
 1456:: I:: Conventions for Encoding the Vietnamese Language VISCII  
 1437:: I:: The Extension of MIME Content-Types to a New Medium  
 1429:: I:: Listserv Distribute Protocol  
 1428:: I:: Transition of Internet Mail from Just-Send-8 to  
 8Bit-SMTP/MIME  
 1427:: PS:: SMTP Service Extension for Message Size Declaration  
 1426:: PS:: SMTP Service Extension for 8bit-MIMEtransport  
 1425:: PS:: SMTP Service Extensions  
 1405:: E:: Mapping between X.400(1984/1988) and Mail-11 (DECnet mail)  
 1357:: I:: A Format for E-mailing Bibliographic Records  
 1344:: I:: Implications of MIME for Internet Mail Gateways  
 1343:: I:: A User Agent Configuration Mechanism For Multimedia  
 Mail Format Information  
 1342:: PS:: Representation of Non-ASCII Text in Internet Message  
 Headers  
 1341:: PS:: MIME (Multipurpose Internet Mail Extensions)  
 1339:: E:: Remote Mail Checking Protocol  
 1328:: PS:: X.400 1988 to 1984 downgrading  
 1327:: PS:: Mapping between X.400(1988) / ISO 10021 and [RFC 822](#)  
 1225:: DS:: Post Office Protocol - Version 3  
 1211:: :: Problems with the Maintenance of Large Mailing Lists  
 1204:: E:: Message Posting Protocol (MPP)  
 1203:: H:: Interactive Mail Access Protocol - Version 3  
 1176:: E:: Interactive Mail Access Protocol - Version 2  
 1168:: :: Intermail and Commercial Mail Relay Services  
 1159:: E:: Message Send Protocol  
 1154:: E:: Encoding Header Field for Internet Messages  
 1153:: E:: Digest Message Format  
 1148:: E:: Mapping between X.400 (1988) / ISO 10021 and [RFC 822](#)  
 1138:: I:: Mapping between X.400(1988) / ISO 10021 and [RFC 822](#)  
 1137:: E:: Mapping between full [RFC 822](#) and [RFC 822](#) with restricted  
 encoding  
 1090:: :: SMTP on X.25  
 1082:: H:: Post Office Protocol - version 3  
 1081:: PS:: Post Office Protocol - version 3  
 1064:: H:: Interactive Mail Access Protocol  
 1056:: I:: PCMAIL  
 1049:: S:: Content-type header field for Internet messages  
 1047:: :: Duplicate messages and SMTP

1026:: PS:: Addendum to [RFC 987](#)  
993:: :: PCMAIL  
987:: PS:: Mapping between X.400 and [RFC 822](#)  
984:: :: PCMAIL  
976:: :: UUCP mail interchange format standard  
974:: S:: Mail routing and the domain system  
937:: H:: Post Office Protocol - version 2  
934:: :: Proposed standard for message encapsulation  
918:: :: Post Office Protocol  
915:: :: Network mail path service  
910:: :: Multimedia mail meeting notes  
886:: :: Proposed standard for message header munging  
876:: :: Survey of SMTP implementations  
841:: :: Specification for message format for Computer Based  
Message Systems  
822:: S:: Standard for the format of ARPA Internet text messages  
821:: S:: Simple Mail Transfer Protocol  
808:: :: Summary of computer mail services meeting held at BBN  
on 10 January 1979  
807:: :: Multimedia mail meeting notes  
805:: :: Computer mail meeting notes  
788:: :: Simple Mail Transfer Protocol  
786:: :: Mail Transfer Protocol  
785:: :: Mail Transfer Protocol  
784:: :: Mail Transfer Protocol  
780:: :: Mail Transfer Protocol  
773:: :: Comments on NCP/TCP mail service transition strategy  
772:: :: Mail Transfer Protocol  
771:: :: Mail transition plan  
767:: :: Structured format for transmission of multi-media  
documents  
763:: :: Role mailboxes  
757:: :: "Suggested solution to the naming, addressing, and delivery problem"  
754:: :: Out-of-net host addresses for mail  
753:: :: Internet Message Protocol  
744:: :: MARS - a Message Archiving and Retrieval Service  
733:: :: Standard for the format of ARPA network text messages  
724:: :: Proposed official standard for the format of ARPA  
Network messages  
720:: :: Address specification syntax for network mail  
714:: :: Host-Host Protocol for an ARPANET-type network  
713:: :: MSDTP-Message Services Data Transmission Protocol  
706:: :: On the junk mail problem  
577:: :: Mail priority  
574:: :: Announcement of a mail facility at UCSB  
561:: :: Standardizing network mail headers  
555:: :: Responses to critiques of the proposed mail protocol  
539:: :: Thoughts on the mail protocol proposed in [RFC524](#)  
534:: :: Lost message detection  
533:: :: Message-ID numbers  
524:: :: Proposed Mail Protocol

516:: :: Lost message detection  
 512:: :: More on lost message detection  
 510:: :: Request for network mailbox addresses  
 498:: :: On mail service to CCN  
 475:: :: FTP and network mail system  
 469:: :: Network mail meeting summary  
 458:: :: Mail retrieval via FTP  
 453:: :: Meeting announcement to discuss a network mail system  
 333:: :: Proposed experiment with a Message Switching Protocol  
 278:: :: Revision of theMail Box Protocol  
 224:: :: Comments on Mailbox Protocol  
 221:: :: Mail Box Protocol  
 196:: :: Mail Box Protocol  
 58:: :: Logical message synchronization  
 42:: :: Message data types

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#### NTP

2030:: I:: "Simple Network Time Protocol (SNTP) Version 4 for IPv4, IPv6 and OSI"  
 1769:: I:: Simple Network Time Protocol (SNTP)  
 1708:: I:: NTP PICS PROFORMA For the Network Time Protocol Version 3  
 1589:: I:: A Kernel Model for Precision Timekeeping  
 1361:: I:: Simple Network Time Protocol (SNTP)  
 1305:: PS:: Network Time Protocol (v3)  
 1165:: E:: Network Time Protocol (NTP) over the OSI Remote Operations Service  
 1129:: :: Internet time synchronization  
 1128:: :: Measured performance of the Network Time Protocol in the Internet system  
 1119:: S:: Network Time Protocol version 2 specification and implementation  
 1059:: :: Network Time Protocol version 1 specification and implementation  
 958:: :: Network Time Protocol NTP  
 957:: :: Experiments in network clock synchronization  
 956:: :: Algorithms for synchronizing network clocks  
 868:: S:: Time Protocol  
 867:: S:: Daytime Protocol  
 778:: H:: DCNET Internet Clock Service  
 738:: :: Time server  
 29:: :: Response to [RFC 28](#)  
 28:: :: Time standards

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#### Name Serving

2053:: I:: The AM (Armenia) Domain  
 2052:: E:: A DNS RR for specifying the location of services (DNS SRV)  
 2010:: I:: Operational Criteria for Root Name Servers  
 1996:: PS:: A Mechanism for Prompt Notification of Zone Changes (DNS NOTIFY)  
 1995:: PS:: Incremental Zone Transfer in DNS



1982:: PS:: Serial Number Arithmetic  
 1956:: I:: Registration in the MIL Domain  
 1912:: I:: Common DNS Operational and Configuration Errors  
 1886:: PS:: DNS Extensions to support IP version 6  
 1876:: E:: A Means for Expressing Location Information in the  
         Domain Name System  
 1794:: I:: DNS Support for Load Balancing  
 1713:: I:: Tools for DNS debugging  
 1712:: E:: DNS Encoding of Geographical Location  
 1706:: I:: DNS NSAP Resource Records  
 1664:: E:: Using the Internet DNS to Distribute [RFC1327](#) Mail  
         Address Mapping Tables  
 1591:: I:: Domain Name System Structure and Delegation  
 1537:: I:: Common DNS Data File Configuration Error  
 1536:: I:: Common DNS Implementation Errors and Suggested Fixes.  
 1480:: I:: The US Domain  
 1464:: E:: Using the Domain Name System To Store Arbitrary  
         String Attributes  
 1394:: I:: Relationship of Telex Answerback Codes to Internet Domains  
 1386:: I:: The US Domain  
 1348:: E:: DNS NSAP RRs  
 1183:: E:: New DNS RR Definitions  
 1101:: :: DNS encoding of network names and other types  
 1035:: S:: Domain names - implementation and specification  
 1034:: S:: Domain names - concepts and facilities  
 1033:: :: Domain administrators operations guide  
 1032:: :: Domain administrators guide  
 1031:: :: MILNET name domain transition  
   973:: :: Domain system changes and observations  
   952:: :: DoD Internet host table specification  
   921:: :: Domain name system implementation schedule - revised  
   920:: :: Domain requirements  
   897:: :: Domain name system implementation schedule  
   883:: :: Domain names  
   882:: :: Domain names  
   881:: :: Domain names plan and schedule  
   849:: :: Suggestions for improved host table distribution  
   830:: :: Distributed system for Internet name service  
   819:: :: Domain naming convention for Internet user applications  
   811:: :: Hostnames Server  
   810:: :: DoD Internet host table specification  
   799:: :: Internet name domains  
   796:: :: Address mappings  
   627:: :: ASCII text file of hostnames  
   625:: :: On-line hostnames service  
   623:: :: Comments on on-line host name service  
   620:: :: Request for monitor host table updates  
   608:: :: Host names on-line  
   606:: :: Host names on-line  
   289:: :: What we hope is an official list of host names  
   280:: :: Draft of host names

273:: :: More on standard host names  
 247:: :: Proffered set of standard host names  
 237:: :: NIC view of standard host names  
 236:: :: Standard host names  
 233:: :: Standardization of host call letters  
 229:: :: Standard host names  
 226:: :: Standardization of host mnemonics

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#### Network Management

2128:: PS:: Dial Control Management Information Base using SMIV2  
 2127:: PS:: ISDN Management Information Base  
 2124:: I:: Light-weight Flow Admission Protocol Specification  
 Version 1.0  
 2108:: PS:: Definitions of Managed Objects for IEEE 802.3 Repeater  
 Devices using SMIV2  
 2096:: PS:: IP Forwarding Table MIB  
 2089:: I:: V2ToV1 Mapping SNMPv2 onto SNMPv1 within a bi-lingual  
 SNMP agent  
 2074:: PS:: Remote Network Monitoring MIB Protocol Identifiers  
 2064:: E:: Traffic Flow Measurement  
 2063:: E:: Traffic Flow Measurement  
 2051:: PS:: Definitions of Managed Objects for APPC  
 2041:: I:: Mobile Network Tracing  
 2039:: I:: Applicability of Standards Track MIBs to Management  
 of World Wide Web Servers  
 2037:: PS:: Entity MIB  
 2024:: PS:: Definitions of Managed Objects for Data Link Switching  
 using SNMPv2  
 2021:: PS:: Remote Network Monitoring Management Information  
 Base Version 2 using SMIV2  
 2020:: PS:: Definitions of Managed Objects for IEEE 802.12 Interfaces  
 2013:: PS:: SNMPv2 Management Information Base for the User  
 Datagram Protocol using SMIV2  
 2012:: PS:: SNMPv2 Management Information Base for the  
 Transmission Control Protocol  
 2011:: PS:: SNMPv2 Management Information Base for the Internet  
 Protocol using SMIV2  
 2006:: PS:: The Definitions of Managed Objects for IP Mobility  
 Support using SMIV2  
 1944:: I:: Benchmarking Methodology for Network Interconnect Devices  
 1910:: E:: User-based Security Model for SNMPv2  
 1909:: E:: An Administrative Infrastructure for SNMPv2  
 1908:: DS:: Coexistence between Version 1 and Version 2 of the  
 Internet-standard Network Management Framework  
 1907:: DS:: Management Information Base for Version 2 of the  
 Simple Network Management Protocol (SNMPv2)  
 1906:: DS:: Transport Mappings for Version 2 of the Simple Network  
 Management Protocol (SNMPv2)  
 1905:: DS:: Protocol Operations for Version 2 of the Simple Network  
 Management Protocol (SNMPv2)  
 1904:: DS:: Conformance Statements for Version 2 of the Simple

Network Management Protocol (SNMPv2)  
 1903:: DS:: Textual Conventions for Version 2 of the Simple  
 Network Management Protocol (SNMPv2)  
 1902:: DS:: Structure of Management Information for Version 2 of  
 the Simple Network Management Protocol (SNMPv2)  
 1901:: E:: Introduction to Community-based SNMPv2  
 1857:: I:: A Model for Common Operational Statistics  
 1856:: I:: The Opstat Client-Server Model for Statistics Retrieval  
 1850:: DS:: OSPF Version 2 Management Information Base  
 1792:: E:: TCP/IPX Connection Mib Specification  
 1759:: PS:: Printer MIB  
 1757:: DS:: Remote Network Monitoring Management Information Base  
 1749:: PS:: IEEE 802.5 Station Source Routing MIB using SMIV2  
 1748:: DS:: IEEE 802.5 MIB using SMIV2  
 1747:: PS:: Definitions of Managed Objects for SNA Data Link Control  
 1743:: DS:: IEEE 802.5 MIB using SMIV2  
 1742:: PS:: AppleTalk Management Information Base II  
 1724:: DS:: RIP Version 2 MIB Extension  
 1697:: PS:: Relational Database Management System (RDBMS)  
 Management Information Base (MIB) using SMIV2  
 1696:: PS:: Modem Management Information Base (MIB) using SMIV2  
 1695:: PS:: Definitions of Managed Objects for ATM Management  
 Version 8.0 using SMIV2  
 1694:: DS:: Definitions of Managed Objects for SMDS Interfaces  
 using SMIV2  
 1666:: PS:: Definitions of Managed Objects for SNA NAUs using SMIV2  
 1665:: PS:: Definitions of Managed Objects for SNA NAUs using SMIV2  
 1660:: DS:: Definitions of Managed Objects for Parallel-printer-like  
 Hardware Devices using SMIV2  
 1659:: DS:: Definitions of Managed Objects for RS-232-like  
 Hardware Devices using SMIV2  
 1658:: DS:: Definitions of Managed Objects for Character Stream  
 Devices using SMIV2  
 1657:: PS:: Definitions of Managed Objects for the Fourth Version  
 of the Border Gateway Protocol (BGP-4) using SMIV2  
 1650:: PS:: Definitions of Managed Objects for the Ethernet-like  
 Interface Types using SMIV2  
 1643:: PS:: Definitions of Managed Objects for the Ethernet-like  
 Interface Types  
 1628:: PS:: UPS Management Information Base  
 1623:: S:: Definitions of Managed Objects for the Ethernet-like  
 Interface Types  
 1612:: PS:: DNS Resolver MIB Extensions  
 1611:: PS:: DNS Server MIB Extensions  
 1596:: PS:: Definitions of Managed Objects for Frame Relay Service  
 1595:: PS:: Definitions of Managed Objects for the SONET/SDH  
 Interface Type  
 1593:: I:: SNA APPN Node MIB  
 1592:: E:: Simple Network Management Protocol Distributed Protocol  
 Interface Version 2.0  
 1573:: PS:: Evolution of the Interfaces Group of MIB-II

1567:: PS:: X.500 Directory Monitoring MIB  
1566:: PS:: Mail Monitoring MIB  
1565:: PS:: Network Services Monitoring MIB  
1564:: I:: DSA Metrics (OSI-DS 34 (v3))  
1559:: DS:: DECnet Phase IV MIB Extensions  
1525:: PS:: Definitions of Managed Objects for Source Routing Bridges  
1516:: DS:: Definitions of Managed Objects for IEEE 802.3  
Repeater Devices  
1515:: PS:: Definitions of Managed Objects for IEEE 802.3  
Medium Attachment Units (MAUs)  
1514:: PS:: Host Resources MIB  
1513:: PS:: Token Ring Extensions to the Remote Network Monitoring MIB  
1512:: PS:: FDDI Management Information Base  
1503:: I:: Algorithms for Automating Administration in SNMPv2  
Managers  
1493:: DS:: Definitions of Managed Objects for Bridges  
1474:: PS:: The Definitions of Managed Objects for the Bridge  
Network Control Protocol of the Point-to-Point Protocol  
1473:: PS:: The Definitions of Managed Objects for the IP Network  
Control Protocol of the Point-to-Point Protocol  
1472:: PS:: The Definitions of Managed Objects for the Security  
Protocols of the Point-to-Point Protocol  
1471:: PS:: The Definitions of Managed Objects for the Link Control  
Protocol of the Point-to-Point Protocol  
1470:: I:: FYI on a Network Management Tool Catalog  
1461:: PS:: SNMP MIB extension for MultiProtocol Interconnect over  
X.25  
1452:: PS:: Coexistence between version 1 and version 2 of the  
Internet-standard Network Management Framework  
1451:: PS:: Manager to Manager Management Information Base  
1450:: PS:: Management Information Base for version 2 of the Simple  
Network Management Protocol (SNMPv2)  
1449:: PS:: Transport Mappings for version 2 of the Simple Network  
Management Protocol (SNMPv2)  
1448:: PS:: Protocol Operations for version 2 of the Simple Network  
Management Protocol (SNMPv2)  
1447:: PS:: Party MIB for version 2 of the Simple Network Management  
Protocol (SNMPv2)  
1446:: PS:: Security Protocols for version 2 of the Simple Network  
Management Protocol (SNMPv2)  
1445:: PS:: Administrative Model for version 2 of the Simple Network  
Management Protocol (SNMPv2)  
1444:: PS:: Conformance Statements for version 2 of the Simple  
Network Management Protocol (SNMPv2)  
1443:: PS:: Textual Conventions for version 2 of the Simple Network  
Management Protocol (SNMPv2)  
1442:: PS:: Structure of Management Information for version 2 of the  
Simple Network Management Protocol (SNMPv2)  
1441:: PS:: Introduction to version 2 of the Internet-standard  
Network Management Framework  
1431:: I:: DUA Metrics

1420:: PS:: SNMP over IPX  
 1419:: PS:: SNMP over AppleTalk  
 1418:: PS:: SNMP over OSI  
 1414:: PS:: Ident MIB  
 1407:: PS:: Definitions of Managed Objects for the DS3/E3 Interface Type  
 1406:: PS:: Definitions of Managed Objects for the DS1 and E1 Interface Types  
 1404:: I:: A Model for Common Operational Statistics  
 1398:: DS:: Definitions of Managed Objects for the Ethernet-like Interface Types  
 1389:: PS:: RIP Version 2 MIB Extension  
 1382:: PS:: SNMP MIB Extension for the X.25 Packet Layer  
 1381:: PS:: SNMP MIB Extension for X.25 LAPB  
 1369:: I:: Implementation Notes and Experience for The Internet Ethernet MIB  
 1368:: PS:: Definitions of Managed Objects for IEEE 802.3 Repeater Devices  
 1354:: PS:: IP Forwarding Table MIB  
 1353:: H:: Definitions of Managed Objects for Administration of SNMP Parties  
 1352:: H:: SNMP Security Protocols  
 1351:: H:: SNMP Administrative Model  
 1346:: I:: "Resource Allocation, Control, and Accounting for the Use of Network Resources"  
 1318:: PS:: Definitions of Managed Objects for Parallel-printer-like Hardware Devices  
 1317:: PS:: Definitions of Managed Objects for RS-232-like Hardware Devices  
 1316:: PS:: Definitions of Managed Objects for Character Stream Devices  
 1315:: PS:: Management Information Base for Frame Relay DTEs  
 1304:: PS:: Definitions of Managed Objects for the SIP Interface Type  
 1303:: I:: A Convention for Describing SNMP-based Agents  
 1298:: I:: SNMP over IPX  
 1289:: PS:: DECnet Phase IV MIB Extensions  
 1286:: PS:: Definitions of Managed Objects for Bridges  
 1285:: PS:: FDDI Management Information Base  
 1284:: PS:: Definitions of Managed Objects for the Ethernet-like Interface Types  
 1283:: E:: SNMP over OSI  
 1273:: I:: "A Measurement Study of Changes in Service-Level Reachability in the Global TCP/IP Internet  
 1272:: I:: Internet Accounting  
 1271:: PS:: Remote Network Monitoring Management Information Base  
 1270:: I:: SNMP Communications Services  
 1269:: PS:: Definitions of Managed Objects for the Border Gateway Protocol (Version 3)  
 1262:: :: Guidelines for Internet Measurement Activities  
 1253:: PS:: OSPF Version 2 Management Information Base  
 1252:: PS:: OSPF Version 2 Management Information Base

1248:: PS:: OSPF Version 2 Management Information Base  
 1247:: DS:: OSPF Version 2  
 1243:: PS:: AppleTalk Management Information Base  
 1242:: I:: Benchmarking Terminology for Network Interconnection  
 Devices  
 1239:: PS:: Reassignment of Experimental MIBs to Standard MIBs  
 1238:: E:: CLNS MIB - for use with Connectionless Network  
 Protocol (ISO 8473) and End System to Intermediate  
 System (ISO 9542)  
 1233:: H:: Definitions of Managed Objects for the DS3 Interface Type  
 1232:: H:: Definitions of Managed Objects for the DS1 Interface Type  
 1231:: DS:: IEEE 802.5 Token Ring MIB  
 1230:: H:: IEEE 802.4 Token Bus MIB  
 1229:: DS:: Extensions to the Generic-Interface MIB  
 1228:: E:: SNMP-DPI - Simple Network Management Protocol  
 Distributed Program Interface  
 1227:: E:: SNMP MUX Protocol and MIB  
 1224:: E:: Techniques for Managing Asynchronously Generated Alerts  
 1215:: I:: A Convention for Defining Traps for use with the SNMP  
 1214:: H:: OSI Internet Management  
 1213:: S:: Management Information Base for Network Management of  
 TCP/IP-based internets  
 1212:: S:: Concise MIB Definitions  
 1189:: H:: The Common Management Information Services and Protocols  
 for the Internet  
 1187:: E:: Bulk Table Retrieval with the SNMP  
 1161:: E:: SNMP over OSI  
 1158:: PS:: Management Information Base for Network Management of  
 TCP/IP-based internets  
 1157:: S:: A Simple Network Management Protocol (SNMP)  
 1155:: S:: Structure and Identification of Management Information  
 for TCP/IP-based Internets  
 1109:: :: Report of the second Ad Hoc Network Management Review  
 Group  
 1098:: :: Simple Network Management Protocol SNMP  
 1095:: DS:: Common Management Information Services and Protocol  
 over TCP/IP CMOT  
 1089:: :: SNMP over Ethernet  
 1067:: :: Simple Network Management Protocol  
 1066:: H:: Management Information Base for network management of  
 TCP/IP-based internets  
 1065:: H:: Structure and identification of management information  
 for TCP/IP-based internets  
 1052:: :: IAB recommendations for the development of Internet  
 network management standards  
 1028:: H:: Simple Gateway Monitoring Protocol  
 1024:: :: HEMS variable definitions  
 1023:: :: HEMS monitoring and control language  
 1022:: :: High-level Entity Management Protocol HEMP  
 1021:: H:: High-level Entity Management System HEMS  
 1012:: :: Bibliography of Request For Comments 1 through 999

1011:: S:: Official Internet protocols  
1010:: S:: Assigned numbers  
996:: H:: Statistics server  
619:: :: Mean round-trip times in the ARPANET  
618:: :: Few observations on NCP statistics  
616:: :: Latest network maps  
615:: :: Proposed Network Standard Data Pathname Syntax  
612:: :: Traffic statistics December 1973  
601:: :: Traffic statistics November 1973  
586:: :: Traffic statistics October 1973  
579:: :: Traffic statistics September 1973  
568:: :: Response to [RFC 567](#) - cross country network bandwidth  
567:: :: Cross country network bandwidth  
566:: :: Traffic statistics August 1973  
565:: :: Storing network survey data at the datacomputer  
557:: :: Revelations in network host measurements  
546:: :: Tenex load averages for July 1973  
545:: :: Of what quality be the UCSB resources evaluators?  
538:: :: Traffic statistics June 1973  
531:: :: Feast or famine? A response to two recent RFC's about  
network information  
522:: :: Traffic statistics May 1973  
509:: :: Traffic statistics April 1973  
500:: :: Integration of data management systems on a computer  
network  
482:: :: Traffic statistics February 1973  
455:: :: Traffic statistics January 1973  
443:: :: Traffic statistics December 1972  
423:: :: UCLA Campus Computing Network liaison staff for ARPANET  
422:: :: Traffic statistics November 1972  
421:: :: Software consulting service for network users  
416:: :: ARC system will be unavailable for use during  
Thanksgivingweek  
415:: :: Tenex bandwidth  
413:: :: Traffic statistics October 1972  
400:: :: Traffic statistics September 1972  
392:: :: Measurement of host costs for transmitting network data  
391:: :: Traffic statistics August 1972  
389:: :: UCLA Campus Computing Network liaison staff for ARPA  
Network  
388:: :: NCP statistics  
384:: :: Official site idents for organizations in the ARPA  
Network  
381:: :: Three aids to improved network operation  
378:: :: Traffic statistics July 1972  
369:: :: "Evaluation of ARPANET services January-March, 1972"  
362:: :: Network host status  
353:: :: Network host status  
344:: :: Network host status  
326:: :: Network host status  
323:: :: Formation of Network Measurement Group NMG

308:: :: ARPANET host availability data  
 304:: :: Data management system proposal for the ARPA network  
 302:: :: Exercising the ARPANET  
 274:: :: Establishing a local guide for network usage  
 227:: :: Data transfer rates Rand/UCLA  
 212:: :: NWG meeting on network usage  
 193:: :: Network checkout  
 188:: :: Data management meeting announcement  
 156:: :: Status of the Illinois site  
 153:: :: SRI ARC-NIC status  
 96:: :: Interactive network experiment to study modes of  
       access to the Network Information Center  
 32:: :: Connecting M.I.T. computers to the  
       ARPA Computer-to-computer communication network  
 18:: :: [Link assignments]

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#### Network News

1036:: :: Standard for interchange of USENET messages  
 977:: PS:: Network News Transfer Protocol  
 850:: :: Standard for interchange of USENET messages

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#### Real Time Services

:: ::

2102:: I:: Multicast Support for Nimrod  
 2090:: E:: TFTP Multicast Option  
 2038:: PS:: RTP Payload Format for MPEG1/MPEG2 Video  
 2035:: PS:: RTP Payload Format for JPEG-compressed Video  
 2032:: PS:: RTP payload format for H.261 video streams  
 2029:: PS:: RTP Payload Format of Sun's CellB Video Encoding  
 2022:: PS:: Support for Multicast over UNI 3.0/3.1 based ATM  
       Networks  
 1890:: PS:: RTP Profile for Audio and Video Conferences with Minimal  
       Control  
 1889:: PS:: RTP  
 1861:: I:: Simple Network Paging Protocol - Version 3 - Two-Way  
       Enhanced  
 1821:: I:: Integration of Real-time Services in an IP-ATM Network  
       Architecture  
 1819:: E:: Internet Stream Protocol Version 2 (ST2) Protocol  
       Specification - Version ST2+  
 1789:: I:: INETPhone  
 1768:: E:: Host Group Extensions for CLNP Multicasting  
 1703:: I:: Principles of Operation for the TPC.INT Subdomain  
 1645:: I:: Simple Network Paging Protocol - Version 2  
 1614:: I:: Network Access to Multimedia Information  
 1569:: I:: Principles of Operation for the TPC.INT Subdomain  
 1568:: I:: Simple Network Paging Protocol - Version 1(b)  
 1546:: I:: Host Anycasting Service  
 1469:: PS:: IP Multicast over Token-Ring Local Area Networks  
 1458:: I:: Requirements for Multicast Protocols



1453:: I:: A Comment on Packet Video Remote Conferencing and the  
 Transport/Network Layers  
 1313:: I:: Today's Programming for KRFC AM 1313 Internet Talk Radio  
 1301:: I:: Multicast Transport Protocol  
 1257:: I:: Isochronous Applications Do Not Require  
 Jitter-Controlled Networks  
 1197:: I:: Using ODA for Translating Multimedia Information  
 1193:: :: Client Requirements for Real-Time Communication Services  
 1190:: E:: "Experimental Internet Stream Protocol, Version 2 (ST-II)"  
 1112:: S:: Host extensions for IP multicasting  
 1054:: :: Host extensions for IP multicasting  
 988:: :: Host extensions for IP multicasting  
 966:: :: Host groups  
 947:: :: Multi-network broadcasting within the Internet  
 809:: :: UCL facsimile system  
 804:: :: CCITT draft recommendation T.4 [Standardization of  
 Group 3 facsimile apparatus for document transmission]  
 803:: :: Dacom 450/500 facsimile data transcoding  
 798:: :: Decoding facsimile data from the Rapicom 450  
 769:: :: Rapicom 450 facsimile file format  
 741:: :: Specifications for the Network Voice Protocol NVP  
 511:: :: Enterprise phone service to NIC from ARPANET sites  
 508:: :: Real-time data transmission on the ARPANET  
 420:: :: CCA ICCC weather demo  
 408:: :: NETBANK  
 251:: :: Weather data

## =====

### Routing

2103:: I:: Mobility Support for Nimrod  
 2092:: I:: Protocol Analysis for Triggered RIP  
 2091:: PS:: Triggered Extensions to RIP to Support Demand Circuits  
 2081:: I:: RIPng Protocol Applicability Statement  
 2080:: PS:: RIPng for IPv6  
 2073:: PS:: An IPv6 Provider-Based Unicast Address Format  
 2072:: I:: Router Renumbering Guide  
 2042:: I:: Registering New BGP Attribute Types  
 2008:: BC:: Implications of Various Address Allocation Policies for  
 Internet Routing  
 1998:: I:: An Application of the BGP Community Attribute in  
 Multi-home Routing  
 1997:: PS:: BGP Communities Attribute  
 1992:: I:: The Nimrod Routing Architecture  
 1987:: I:: Ipsilon's General Switch Management Protocol  
 Specification Version 1.1  
 1966:: E:: BGP Route Reflection An alternative to full mesh IBGP  
 1965:: E:: Autonomous System Confederations for BGP  
 1955:: I:: New Scheme for Internet Routing and Addressing (ENCAPS)  
 for IPN  
 1953:: I:: Ipsilon Flow Management Protocol Specification for  
 IPv4 Version 1.0

1940:: I:: Source Demand Routing  
 1930:: BC:: "Guidelines for creation, selection, and registration  
 of an Autonomous System (AS)"  
 1925:: I:: The Twelve Networking Truths  
 1923:: I:: RIPv1 Applicability Statement for Historic Status  
 1863:: E:: A BGP/IDRP Route Server alternative to a full mesh routing  
 1817:: I:: CIDR and Classful Routing  
 1812:: PS:: Requirements for IP Version 4 Routers  
 1793:: PS:: Extending OSPF to Support Demand Circuits  
 1787:: I:: Routing in a Multi-provider Internet  
 1786:: I:: Representation of IP Routing Policies in a Routing Registry (ripe-  
 1774:: I:: BGP-4 Protocol Analysis  
 1773:: I:: Experience with the BGP-4 protocol  
 1772:: DS:: Application of the Border Gateway Protocol in the Internet  
 1771:: DS:: A Border Gateway Protocol 4 (BGP-4)  
 1765:: E:: OSPF Database Overflow  
 1753:: I:: IPng Technical Requirements Of the Nimrod Routing and  
 Addressing Architecture  
 1745:: PS:: BGP4/IDRP for IP---OSPF Interaction  
 1723:: DS:: RIP Version 2 Carrying Additional Information  
 1722:: DS:: RIP Version 2 Protocol Applicability Statement  
 1721:: I:: RIP Version 2 Protocol Analysis  
 1716:: I:: Towards Requirements for IP Routers  
 1702:: I:: Generic Routing Encapsulation over IPv4 networks  
 1701:: I:: Generic Routing Encapsulation (GRE)  
 1668:: I:: Unified Routing Requirements for IPng  
 1656:: I:: BGP-4 Protocol Document Roadmap and Implementation  
 Experience  
 1655:: PS:: Application of the Border Gateway Protocol in the  
 Internet  
 1654:: PS:: A Border Gateway Protocol 4 (BGP-4)  
 1587:: PS:: The OSPF NSSA Option  
 1586:: I:: Guidelines for Running OSPF Over Frame Relay Networks  
 1585:: I:: MOSPF  
 1584:: PS:: Multicast Extensions to OSPF  
 1583:: DS:: OSPF Version 2  
 1582:: PS:: Extensions to RIP to Support Demand Circuits  
 1581:: I:: Protocol Analysis for Extensions to RIP to Support  
 Demand Circuits  
 1520:: I:: Exchanging Routing Information Across Provider Boundaries  
 in the CIDR Environment  
 1519:: PS:: Classless Inter-Domain Routing (CIDR)  
 1517:: PS:: Applicability Statement for the Implementation of  
 Classless Inter-Domain Routing (CIDR)  
 1504:: I:: Appletalk Update-Based Routing Protocol  
 1482:: I:: Aggregation Support in the NSFNET Policy Routing Database  
 1479:: PS:: Inter-Domain Policy Routing Protocol Specification  
 1478:: PS:: An Architecture for Inter-Domain Policy Routing  
 1477:: I:: IDPR as a Proposed Standard  
 1476:: E:: RAP  
 1439:: I:: The Uniqueness of Unique Identifiers

1403:: PS:: BGP OSPF Interaction  
1397:: PS:: Default Route Advertisement In BGP2 And BGP3 Versions Of  
The Border Gateway Protocol  
1388:: PS:: RIP Version 2 Carrying Additional Information  
1387:: I:: RIP Version 2 Protocol Analysis  
1383:: I:: An Experiment in DNS Based IP Routing  
1380:: I:: IESG Deliberations on Routing and Addressing  
1371:: I:: "Choosing a "Common IGP" for the IP Internet (The  
IESG's Recommendation to the IAB)"  
1370:: PS:: Applicability Statement for OSPF  
1364:: PS:: BGP OSPF Interaction  
1338:: I:: Supernetting  
1322:: I:: A Unified Approach to Inter-Domain Routing  
1268:: DS:: Application of the Border Gateway Protocol in the Internet  
1267:: DS:: A Border Gateway Protocol 3 (BGP-3)  
1266:: I:: Experience with the BGP Protocol  
1265:: I:: BGP Protocol Analysis  
1264:: I:: Internet Routing Protocol Standardization Criteria  
1254:: I:: Gateway Congestion Control Survey  
1246:: I:: Experience with the OSPF Protocol  
1245:: I:: OSPF Protocol Analysis  
1222:: :: Advancing the NSFNET Routing Architecture  
1195:: PS:: Use of OSI IS-IS for Routing in TCP/IP and Dual  
Environments  
1164:: PS:: Application of the Border Gateway Protocol in the Internet  
1163:: PS:: A Border Gateway Protocol (BGP)  
1142:: I:: OSI IS-IS Intra-domain Routing Protocol  
1136:: :: Administrative Domains and Routing Domains  
1133:: :: Routing between the NSFNET and the DDN  
1131:: PS:: OSPF specification  
1126:: :: Goals and functional requirements for inter-autonomous  
system routing  
1125:: :: Policy requirements for inter Administrative Domain  
routing  
1124:: :: Policy issues in interconnecting networks  
1105:: E:: Border Gateway Protocol BGP  
1104:: :: Models of policy based routing  
1102:: :: Policy routing in Internet protocols  
1092:: :: EGP and policy based routing in the new NSFNET backbone  
1075:: E:: Distance Vector Multicast Routing Protocol  
1074:: :: NSFNET backbone SPF based Interior Gateway Protocol  
1058:: S:: Routing Information Protocol  
1009:: H:: Requirements for Internet gateways  
995:: :: End System to Intermediate System Routing Exchange Protocol for us  
985:: :: Requirements for Internet gateways - draft  
981:: :: Experimental multiple-path routing algorithm  
975:: :: Autonomous confederations  
950:: S:: Internet standard subnetting procedure  
911:: :: EGP Gateway under Berkeley UNIX 4.2  
904:: H:: Exterior Gateway Protocol formal specification  
898:: :: Gateway special interest group meeting notes

890:: :: Exterior Gateway Protocol implementation schedule  
 888:: :: STUB Exterior Gateway Protocol  
 875:: :: "Gateways, architectures, and heffalumps"  
 827:: :: Exterior Gateway Protocol EGP  
 823:: H:: DARPA Internet gateway

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## Security

2104:: I:: HMAC  
 2085:: PS:: HMAC-MD5 IP Authentication with Replay Prevention  
 2084:: I:: Considerations for Web Transaction Security  
 2082:: PS:: RIP-2 MD5 Authentication  
 2078:: PS:: "Generic Security Service Application Program Interface, Version 2"  
 2069:: PS:: An Extension to HTTP  
 2065:: PS:: Domain Name System Security Extensions  
 2059:: I:: RADIUS Accounting  
 2058:: PS:: Remote Authentication Dial In User Service (RADIUS)  
 2057:: I:: Source directed access control on the Internet.  
 2040:: I:: "The RC5, RC5-CBC, RC5-CBC-Pad, and RC5-CTS Algorithms"  
 2025:: PS:: The Simple Public-Key GSS-API Mechanism (SPKM)  
 2015:: :: MIME Security with Pretty Good Privacy (PGP)  
 1984:: I:: IAB and IESG Statement on Cryptographic Technology and the Internet  
 1969:: I:: The PPP DES Encryption Protocol (DESE)  
 1968:: PS:: The PPP Encryption Control Protocol (ECP)  
 1964:: PS:: The Kerberos Version 5 GSS-API Mechanism  
 1961:: PS:: GSS-API Authentication Method for SOCKS Version 5  
 1949:: E:: Scalable Multicast Key Distribution  
 1948:: I:: Defending Against Sequence Number Attacks  
 1938:: PS:: A One-Time Password System  
 1929:: PS:: Username/Password Authentication for SOCKS V5  
 1928:: PS:: SOCKS Protocol Version 5  
 1898:: I:: CyberCash Credit Card Protocol Version 0.8  
 1858:: I:: Security Considerations for IP Fragment Filtering  
 1852:: E:: IP Authentication using Keyed SHA  
 1851:: E:: The ESP Triple DES-CBC Transform  
 1829:: PS:: The ESP DES-CBC Transform  
 1828:: PS:: IP Authentication using Keyed MD5  
 1827:: PS:: IP Encapsulating Security Payload (ESP)  
 1826:: PS:: IP Authentication Header  
 1825:: PS:: Security Architecture for the Internet Protocol  
 1824:: I:: The Exponential Security System TESS  
 1760:: I:: The S/KEY One-Time Password System  
 1751:: I:: A Convention for Human-Readable 128-bit Keys  
 1750:: I:: Randomness Recommendations for Security  
 1704:: I:: On Internet Authentication  
 1675:: I:: Security Concerns for IPng  
 1579:: I:: Firewall-Friendly FTP  
 1535:: I:: A Security Problem and Proposed Correction With Widely

## Deployed DNS Software

1511:: I:: Common Authentication Technology Overview  
1510:: PS:: The Kerberos Network Authentication Service (V5)  
1509:: PS:: Generic Security Service API  
1508:: PS:: Generic Security Service Application Program Interface  
1507:: E:: DASS - Distributed Authentication Security Service  
1492:: I:: "An Access Control Protocol, Sometimes Called TACACS"  
1457:: I:: Security Label Framework for the Internet  
1455:: E:: Physical Link Security Type of Service  
1424:: PS:: Privacy Enhancement for Internet Electronic Mail  
1423:: PS:: "Privacy Enhancement for Internet Electronic Mail  
1422:: PS:: Privacy Enhancement for Internet Electronic Mail  
1421:: PS:: Privacy Enhancement for Internet Electronic Mail  
1416:: E:: Telnet Authentication Option  
1412:: E:: Telnet Authentication  
1411:: E:: Telnet Authentication  
1409:: E:: Telnet Authentication Option  
1408:: H:: Telnet Environment Option  
1321:: I:: The MD5 Message-Digest Algorithm  
1320:: I:: The MD4 Message-Digest Algorithm  
1319:: I:: The MD2 Message-Digest Algorithm  
1281:: I:: Guidelines for the Secure Operation of the Internet  
1244:: I:: Site Security Handbook  
1186:: I:: The MD4 Message Digest Algorithm  
1170:: I:: Public Key Standards and Licenses  
1156:: S:: Management Information Base for Network Management of  
TCP/IP-based internets  
1115:: H:: "Privacy enhancement for Internet electronic mail  
1114:: H:: Privacy enhancement for Internet electronic mail  
1113:: H:: Privacy enhancement for Internet electronic mail  
1108:: PS:: U.S. Department of Defense Security Options for the  
Internet Protocol  
1040:: :: Privacy enhancement for Internet electronic mail  
1038:: :: Draft revised IP security option  
1004:: E:: Distributed-protocol authentication scheme  
989:: :: Privacy enhancement for Internet electronic mail  
972:: :: Password Generator Protocol  
931:: E:: Authentication server  
927:: :: TACACS user identification Telnet option  
912:: :: Authentication service  
644:: :: On the problem of signature authentication for  
network mail

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## Virtual Terminal

2066:: E:: TELNET CHARSET Option  
1647:: PS:: TN3270 Enhancements  
1646:: I:: TN3270 Extensions for LUsername and Printer Selection  
1576:: I:: TN3270 Current Practices  
1572:: PS:: Telnet Environment Option  
1571:: I:: Telnet Environment Option Interoperability Issues

1372:: PS:: Telnet Remote Flow Control Option  
1282:: I:: BSD Rlogin  
1258:: I:: BSD Rlogin  
1221:: :: Host Access Protocol (HAP) Specification - Version 2  
1205:: :: 5250 Telnet Interface  
1184:: DS:: Telnet Linemode Option  
1143:: :: The Q Method of Implementing TELNET Option Negotiation  
1116:: PS:: Telnet Linemode option  
1097:: :: Telnet subliminal-message option  
1096:: :: Telnet X display location option  
1091:: :: Telnet terminal-type option  
1080:: :: Telnet remote flow control option  
1079:: :: Telnet terminal speed option  
1073:: :: Telnet window size option  
1053:: :: Telnet X.3 PAD option  
1043:: :: Telnet Data Entry Terminal option  
1041:: :: Telnet 3270 regime option  
1013:: :: "X Window System Protocol, version 11  
1005:: :: ARPANET AHIP-E Host Access Protocol enhanced AHIP  
946:: :: Telnet terminal location number option  
933:: :: Output marking Telnet option  
930:: :: Telnet terminal type option  
929:: :: Proposed Host-Front End Protocol  
907:: S:: Host Access Protocol specification  
885:: :: Telnet end of record option  
884:: :: Telnet terminal type option  
878:: :: ARPANET 1822L Host Access Protocol  
861:: :: Telnet extended options  
860:: S:: Telnet timing mark option  
859:: S:: Telnet status option  
858:: S:: Telnet Suppress Go Ahead option  
857:: S:: Telnet echo option  
856:: S:: Telnet binary transmission  
855:: S:: Telnet option specifications  
854:: S:: Telnet Protocol specification  
851:: :: ARPANET 1822L Host Access Protocol  
818:: H:: Remote User Telnet service  
802:: :: ARPANET 1822L Host Access Protocol  
782:: :: Virtual Terminal management model  
779:: :: Telnet send-location option  
764:: :: Telnet Protocol specification  
749:: :: Telnet SUPDUP-Output option  
748:: :: Telnet randomly-lose option  
747:: :: Recent extensions to the SUPDUP Protocol  
746:: :: SUPDUP graphics extension  
736:: :: Telnet SUPDUP option  
735:: :: Revised Telnet byte macro option  
734:: H:: SUPDUP Protocol  
732:: :: Telnet Data Entry Terminal option  
731:: :: Telnet Data Entry Terminal option  
729:: :: Telnet byte macro option

728:: :: Minor pitfall in the Telnet Protocol  
727:: :: Telnet logout option  
726:: :: Remote Controlled Transmission and Echoing Telnet option  
721:: :: Out-of-band control signals in a Host-to-Host Protocol  
719:: :: Discussion on RCTE  
718:: :: Comments on RCTE from the Tenex implementation experience  
703:: :: "July, 1975, survey of New-Protocol Telnet Servers"  
702:: :: "September, 1974, survey of New-Protocol Telnet servers"  
701:: :: "August, 1974, survey of New-Protocol Telnet servers"  
698:: :: Telnet extended ASCII option  
688:: :: Tentative schedule for the new Telnet implementation for  
the TIP  
679:: :: "February, 1975, survey of New-Protocol Telnet servers"  
669:: :: "November, 1974, survey of New-Protocol Telnet servers"  
659:: :: Announcing additional Telnet options  
658:: :: Telnet output linefeed disposition  
657:: :: Telnet output vertical tab disposition option  
656:: :: Telnet output vertical tabstops option  
655:: :: Telnet output formfeed disposition option  
654:: :: Telnet output horizontal tab disposition option  
653:: :: Telnet output horizontal tabstops option  
652:: :: Telnet output carriage-return disposition option  
651:: :: Revised Telnet status option  
647:: :: Proposed protocol for connecting host computers to  
ARPA-like networks via front end processors  
636:: :: TIP/Tenex reliability improvements  
600:: :: Interfacing an Illinois plasma terminal to the ARPANET  
596:: :: Second thoughts on Telnet Go-Ahead  
595:: :: Second thoughts in defense of the Telnet Go-Ahead  
587:: :: Announcing new Telnet options  
563:: :: Comments on the RCTE Telnet option  
562:: :: Modifications to the Telnet specification  
560:: :: Remote Controlled Transmission and Echoing Telnet option  
559:: :: Comments on the new Telnet Protocol and its implementation  
513:: :: Comments on the new Telnet specifications  
495:: :: Telnet Protocol specifications  
470:: :: Change in socket for TIP news facility  
466:: :: Telnet logger/server for host LL-67  
461:: :: Telnet Protocol meeting announcement  
447:: :: IMP/TIP memory retrofit schedule  
435:: :: Telnet issues  
431:: :: Update on SMFS login and logout  
399:: :: SMFS login and logout  
393:: :: Comments on Telnet Protocol changes  
386:: :: Letter to TIP users-2  
377:: :: Using TSO via ARPA Network Virtual Terminal  
365:: :: Letter to all TIP users  
364:: :: Serving remote users on the ARPANET  
352:: :: TIP site information form  
340:: :: Proposed Telnet changes  
339:: :: "MLTNET"

328:: :: Suggested Telnet Protocol changes  
 318:: :: [Ad hoc Telnet Protocol]  
 311:: :: New console attachments to the USCB host  
 297:: :: TIP message buffers  
 296:: :: DS-1 display system  
 231:: :: Service center standards for remote usage  
 230:: :: Toward reliable operation of minicomputer-based  
         terminals on a TIP  
 216:: :: Telnet access to UCSB's On-Line System  
 215:: :: "NCP, ICP, and Telnet  
 206:: :: User Telnet - description of an initial implementation  
 205:: :: NETCRT - a character display protocol  
 177:: :: Device independent graphical display description  
 158:: :: Telnet Protocol  
 139:: :: Discussion of Telnet Protocol  
 137:: :: Telnet Protocol - a proposed document  
 110:: :: Conventions for using an IBM 2741 terminal as a  
         user console for access to network server hosts  
   97:: :: First cut at a proposed Telnet Protocol

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 Other

2123:: I:: Traffic Flow Measurement  
 2121:: I:: Issues affecting MARS Cluster Size  
 2119:: BC:: Key words for use in RFCs to Indicate Requirement Levels  
 2101:: I:: IPv4 Address Behaviour Today  
 2100:: I:: The Naming of Hosts  
 2099:: I:: Request for Comments Summary RFC Numbers 2000-2099  
 2083:: I:: PNG (Portable Network Graphics) Specification Version 1.0  
 2071:: I:: Network Renumbering Overview  
 2050:: BC:: INTERNET REGISTRY IP ALLOCATION GUIDELINES  
 2036:: I:: Observations on the use of Components of the Class  
         A Address Space within the Internet  
 2031:: I:: IETF-ISOC relationship  
 2028:: BC:: The Organizations Involved in the IETF Standards Process  
 2027:: BC:: "IAB and IESG Selection, Confirmation, and Recall Process  
 2026:: BC:: The Internet Standards Process -- Revision 3  
 2014:: BC:: IRTF Research Group Guidelines and Procedures  
 2007:: I:: Catalogue of Network Training Materials  
 2000:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1999:: I:: Request for Comments Summary RFC Numbers 1900-1999  
 1988:: I:: Conditional Grant of Rights to Specific Hewlett-Packard  
         Patents In Conjunction With the Internet Engineering  
         Task Force's Internet-Standard Network Management  
         Framework  
 1983:: I:: Internet Users' Glossary  
 1958:: I:: Architectural Principles of the Internet  
 1952:: I:: GZIP file format specification version 4.3  
 1951:: I:: DEFLATE Compressed Data Format Specification version 1.3  
 1950:: I:: ZLIB Compressed Data Format Specification version 3.3  
 1941:: I:: Frequently Asked Questions for Schools



1935:: I:: "What is the Internet, Anyway?"  
 1920:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1900:: I:: Renumbering Needs Work  
 1899:: I:: Request for Comments Summary RFC Numbers 1800-1899  
 1882:: I:: The 12-Days of Technology Before Christmas  
 1880:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1879:: I:: Class A Subnet Experiment Results and Recommendations  
 1875:: I:: UNINETT PCA Policy Statements  
 1871:: BC:: Addendum to [RFC 1602](#) -- Variance Procedure  
 1855:: I:: Netiquette Guidelines  
 1822:: I:: A Grant of Rights to Use a Specific IBM patent with  
 Photuris  
 1818:: S:: Best Current Practices  
 1816:: I:: U.S. Government Internet Domain Names  
 1814:: I:: Unique Addresses are Good  
 1811:: I:: U.S. Government Internet Domain Names  
 1810:: I:: Report on MD5 Performance  
 1805:: I:: Location-Independent Data/Software Integrity Protocol  
 1802:: I:: Introducing Project Long Bud  
 1800:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1799:: I:: Request for Comments Summary RFC Numbers 1700-1799  
 1797:: E:: Class A Subnet Experiment  
 1796:: I:: Not All RFCs are Standards  
 1790:: I:: "An Agreement between the Internet Society and Sun  
 Microsystems, Inc. in the Matter of ONC RPC and  
 XDR Protocols"  
 1780:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1776:: I:: The Address is the Message  
 1775:: I:: "To Be "On" the Internet"  
 1758:: I:: NADF Standing Documents  
 1746:: I:: Ways to Define User Expectations  
 1739:: I:: A Primer On Internet and TCP/IP Tools  
 1720:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
 1718:: I:: The Tao of IETF - A Guide for New Attendees of the  
 Internet Engineering Task Force  
 1715:: I:: The H Ratio for Address Assignment Efficiency  
 1709:: I:: K-12 Internetworking Guidelines  
 1700:: S:: ASSIGNED NUMBERS  
 1699:: I:: Request for Comments Summary RFC Numbers 1600-1699  
 1691:: I:: The Document Architecture for the Cornell Digital Library  
 1690:: I:: Introducing the Internet Engineering and Planning  
 Group (IEPG)  
 1689:: I:: A Status Report on Networked Information Retrieval  
 1640:: I:: The Process for Organization of Internet Standards  
 Working Group (POISED)  
 1636:: I:: "Report of IAB Workshop on Security in the Internet  
 Architecture - February 8-10, 1994"  
 1635:: I:: How to Use Anonymous FTP  
 1627:: I:: Network 10 Considered Harmful (Some Practices  
 Shouldn't be Codified)  
 1610:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS

1607:: I:: A VIEW FROM THE 21ST CENTURY  
1606:: I:: A Historical Perspective On The Usage Of IP Version 9  
1603:: I:: IETF Working Group Guidelines and Procedures  
1602:: I:: The Internet Standards Process -- Revision 2  
1601:: I:: Charter of the Internet Architecture Board (IAB)  
1600:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
1599:: I:: Request for Comments Summary RFC Numbers 1500 - 1599  
1597:: I:: Address Allocation for Private Internets  
1594:: I:: FYI on Questions and Answer Answers to Commonly  
asked ``New Internet User'' Questions  
1580:: I:: Guide to Network Resource Tools  
1578:: I:: FYI on Questions and Answers  
1574:: I:: Essential Tools for the OSI Internet  
1550:: I:: IP  
1543:: I:: Instructions to RFC Authors  
1540:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
1539:: I:: The Tao of IETF - A Guide for New Attendees of the  
Internet Engineering Task Force  
1527:: I:: What Should We Plan Given the Dilemma of the Network?  
1501:: I:: OS/2 User Group  
1500:: S:: INTERNET OFFICIAL PROTOCOL STANDARDS  
1499:: I:: Request for Comments Summary RFC Numbers 1400-1499  
1481:: I:: IAB Recommendation for an Intermediate Strategy to  
Address the Issue of Scaling  
1467:: I:: Status of CIDR Deployment in the Internet  
1463:: I:: FYI on Introducing the Internet--A Short Bibliography  
of Introductory Internetworking Readings for the  
Network Novice  
1462:: I:: FYI on ``What is the Internet?''  
1438:: I:: Internet Engineering Task Force Statements Of  
Boredom (SOBs)  
1432:: I:: Recent Internet Books  
1417:: I:: NADF Standing Documents  
1410:: S:: IAB OFFICIAL PROTOCOL STANDARDS  
1402:: I:: There's Gold in them thar Networks! Searching for  
Treasure in all the Wrong Places  
1401:: I:: Correspondence between the IAB and DISA on the use  
of DNS throughout the Internet  
1399:: I:: Request for Comments Summary RFC Numbers 1300-1399  
1396:: I:: The Process for Organization of Internet Standards  
Working Group (POISED)  
1392:: I:: Internet Users' Glossary  
1391:: I:: The Tao of IETF  
1367:: I:: Schedule for IP Address Space Management Guidelines  
1366:: I:: Guidelines for Management of IP Address Space  
1360:: S:: IAB OFFICIAL PROTOCOL STANDARDS  
1359:: I:: Connecting to the Internet What Connecting  
Institutions Should Anticipate  
1358:: I:: Charter of the Internet Architecture Board (IAB)  
1349:: PS:: Type of Service in the Internet Protocol Suite  
1340:: S:: ASSIGNED NUMBERS

1336:: I:: "Who's Who in the Internet Biographies of IAB,  
 IESG and IRSG Members"  
 1325:: I:: FYI on Questions and Answers Answers to Commonly  
 asked ``New Internet User'' Questions  
 1324:: I:: A Discussion on Computer Network Conferencing  
 1311:: I:: Introduction to the STD Notes  
 1310:: I:: The Internet Standards Process  
 1300:: I:: Remembrances of Things Past  
 1299:: I:: Request for Comments Summary RFC Numbers 1200-1299  
 1297:: I:: NOC Internal Integrated Trouble Ticket System  
 Functional Specification Wishlist  
 (``NOC TT REQUIREMENTS'')  
 1296:: I:: Internet Growth (1981-1991)  
 1295:: I:: User Bill of Rights for entries and listings in the  
 Public Directory  
 1291:: I:: Mid-Level Networks  
 1290:: I:: There's Gold in them thar Networks! or Searching for  
 Treasure in all the Wrong Places  
 1287:: I:: Towards the Future Internet Architecture  
 1280:: S:: IAB OFFICIAL PROTOCOL STANDARDS  
 1261:: I:: Transition of NIC Services  
 1259:: I:: Building The Open Road  
 1251:: :: "Who's Who in the Internet  
 1250:: S:: IAB Official Protocol Standards  
 1249:: I:: DIXIE Protocol Specification  
 1217:: :: Memo from the Consortium for Slow Commotion Research (CSCR)  
 1216:: :: Gigabit Network Economics and Paradigm Shifts  
 1208:: :: A Glossary of Networking Terms  
 1207:: :: Answers to Commonly asked ``Experienced Internet User''  
 Questions  
 1206:: :: FYI on Questions and Answers - Answers to Commonly  
 asked ``New Internet User'' Questions  
 1200:: S:: IAB Official Protocol Standards  
 1199:: I:: Request for Comments Summary RFC Numbers 1100-1199  
 1198:: I:: FYI on the X Window System  
 1192:: :: Commercialization of the Internet Summary Report  
 1181:: :: RIPE Terms of Reference  
 1180:: :: A TCP/IP Tutorial  
 1178:: :: Choosing a Name for Your Computer  
 1177:: :: FYI on Questions and Answers - Answers to Commonly  
 Asked ``New Internet User'' Questions  
 1175:: :: FYI on Where to Start - A Bibliography of  
 Internetworking Information  
 1174:: I:: "IAB Recommended Policy on Distributing Internet  
 Identifier Assignment and IAB Recommended Policy Change  
 to Internet ""Connected"" Status"  
 1173:: :: "Responsibilities of Host and Network Managers  
 Summary of the ""Oral Tradition"" of the Internet"  
 1169:: :: Explaining the Role of GOSIP  
 1167:: :: Thoughts on the National Research and Education Network  
 1160:: :: The Internet Activities Board

1152:: :: Workshop Report  
1150:: I:: F.Y.I. on F.Y.I.  
1149:: :: A Standard for the Transmission of IP Datagrams  
on Avian Carriers  
1147:: I:: FYI on a Network Management Tool Catalog  
1140:: S:: IAB Official Protocol Standards  
1135:: :: Helminthiasis of the Internet  
1130:: S:: IAB official protocol standards  
1127:: :: Perspective on the Host Requirements RFCs  
1121:: :: Act one - the poems  
1120:: :: Internet Activities Board  
1118:: :: Hitchhikers guide to the Internet  
1117:: :: Internet numbers  
1111:: :: Request for comments on Request for Comments  
1100:: S:: IAB official protocol standards  
1099:: I:: Request for Comments Summary RFC Numbers 1000-1099  
1093:: :: NSFNET routing architecture  
1087:: :: Ethics and the Internet  
1083:: S:: IAB official protocol standards  
1077:: :: Critical issues in high bandwidth networking  
1076:: :: HEMS monitoring and control language  
1060:: S:: ASSIGNED NUMBERS  
1039:: :: DoD statement on Open Systems Interconnection protocols  
1020:: :: Internet numbers  
1019:: :: Report of the Workshop on Environments for  
Computational Mathematics  
1018:: :: Some comments on SQuID  
1017:: :: Network requirements for scientific research  
1015:: :: Implementation plan for interagency research Internet  
1014:: :: XDR  
1000:: :: Request For Comments reference guide  
999:: :: Requests For Comments summary notes  
997:: :: Internet numbers  
992:: :: On communication support for fault tolerant process groups  
991:: S:: Official ARPA-Internet protocols  
990:: :: Assigned numbers  
980:: :: Protocol document order information  
979:: :: PSN End-to-End functional specification  
968:: :: Twas the night before start-up  
967:: :: All victims together  
961:: S:: Official ARPA-Internet protocols  
960:: :: Assigned numbers  
945:: :: DoD statement on the NRC report  
944:: S:: Official ARPA-Internet protocols  
943:: :: Assigned numbers  
939:: :: Executive summary of the NRC report on transport  
protocols for Department of Defense data networks  
938:: E:: Internet Reliable Transaction Protocol functional  
and interface specification  
928:: :: Introduction to proposed DoD standard H-FP  
923:: :: Assigned numbers

909:: E:: Loader Debugger Protocol  
908:: E:: Reliable Data Protocol  
902:: :: ARPA Internet Protocol policy  
901:: S:: Official ARPA-Internet protocols  
900:: :: Assigned Numbers  
899:: :: Request For Comments summary notes  
880:: S:: Official protocols  
873:: :: Illusion of vendor support  
870:: :: Assigned numbers  
869:: H:: Host Monitoring Protocol  
852:: :: ARPANET short blocking feature  
847:: :: Summary of Smallberg surveys  
846:: :: Who talks TCP? - survey of 22 February 1983  
845:: :: Who talks TCP? - survey of 15 February 1983  
844:: :: "Who talks ICMP, too? - Survey of 18 February 1983"  
843:: :: Who talks TCP? - survey of 8 February 83  
842:: :: Who talks TCP? - survey of 1 February 83  
840:: S:: Official protocols  
839:: :: Who talks TCP?  
838:: :: Who talks TCP?  
837:: :: Who talks TCP?  
836:: :: Who talks TCP?  
835:: :: Who talks TCP?  
834:: :: Who talks TCP?  
833:: :: Who talks TCP?  
832:: :: Who talks TCP?  
831:: :: Backup access to the European side of SATNET  
828:: :: "Data communications  
825:: :: Request for comments on Requests For Comments  
820:: :: Assigned numbers  
817:: :: Modularity and efficiency in protocol implementation  
816:: :: Fault isolation and recovery  
806:: :: Proposed Federal Information Processing Standard  
800:: :: Request For Comments summary notes  
794:: :: Pre-emption  
790:: :: Assigned numbers  
776:: :: Assigned numbers  
774:: :: Internet Protocol Handbook  
770:: :: Assigned numbers  
766:: :: Internet Protocol Handbook  
762:: :: Assigned numbers  
758:: :: Assigned numbers  
755:: :: Assigned numbers  
750:: :: Assigned numbers  
745:: :: JANUS interface specifications  
739:: :: Assigned numbers  
717:: :: Assigned network numbers  
716:: :: Interim revision to [Appendix F](#) of BBN 1822  
708:: :: Elements of a distributed programming system  
705:: :: Front-end Protocol B6700 version  
700:: :: Protocol experiment

699:: :: Request For Comments summary notes  
694:: :: Protocol information  
686:: :: Leaving well enough alone  
684:: :: Commentary on procedure calling as a network protocol  
681:: :: Network UNIX  
678:: :: Standard file formats  
677:: :: Maintenance of duplicate databases  
672:: :: Multi-site data collection facility  
671:: :: Note on Reconnection Protocol  
667:: :: BBN host ports  
666:: :: Specification of the Unified User-Level Protocol  
663:: :: Lost message detection and recovery protocol  
661:: :: Protocol information  
645:: :: Network Standard Data Specification syntax  
643:: :: Network Debugging Protocol  
642:: :: Ready line philosophy and implementation  
638:: :: IMP/TIP preventive maintenance schedule  
637:: :: Change of network address for SU-DSL  
635:: :: Assessment of ARPANET protocols  
634:: :: Change in network address for Haskins Lab  
631:: :: International meeting on minicomputers and data  
communication  
629:: :: Scenario for using the Network Journal  
628:: :: Status of RFC numbers and a note on pre-assigned  
journal numbers  
621:: :: NIC user directories at SRI ARC  
617:: :: Note on socket number assignment  
609:: :: Statement of upcoming move of NIC/NLS service  
604:: :: Assigned link numbers  
603:: :: Response to [RFC 597](#)  
602:: :: The stockings were hung by the chimney with care  
598:: :: "RFC index - December 5, 1973"  
597:: :: Host status  
590:: :: MULTICS address change  
588:: :: London node is now up  
585:: :: ARPANET users interest working group meeting  
584:: :: Charter for ARPANET Users Interest Working Group  
582:: :: Comments on [RFC 580](#)  
581:: :: Corrections to [RFC 560](#)  
580:: :: Note to protocol designers and implementers  
578:: :: Using MIT-Mathlab MACSYMA from MIT-DMS Muddle  
569:: H:: NETED  
552:: :: Single access to standard protocols  
547:: :: Change to the Very Distant Host specification  
544:: :: Locating on-line documentation at SRI-ARC  
537:: :: Announcement of NGG meeting July 16-17  
530:: :: Report on the Survey project  
529:: :: Note on protocol synch sequences  
527:: :: ARPAWOCKY  
526:: :: Technical meeting  
523:: :: SURVEY is in operation again

519:: :: Resource evaluation  
518:: :: ARPANET accounts  
515:: :: Specifications for datalanguage  
503:: :: Socket number list  
496:: :: TNLS quick reference card is available  
494:: :: Availability of MIX and MIXAL in the Network  
492:: :: Response to [RFC 467](#)  
491:: :: "What is ""Free""?"  
483:: :: Cancellation of the resource notebook framework meeting  
474:: :: Announcement of NGWG meeting  
464:: :: Resource notebook framework  
462:: :: Responding to user needs  
457:: :: TIPUG  
456:: :: Memorandum  
441:: :: Inter-Entity Communication - an experiment  
440:: :: Scheduled network software maintenance  
439:: :: PARRY encounters the DOCTOR  
433:: :: Socket number list  
432:: :: Network logical map  
425:: :: But my NCP costs \$500 a day  
419:: :: To  
405:: :: Correction to [RFC 404](#)  
404:: :: Host address changes involving Rand and ISI  
403:: :: Desirability of a network 1108 service  
402:: :: ARPA Network mailing lists  
401:: :: Conversion of NGP-0 coordinates to device specific  
coordinates  
390:: :: TSO scenario  
379:: :: Using TSO at CCN  
376:: :: Network host status  
372:: :: Notes on a conversation with Bob Kahn on the ICC  
371:: :: Demonstration at International Computer Communications  
Conference  
370:: :: Network host status  
363:: :: ARPA Network mailing lists  
356:: :: ARPA Network Control Center  
355:: :: Response to NWG/RFC 346  
350:: :: User accounts for UCSB On-Line System  
349:: :: Proposed standard socket numbers  
345:: :: Interest in mixed integer programming MPSX on NIC  
360/91 at CCN  
334:: :: Network use on May 8  
331:: :: IMP System change notification  
330:: :: Network host status  
329:: :: ARPA Network mailing lists  
327:: :: Data and File Transfer workshop notes  
322:: :: Well known socket numbers  
321:: :: CBI networking activity at MITRE  
320:: :: Workshop on hard copy line printers  
319:: :: Network host status  
317:: :: Official Host-Host Protocol modification

316:: :: ARPA Network Data Management Working Group  
315:: :: Network host status  
313:: :: Computer based instruction  
305:: :: Unknown host numbers  
303:: :: ARPA Network mailing lists  
295:: :: "Report of the Protocol Workshop, 12 October 1971"  
291:: :: Data management meeting announcement  
290:: :: Computer networks and data sharing  
282:: :: Graphics meeting report  
276:: :: NIC course  
270:: :: Correction to BBN Report No. 1822 NIC NO 7958  
269:: :: Some experience with file transfer  
263:: :: Very Distant Host interface  
256:: :: IMPSYS change notification  
254:: :: Scenarios for using ARPANET computers  
253:: :: Second Network Graphics meeting details  
249:: :: Coordination of equipment and supplies purchase  
246:: :: Network Graphics meeting  
245:: :: Reservations for Network Group meeting  
243:: :: Network and data sharing bibliography  
242:: :: Data descriptive language for shared data  
240:: :: Site status  
239:: :: Host mnemonics proposed in [RFC 226](#) NIC 7625  
235:: :: Site status  
234:: :: Network Working Group meeting schedule  
232:: :: Postponement of network graphics meeting  
228:: :: Clarification  
225:: :: Rand/UCSB network graphics experiment  
223:: :: Network Information Center schedule for network users  
219:: :: User's view of the datacomputer  
218:: :: Changing the IMP status reporting facility  
214:: :: Network checkpoint  
213:: :: IMP System change notification  
211:: :: ARPA Network mailing lists  
209:: :: Host/IMP interface documentation  
208:: :: Address tables  
207:: :: September Network Working Group meeting  
204:: :: Sockets in use  
200:: :: RFC list by number  
198:: :: Site certification - Lincoln Labs 360/67  
195:: :: Data computers-data descriptions and access language  
194:: :: Data Reconfiguration Service - compiler/interpreter  
implementation notes  
187:: :: Network/440 protocol concept  
186:: :: Network graphics loader  
185:: :: NIC distribution of manuals and handbooks  
182:: :: Compilation of list of relevant site reports  
180:: :: File system questionnaire  
179:: :: Link number assignments  
173:: :: Network data management committee meeting announcement  
171:: :: Data Transfer Protocol



170:: :: RFC list by number  
169:: :: Computer networks  
168:: :: ARPA Network mailing lists  
167:: :: Socket conventions reconsidered  
164:: :: "Minutes of Network Working Group meeting, 5/16  
through 5/19/71 "  
162:: :: NETBUGGER3  
160:: :: RFC brief list  
157:: :: Invitation to the Second Symposium on Problems in the  
Optimization of Data Communications Systems  
155:: :: ARPA Network mailing lists  
154:: :: Exposition style  
149:: :: Best laid plans  
148:: :: Comments on [RFC 123](#)  
147:: :: Definition of a socket  
140:: :: Agenda for the May NWG meeting  
138:: :: Status report on proposed Data Reconfiguration Service  
136:: :: Host accounting and administrative procedures  
135:: :: Response to NWG/RFC 110  
132:: :: Typographical error in [RFC 107](#)  
131:: :: Response to [RFC 116](#)  
130:: :: Response to [RFC 111](#)  
129:: :: Request for comments on socket name structure  
126:: :: Graphics facilities at Ames Research Center  
124:: :: Typographical error in [RFC 107](#)  
121:: :: Network on-line operators  
120:: :: Network PL1 subprograms  
119:: :: Network Fortran subprograms  
118:: :: Recommendations for facility documentation  
117:: :: Some comments on the official protocol  
116:: :: Structure of the May NWG meeting  
115:: :: Some Network Information Center policies on handling  
documents  
113:: :: Network activity report  
112:: :: User/Server Site Protocol  
111:: :: Pressure from the chairman  
109:: :: Level III Server Protocol for the Lincoln Laboratory  
NIC 360/67 Host  
108:: :: "Attendance list at the Urbana NWG meeting, February  
17-19,1971 "  
107:: :: Output of the Host-Host Protocol glitch cleaning committee  
106:: :: User/Server Site Protocol network host questionnaire  
104:: :: Link 191  
103:: :: Implementation of interrupt keys  
102:: :: Output of the Host-Host Protocol glitch cleaning committee  
101:: :: "Notes on the Network Working Group meeting,  
Urbana, Illinois, February 17, 1971"  
100:: :: Categorization and guide to NWG/RFCs  
99:: :: Network meeting  
95:: :: Distribution of NWG/RFC's through the NIC  
90:: :: CCN as a network service center

89:: :: Some historic moments in networking  
87:: :: Topic for discussion at the next Network Working Group meeting  
85:: :: Network Working Group meeting  
84:: :: List of NWG/RFC's 1-80  
82:: :: Network meeting notes  
81:: :: Request for reference information  
78:: :: NCP status report  
77:: :: Network meeting report  
76:: :: Connection by name  
75:: :: Network meeting  
74:: :: Specifications for network use of the UCSB On-Line System  
73:: :: Response to NWG/RFC 67  
72:: :: Proposed moratorium on changes to network protocol  
71:: :: Reallocation in case of input error  
69:: :: Distribution list change for MIT  
68:: :: "Comments on memory allocation control commands  
66:: :: NIC - third level ideas and other noise  
64:: :: Getting rid of marking  
63:: :: Belated network meeting report  
61:: :: Note on interprocess communication in a resource sharing computer network  
57:: :: Thoughts and reflections on NWG/RFC 54  
52:: :: Updated distribution list  
51:: :: Proposal for a Network Interchange Language  
50:: :: Comments on the Meyer proposal  
49:: :: Conversations with S. Crocker UCLA  
48:: :: Possible protocol plateau  
47:: :: BBN's comments on NWG/RFC #33  
46:: :: ARPA Network protocol notes  
45:: :: New protocol is coming  
44:: :: Comments on NWG/RFC 33 and 36  
43:: :: Proposed meeting [LIL]  
40:: :: More comments on the forthcoming protocol  
39:: :: Comments on protocol re  
37:: :: "Network meeting epilogue, etc"  
36:: :: Protocol notes  
35:: :: Network meeting  
34:: :: Some brief preliminary notes on the Augmentation Research Center clock  
31:: :: Binary message forms in computer  
30:: :: Documentation conventions  
27:: :: Documentation conventions  
25:: :: No high link numbers  
24:: :: Documentation conventions  
21:: :: Network meeting  
16:: :: M.I.T  
15:: :: Network subsystem for time sharing hosts  
13:: :: [Referring to NWG/RFC 11]  
11:: :: Implementation of the Host-Host software procedures in GORDO

```

10::  :: Documentation conventions
9::   :: Host software
8::   :: Functional specifications for the ARPA Network
7::   :: Host-IMP interface
6::   :: Conversation with Bob Kahn
5::   :: Decode Encode Language
4::   :: Network timetable
3::   :: Documentation conventions
2::   :: Host software
1::   :: Host software

```

## Appendix B: Automatic Script to Implement Methodology

```

#!/usr/bin/perl

# Program to read text files (such as RFCs and Internet Drafts) and
#   output items that might relate to year 2000 issues, particularly
#   2-digit years.

# Version 1.1. By Paul Hoffman (phoffman@imc.org). This is a
#   quick-and-dirty hack and could be written more elegantly and
#   more efficiently. There may be bugs in this software. For
#   example, there was an off-by-one-line bug in version 1.0.
#   Use this code at your own risk. This code may be freely
#   redistributed.

# Some people like using disk files, others like STDIN and STDOUT.
#   This program accomodates both types by setting the $UsageType
#   variable. 'file' means input comes from the first argument on
#   the command line, output goes to that filename with a ".out"
#   extension; 'std' means STDIN and STDOUT.
$UsageType = 'file'; # Should be 'file' or 'std'

# @CheckWords is a list of words to look for. This list is used in
#   addition to the automatic checking for "yy" on a line without "YYYY".
#   You might want to add "year yyyy" to this list, but then a large
#   proportion of the RFCs and drafts get selected

@CheckWords = qw(UTCTime two-digit 2-digit 2digit century 1900 2000);

if($UsageType eq 'file') {
    if($ARGV[0] eq '')
        { die "You must specify the name of the file to open.\n" }
    $InName = $ARGV[0];
    unless(-r $InName) { die "Could not read $InName.\n" }
    open(IN, $InName) or die "Could not open $InName.\n";
    $OutName = "$InName.out";
    open(OUT, ">$OutName") or die "Could not write to $OutName.\n";
    $OutStuff = ''; # Holder for what we're going to print out

```

```

} else { # Do STDIN and STDOUT
    open(IN, "-"); open(OUT, ">-");
}

# Read the whole file into an array. This is a tad wasteful of memory
# but makes the output easier.
@All = ();
while(<IN>) { push(@All, $_) }
$LastLine = $#All;

# Process the instance of "yy" not followed by "yy"
for($i = 0; $i <= $LastLine; $i += 1 ) {
    next unless(grep(/yy/i, $All[$i]));
    next if(grep(/yyyy/i, $All[$i]));
    &PrintFive($i, "'yy' on a line without 'yyyy'");
}

# Next do the words that should cause extra concern
foreach $Word (@CheckWords) {
    for($i = 0; $i <= $LastLine; $i += 1 ) {
        next unless(grep(/$Word/i, $All[$i]));
        &PrintFive($i, "$Word");
    }
}

# All done. If writing to a file, and nothing got written, delete the
# file so that you can quickly scan for the ".out" files.
# (A better-written program would have waited to do the opens
# until here so the unlink wouldn't be necessary. Oh, well.)
if($UsageType eq 'file') {
    if(length($OutStuff) > 0) {
        $OutStuff = "+====+ File $InName +====+ \n$OutStuff\n";
        print OUT $OutStuff; close(OUT);
    } else { # Nothing to put in the .out
        close(OUT);
        unlink($OutName) or die "Couldn't unlink $OutName\n";
    }
}
exit;

# Print the five lines around the word found
sub PrintFive {
    my $Where = shift(@_); my $Msg = shift(@_);
    my ($WhereRealLine, $Start, $End, $j);

    $WhereRealLine = $Where + 1;
    $OutStuff .= "$Msg found at line $WhereRealLine:\n";
    $Start = $WhereRealLine - 2; $End = $WhereRealLine + 2;
    if($Where < 2) { $Start = 0 }
    if($Where > $LastLine - 2) { $End = $LastLine }
    for($j = $Start; $j <= $End; $j += 1) { $OutStuff .= "$j: "

```

```

        . $All[$j-1] }
    $OutStuff .= "\n";
}

```

Appendix C: Output of the script in [Appendix B](#) on all RFC's from 1 through 2479

+++++ File [rfc0052.txt](#) +++++

[2000](#) found at line 141:

```

139:
140:      Chuck Rose                      Case University
141:      Jennings Computing Center       (216) 368-2000
142:      Case Western Reserve University x2808
143:      10900 Euclid Avenue

```

+++++ File [rfc0090.txt](#) +++++

[2000](#) found at line 71:

```

69:                                consoles);
70:
71:                                j) Six data communication ports (3 dial @ 2000 baud,
72:                                1 dedicated @ 4800 baud, and 2 dedicated @ 50,000
73:                                baud) for remote batch entry terminals;

```

+++++ File [rfc0230.txt](#) +++++

[2000](#) found at line 92:

```

90:  as for conventional synchronous block communication, since start and
91:  stop bits for each character would need to be transmitted. This loss
92:  is not substantial and does occur now for 2000 bps TIP-terminal
93:  communication.
94:

```

[2000](#) found at line 134:

```

132:  92 transmitting sites in the U.S. and Canada were used with standard
133:  Bell System Dataphone datasets used at both ends. At both 1200 and
134:  2000 bps, approximately 82% of the calls had error rates of 1 error in
135:  10^5 bits or better, assuming an equal number of short, medium, and
136:  long hauls.

```

+++++ File [rfc0241.txt](#) +++++

[2000](#) found at line 32:

```

30:      justifiable on the basis that the IMP and Host computers were
31:      expected to be either in the same room (up to 30 feet of cable) or,
32:      via the Distant Host option, within 2000 feet on well- controlled,
33:      shielded cables. A connection through common carrier facilities is
34:      not comparably free of errors. Usage of common- carrier lines for

```

+++++ File [rfc0263.txt](#) +++++

[2000](#) found at line 22:

20: of the occasional desire to interface a Host to some IMP via a  
21: long-distance connection (where long-distance, in this context,  
22: is any cable run longer than 2000 feet but may typically be tens  
23: of miles) via either a hard-wire or telephone circuit. We believe  
24: that any good solution to the general problem of interfacing Hosts

+=+=+=+= File [rfc0662.txt](#) +=+=+=+=

[2000](#) found at line 143:

141: by a rather short cable (approximately 100 feet long.) The CISL Multics i  
142: connected to the IMP number 6 (port 0) by an approximately 1500 feet long  
143: 80th IMPs are in close physical proximity (approximately 2000 feet,) and  
144: connected to each other by a 50 kilobits per second line. The results giv  
145: above show considerable improvement in the performance with the new IMP D

+=+=+=+= File [rfc0713.txt](#) +=+=+=+=

[2000](#) found at line 830:

828: succeeding bytes in the stream used to encode the object.  
829:  
830: A data object requiring 20000 (47040 octal) bytes would  
831: appear in the stream as follows.  
832:

[2000](#) found at line 837:

835: 10000010 -- specifying that the next 2 bytes  
836: contain the stream length  
837: 01001110 -- first byte of number 20000  
838: 00100000 -- second byte  
839: .

[2000](#) found at line 845:

843: .  
844:  
845: Interpretation of the contents of the 20000 bytes in  
846: the stream can be performed by a module which knows the  
847: specific format of the non-atomic type specified by DEFGH in

+=+=+=+= File [rfc0724.txt](#) +=+=+=+=

2-digit found at line 1046:

1044:			<4-digit-year>
1045:	<slash-date>	::=	<numeric-month> "/" <date-of-month>
1046:			"/" <2-digit-year>
1047:	<numeric-month>	::=	<one or two decimal digits>
1048:	<day-of-month>	::=	<one or two decimal digits>

2-digit found at line 1062:

1060:			"December"   "Dec"
1061:	<4-digit-year>	::=	<four decimal digits>

```
1062:          <2-digit-year>      ::=  <two decimal digits>
1063:          <time>                ::=  <24-hour-time> "-" <time-zone>
1064:          <24-hour-time>        ::=  <hour> <minute>
```

2-digit found at line 1675:

```
1673:          A.  ALPHABETICAL LISTING OF SYNTAX RULES
1674:
1675:          <2-digit-year>      ::=  <two decimal digits>
1676:          <4-digit-year>      ::=  <four decimal digits>
1677:          <24-hour-time>      ::=  <hour> <minute>
```

2-digit found at line 1829:

```
1827:
1828:          <slash-date>        ::=  <numeric-month> "/" <date-of-month>
1829:                                     "/" <2-digit-year>
1830:          <space>              ::=  <TELNET ASCII space (decimal 32)>
1831:
```

+++++ File [rfc0731.txt](#) +++++

[2000](#) found at line 1571:

```
1569:          RFC 728, 1977.
1570:
1571:          9.  Hazeltine 2000 Desk Top Display Operating Instructions.
1572:              Hazeltine IB-1866A, 1870.
1573:
```

+++++ File [rfc0732.txt](#) +++++

[2000](#) found at line 1681:

```
1679:          1977.
1680:
1681:          9.  Hazeltine 2000 Desk Top Display Operating Instructions. Hazeltine
1682:              IB-1866A, 1870.
1683:
```

+++++ File [rfc0733.txt](#) +++++

2-digit found at line 333:

```
331:
332:  "<n>(element)" is equivalent to "<n>*<n>(element)"; that is,
333:  exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit
334:  number, and 3ALPHA is a string of three alphabetic characters.
335:
```

2digit found at line 333:

```
331:
332:  "<n>(element)" is equivalent to "<n>*<n>(element)"; that is,
333:  exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit
334:  number, and 3ALPHA is a string of three alphabetic characters.
335:
```

2digit found at line 947:

```
945:          / "Sunday"      / "Sun"
946:
947:  date      =  1*2DIGIT ["-"] month          ; day month year
948:          ["-"] (2DIGIT /4DIGIT)          ; e.g. 20 Aug [19]77
949:
```

2digit found at line 948:

```
946:
947:  date      =  1*2DIGIT ["-"] month          ; day month year
948:          ["-"] (2DIGIT /4DIGIT)          ; e.g. 20 Aug [19]77
949:
950:  month     =  "January"    / "Jan"    / "February"    / "Feb"
```

2digit found at line 967:

```
965:                                     ; (seconds optional)
966:
967:  hour      =  2DIGIT [":"] 2DIGIT [ [":"] 2DIGIT ]
968:                                     ; 0000[00] - 2359[59]
969:
```

2digit found at line 1718:

```
1716:  CTL      =  <any TELNET ASCII control character and DEL>
1717:
1718:  date      =  1*2DIGIT ["-"] month ["-"] (2DIGIT /4DIGIT)
1719:  date-field =  "Date"          ":" date-time
1720:  date-time =  [ day-of-week "," ] date time
```

2digit found at line 1754:

```
1752:  host-indicator =  1*( ("at" / "@") node )
1753:  host-phrase    =  phrase host-indicator
1754:  hour          =  2DIGIT [":"] 2DIGIT [ [":"] 2DIGIT ]
1755:  HTAB          =  <TELNET ASCII horizontal-tab>
1756:
```

+=+=+=+=+= File [rfc0734](#).txt +=+=+=+=+=

[2000](#) found at line 184:

```
182:  Bit name  Value          Meaning
183:
184:  %TOALT      200000,,0      characters 175 and 176 are converted
185:                      altmode (033) on input.
186:
```

[2000](#) found at line 264:

```
262:                      NORMALLY OFF.
263:
264:  %TOSA1      2000,,0      characters 001-037 should be displa
265:                      using the Stanford/ITS extended ASCII
266:                      graphics character set instead of uparrow
```



[2000](#) found at line 354:

```
352: %TXTOP      4000      This character has the [TOP] key depressed.
353:
354: %TXSFL       2000      Reserved, must be zero.
355:
356: %TXSFT       1000      Reserved, must be zero.
```

[2000](#) found at line 634:

```
632: Value      Key
633:
634:    2000      Reserved
635:    1000      Reserved
636:    0400      <META>
```

+==+==+==+ File [rfc0738](#).txt +==+==+==+

[1900](#) found at line 41:

```
39: without sending anything.
40:
41: The time is the number of seconds since 0000 (midnight) 1 January 1900
42: GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT; this
43: base will serve until the year 2036. As a further example, the most
```

[1900](#) found at line 42:

```
40:
41: The time is the number of seconds since 0000 (midnight) 1 January 1900
42: GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT; this
43: base will serve until the year 2036. As a further example, the most
44: recent leap year as of this writing began from the time 2,398,291,200
```

+==+==+==+ File [rfc0745](#).txt +==+==+==+

[2000](#) found at line 562:

```
560: Circuits, EIA standard RS-422," April 1975; Engineering Dept.,
561: Electronic Industries Assn., 2001 Eye St., N.W., Washington, D.C.,
562: 20006.
563:
564: REA bulletin 345-67, Rural Electrification Admin., U.S. Dept. of
```

+==+==+==+ File [rfc0746](#).txt +==+==+==+

'yy' on a line without 'yyyy' found at line 341:

```
339:          %TDGRF                      ;Enter graphics.
340:          %GOCLR                       ;Clear the screen.
341:          %GOMVA xx yy                 ;Set cursor.
342:          %GODLA xx yy                 ;Draw line from there.
343:          << repeat last two commands for each line >>
```

'yy' on a line without 'yyyy' found at line 342:

```
340:          %GOCLR                       ;Clear the screen.
```

```
341:          %GOMVA xx yy          ;Set cursor.
342:          %GODLA xx yy          ;Draw line from there.
343:          << repeat last two commands for each line >>
344:          %TDNOP                  ;Exit graphics.
```

[2000](#) found at line 859:

```
857: %TRGIN  0,,400000  terminal can provide graphics input.
858:
859: %TRGHC   0,,200000  terminal has a hard-copy device to which output can
860:                      be diverted.
861:
```

+=+=+=+=+= File [rfc0752](#).txt +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 218:

```
216: word 4          The name of the site in SIXBIT.
217: word 5          The user name who compiled the file, usually in SIXBIT.
218: word 6          Date of compilation as SIXBIT YYMMDD.
219: word 7          Time of compilation as SIXBIT HHMMSS.
220: word 8          Address in file of NAME table.
```

+=+=+=+=+= File [rfc0754](#).txt +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 76:

```
74:
75: Messages are transmitted as a character string to an address which is
76: specified "outside" the message. The destination host ("YYY") is
77: specified to the sending (or user) FTP as the argument of the "open
78: connection" command, and the destination user ("XXX") is specified to
```

'yy' on a line without 'yyyy' found at line 81:

```
79: the receiving (or server) FTP as the argument of the "MAIL" (or "MLFL")
80: command. In Tenex, when mail is queued this outside information is
81: saved in the file name ("[--].XXX@YYY").
82:
83: The proposed solutions are briefly characterized.
```

'yy' on a line without 'yyyy' found at line 239:

```
237:
238:
239: "[--].XXX@YYY", not anything from the header. Only the string "XXX"
240: is passed to the FTP server.
241:
```

+=+=+=+=+= File [rfc0759](#).txt +=+=+=+=+=

two-digit found at line 1414:

```
1412:          yyyy-mm-dd-hh:mm:ss,fff+hh:mm
1413:
1414:          Where yyyy is the four-digit year, mm is the two-digit month, dd is
1415:          the two-digit day, hh is the two-digit hour in 24 hour time, mm is
```

1416:        the two-digit minute, ss is the two-digit second, and fff is the  
two-digit found at line 1415:

1413:  
1414:        Where yyyy is the four-digit year, mm is the two-digit month, dd is  
1415:        the two-digit day, hh is the two-digit hour in 24 hour time, mm is  
1416:        the two-digit minute, ss is the two-digit second, and fff is the  
1417:        decimal fraction of the second. To this basic date and time is

two-digit found at line 1416:

1414:        Where yyyy is the four-digit year, mm is the two-digit month, dd is  
1415:        the two-digit day, hh is the two-digit hour in 24 hour time, mm is  
1416:        the two-digit minute, ss is the two-digit second, and fff is the  
1417:        decimal fraction of the second. To this basic date and time is  
1418:        appended the offset from Greenwich as plus or minus hh hours and mm

+=+=+=+=+= File [rfc0767.txt](#) +=+=+=+=+=

two-digit found at line 710:

708:        yyyy-mm-dd-hh:mm:ss,fff+hh:mm

709:  
710:        Where yyyy is the four-digit year, mm is the two-digit month, dd is  
711:        the two-digit day, hh is the two-digit hour in 24 hour time, mm is  
712:        the two-digit minute, ss is the two-digit second, and fff is the

two-digit found at line 711:

709:  
710:        Where yyyy is the four-digit year, mm is the two-digit month, dd is  
711:        the two-digit day, hh is the two-digit hour in 24 hour time, mm is  
712:        the two-digit minute, ss is the two-digit second, and fff is the  
713:        decimal fraction of the second. To this basic date and time is

two-digit found at line 712:

710:        Where yyyy is the four-digit year, mm is the two-digit month, dd is  
711:        the two-digit day, hh is the two-digit hour in 24 hour time, mm is  
712:        the two-digit minute, ss is the two-digit second, and fff is the  
713:        decimal fraction of the second. To this basic date and time is  
714:        appended the offset from Greenwich as plus or minus hh hours and mm

+=+=+=+=+= File [rfc0786.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 71:

69:  
70:        The date-time will be in the default TOPS20 ODTIM format  
71:        "dd-mmm-yy hh:mm:ss" (24 hour time).  
72:  
73:        The files will named "arbitrary.NIMAIL.-1", where "arbitrary" will

+=+=+=+=+= File [rfc0788.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 1592:

```

1590:          <daytime> ::= "at" <SP> <date> <SP> <time>
1591:
1592:          <date> ::= <dd> "-" <mon> "-" <yy>
1593:
1594:          <time> ::= <hh> ":" <mm> ":" <ss> "-" <zone>

```

'yy' on a line without 'yyyy' found at line 1602:

```

1600:          "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "DEC"
1601:
1602:          <yy> ::= the two decimal integer year of the century in the
1603:                   range 01 to 99.
1604:

```

century found at line 1602:

```

1600:          "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "DEC"
1601:
1602:          <yy> ::= the two decimal integer year of the century in the
1603:                   range 01 to 99.
1604:

```

+++++ File [rfc0809.txt](#) +++++

[2000](#) found at line 3349:

```

3347:
3348:          #define WID      00000000    /* Write Image Data */
3349:          #define WGD      00200000    /* Write Graphic Data */
3350:          #define WAC      00220000    /* Write AlphanumCh */
3351:

```

[2000](#) found at line 3350:

```

3348:          #define WID      00000000    /* Write Image Data */
3349:          #define WGD      00200000    /* Write Graphic Data */
3350:          #define WAC      00220000    /* Write AlphanumCh */
3351:
3352:          #define LWM      00240000    /* Load Write Mode */

```

[2000](#) found at line 3379:

```

3377:
3378:          #define ERS      00300000    /* Erase */
3379:          #define ERL      00320000    /* Erase Line */
3380:          #define SLU      00340000    /* Special Location Update */
3381:          #define SCRL_ZAP 0100        /* unlimited scroll speed */

```

[2000](#) found at line 3392:

```

3390:          #define LLB      00700000    /* Load Lb */
3391:          #define LLC      00740000    /* Load Lc */
3392:          #define LGW      020000      /* perform write */
3393:
3394:          #define NOP      01100000    /* No-Operation */

```

[2000](#) found at line 3396:

```

3394:      #define NOP      0110000    /* No-Operation */
3395:
3396:      #define SPD        0120000    /* Select Special Device */
3397:      #define LPA        0130000    /* Load Peripheral Address */
3398:      #define LPR        0140000    /* Load Peripheral Register */

```

[2000](#) found at line 3405:

```

3403:      #define    ALPHA    06000    /* LPR - Alphanumeric data */
3404:      #define    GRAPH    04000    /* LPR - Graphic data */
3405:      #define    IMAGE    02000    /* LPR - Image data */
3406:      #define    LTHENH    01000    /* take lo byte then hi byte */
3407:      #define    DROPBYTE 0400    /* drop last byte */

```

[2000](#) found at line 3408:

```

3406:      #define    LTHENH    01000    /* take lo byte then hi byte */
3407:      #define    DROPBYTE 0400    /* drop last byte */
3408:      #define    INTERR    02000    /* SPD - Interrupt Enable */
3409:      #define    TEST      04000    /* SPD - Diagnostic Test */
3410:

```

+++++ File [rfc0810.txt](#) +++++

'yy' on a line without 'yyyy' found at line 146:

```

144:      , (comma)          is used as a data element delimiter
145:
146:      XXX/YYY            indicates protocol information of the type
147:                        TRANSPORT/SERVICE.
148:

```

+++++ File [rfc0820.txt](#) +++++

[2000](#) found at line 674:

```

672:      014.000.000.001    311031700035 00      PURDUE-TN      [CXK]
673:      014.000.000.002    311060800027 00      UWISC-TN       [CXK]
674:      014.000.000.003    311030200024 00      UDEL-TN       [CXK]
675:      014.000.000.004    234219200149 23      UCL-VTEST     [PK]
676:      014.000.000.005    234219200300 23      UCL-TG        [PK]

```

+++++ File [rfc0821.txt](#) +++++

'yy' on a line without 'yyyy' found at line 1944:

```

1942:      <daytime> ::= <SP> <date> <SP> <time>
1943:
1944:      <date> ::= <dd> <SP> <mon> <SP> <yy>
1945:
1946:      <time> ::= <hh> ":" <mm> ":" <ss> <SP> <zone>

```

'yy' on a line without 'yyyy' found at line 1954:

```

1952:      "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "DEC"
1953:
1954:      <yy> ::= the two decimal integer year of the century in the

```

1955: range 00 to 99.  
1956:

century found at line 1954:

1952: "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "DEC"  
1953:  
1954: <yy> ::= the two decimal integer year of the century in the  
1955: range 00 to 99.  
1956:

+++++= File [rfc0822.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 1635:

1633: 5.1. SYNTAX  
1634:  
1635: date-time = [ day "," ] date time ; dd mm yy  
1636: ; hh:mm:ss zzz  
1637:

'yy' on a line without 'yyyy' found at line 2701:

2699: dates = orig-date ; Original  
2700: [ resent-date ] ; Forwarded  
2701: date-time = [ day "," ] date time ; dd mm yy  
2702: ; hh:mm:ss zzz  
2703: day = "Mon" / "Tue" / "Wed" / "Thu"

2-digit found at line 344:

342:  
343: "<n>(element)" is equivalent to "<n>\*<n>(element)"; that is,  
344: exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit  
345: number, and 3ALPHA is a string of three alphabetic characters.  
346:

2digit found at line 344:

342:  
343: "<n>(element)" is equivalent to "<n>\*<n>(element)"; that is,  
344: exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit  
345: number, and 3ALPHA is a string of three alphabetic characters.  
346:

2digit found at line 1641:

1639: / "Fri" / "Sat" / "Sun"  
1640:  
1641: date = 1\*2DIGIT month 2DIGIT ; day month year  
1642: ; e.g. 20 Jun 82  
1643:

2digit found at line 1650:

1648: time = hour zone ; ANSI and Military  
1649:  
1650: hour = 2DIGIT ":" 2DIGIT [":" 2DIGIT]

```

1651:                                     ; 00:00:00 - 23:59:59
1652:

2digit found at line 2697:
2695:      CTL          = <any ASCII control          ; ( 0- 37, 0.- 31.)
2696:                  character and DEL>                ; (   177,   127.)
2697:      date          = 1*2DIGIT month 2DIGIT        ; day month year
2698:                  ; e.g. 20 Jun 82
2699:      dates         = orig-date                    ; Original

2digit found at line 2747:
2745:      field-name    = 1*<any CHAR, excluding CTLs, SPACE, and ":">
2746:      group          = phrase ":" [#mailbox] ";"
2747:      hour           = 2DIGIT ":" 2DIGIT [":" 2DIGIT]
2748:                  ; 00:00:00 - 23:59:59
2749:      HTAB           = <ASCII HT, horizontal-tab>   ; (   11,   9.)

+=+=+=+=+= File rfc0850.txt +=+=+=+=+=
'yy' on a line without 'yyyy' found at line 227:
225: network. One format that is acceptable to both is
226:
227:      Weekday, DD-Mon-YY HH:MM:SS TIMEZONE
228:
229: Several examples of valid dates appear in the sample

+=+=+=+=+= File rfc0867.txt +=+=+=+=+=
'yy' on a line without 'yyyy' found at line 67:
65:      Another popular syntax is that used in SMTP:
66:
67:      dd mmm yy hh:mm:ss zzz
68:
69:      Example:

+=+=+=+=+= File rfc0868.txt +=+=+=+=+=
1900 found at line 19:
17: This protocol provides a site-independent, machine readable date and
18: time. The Time service sends back to the originating source the time in
19: seconds since midnight on January first 1900.
20:
21: One motivation arises from the fact that not all systems have a

1900 found at line 83:
81: The Time
82:
83: The time is the number of seconds since 00:00 (midnight) 1 January 1900
84: GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT; this
85: base will serve until the year 2036.

```

[1900](#) found at line 84:

82:

83: The time is the number of seconds since 00:00 (midnight) 1 January 1900

84: GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT; this

85: base will serve until the year 2036.

86:

==== File [rfc0869](#).txt =====

[2000](#) found at line 1639:

1637:	400	HDH
1638:	1000	Cassette Writer
1639:	2000	Propagation Delay Measurement
1640:	4000	X25
1641:	10000	Profile Measurements

[2000](#) found at line 1642:

1640:	4000	X25
1641:	10000	Profile Measurements
1642:	20000	Self Authenticating Password
1643:	40000	Host traffic Matrix
1644:	100000	Experimental/Special

[2000](#) found at line 1669:

1667:	200	Trace ON
1668:	1000	Statistics ON
1669:	2000	Message Generator ON
1670:	4000	Packet Trace ON
1671:	10000	Host Data Checksum is BAD

[2000](#) found at line 1672:

1670:	4000	Packet Trace ON
1671:	10000	Host Data Checksum is BAD
1672:	20000	Reload Location SET
1673:		
1674:		

==== File [rfc0884](#).txt =====

[2000](#) found at line 236:

234:	GENERAL-TERMINAL-100A
235:	HAZELTINE-1500
236:	HAZELTINE-2000
237:	HP-2621
238:	HP-2640A

==== File [rfc0899](#).txt =====

[1900](#) found at line 337:

335: provides a site-independent, machine readable date and time. The

336: Time service sends back to the originating source the time in seconds



337: since midnight on January first 1900.  
338:  
339: 867 Postel May 83 Daytime Protocol

+++++ File [rfc0900](#).txt +++++

[2000](#) found at line 1595:

1593: HAZELTINE-1510  
1594: HAZELTINE-1520  
1595: HAZELTINE-2000  
1596: HP-2621  
1597: HP-2621A

+++++ File [rfc0909](#).txt +++++

'yy' on a line without 'yyyy' found at line 859:

857: responses from the target. A session begins when a host opens a  
858: transport connection to a target listening on a well known port.  
859: LDP uses RDP port number zzz or TCP port number yyy. When the  
860: connection has been established, the host sends a HELLO command,  
861: and the target replies with a HELLO\_REPLY. The HELLO\_REPLY

+++++ File [rfc0923](#).txt +++++

[2000](#) found at line 1769:

1767: HAZELTINE-1510  
1768: HAZELTINE-1520  
1769: HAZELTINE-2000  
1770: HP-2621  
1771: HP-2621A

+++++ File [rfc0937](#).txt +++++

'yy' on a line without 'yyyy' found at line 327:

325: FOLD mailbox - Error  
326: READ [n] #xxx  
327: RETR =yyy  
328: ACKS  
329: ACKD

+++++ File [rfc0943](#).txt +++++

[2000](#) found at line 1829:

1827: HAZELTINE-1510  
1828: HAZELTINE-1520  
1829: HAZELTINE-2000  
1830: HP-2621  
1831: HP-2621A

+++++ File [rfc0952](#).txt +++++

'yy' on a line without 'yyyy' found at line 159:  
157: ,(comma) is used as a data element delimiter  
158:  
159: XXX/YYY indicates protocol information of the type  
160: TRANSPORT/SERVICE.  
161:

==== File [rfc0956](#).txt =====

[1900](#) found at line 748:

746:  
747: 3. The data format should be based on the UDP Time format, which  
748: specifies 32-bit time in seconds since 1 January 1900, but  
749: extended additional bits for the fractional part of a second.  
750:

[1900](#) found at line 826:

824: experiment the results indicated by UDP and ICMP are compared. In  
825: the UDP Time protocol time is indicated as a 32-bit field in seconds  
826: past 0000 UT on 1 January 1900, while in the ICMP Timestamp message  
827: time is indicated as a 32-bit field in milliseconds past 0000 UT of  
828: each day.

[2000](#) found at line 1392:

1390:	CU-ARPA.CS.CORNELL.EDU	-1	-514
1391:	UCI-ICSE.ARPA	-1	-1896
1392:	UCI-ICSC.ARPA	1	2000
1393:	DCN9.ARPA	-7	-6610
1394:	TRANTOR.ARPA	10	10232

==== File [rfc0958](#).txt =====

century found at line 41:

39: NTP provides the protocol mechanisms to synchronize time in principle  
40: to precisions in the order of nanoseconds while preserving a  
41: non-ambiguous date, at least for this century. The protocol includes  
42: provisions to specify the precision and estimated error of the local  
43: clock and the characteristics of the reference clock to which it may

[1900](#) found at line 143:

141:  
142: NTP timestamps are represented as a 64-bit fixed-point number, in  
143: seconds relative to 0000 UT on 1 January 1900. The integer part is  
144: in the first 32 bits and the fraction part in the last 32 bits, as  
145: shown in the following diagram.

==== File [rfc0960](#).txt =====

[2000](#) found at line 1659:

1657:	014.000.000.018	2624-522-80900 52	DFVLR5-X25	[HDC1]
1658:	014.000.000.019	2041-170-10000 00	SHAPE-X25	[JFW]

1659:	014.000.000.020	5052-737-20000	50	UQNET	[AXH]
1660:	014.000.000.021	3020-801-00057	50	DMC-CRC1	[JR17]
1661:	014.000.000.022-014.255.255.254			Unassigned	[JBP]

[2000](#) found at line 1984:

1982: AEGIS  
1983: APOLLO  
1984: BS-2000  
1985: CEDAR  
1986: CGW

[2000](#) found at line 2350:

2348: HAZELTINE-1510  
2349: HAZELTINE-1520  
2350: HAZELTINE-2000  
2351: HP-2621  
2352: HP-2621A

+=+=+=+= File [rfc0973](#).txt +=+=+=+=

[2000](#) found at line 377:

375: We might add the following to the parent zone:  
376:  
377: 99.128.IN-ADDR.ARPA. 2000 NS Q.ISI.EDU.  
378: 2000 NS XX.MIT.EDU.  
379: Q.ISI.EDU. 2000 A <address of Q.ISI.EDU.>

[2000](#) found at line 378:

376:  
377: 99.128.IN-ADDR.ARPA. 2000 NS Q.ISI.EDU.  
378: 2000 NS XX.MIT.EDU.  
379: Q.ISI.EDU. 2000 A <address of Q.ISI.EDU.>  
380: XX.MIT.EDU. 2000 A <address of XX.MIT.EDU.>

[2000](#) found at line 379:

377: 99.128.IN-ADDR.ARPA. 2000 NS Q.ISI.EDU.  
378: 2000 NS XX.MIT.EDU.  
379: Q.ISI.EDU. 2000 A <address of Q.ISI.EDU.>  
380: XX.MIT.EDU. 2000 A <address of XX.MIT.EDU.>  
381:

[2000](#) found at line 380:

378: 2000 NS XX.MIT.EDU.  
379: Q.ISI.EDU. 2000 A <address of Q.ISI.EDU.>  
380: XX.MIT.EDU. 2000 A <address of XX.MIT.EDU.>  
381:  
382: and the following to the child zone:

[2000](#) found at line 384:

382: and the following to the child zone:  
383:

```
384:          99.128.IN-ADDR.ARPA. 2000 NS  Q.ISI.EDU.
385:          2000 NS  XX.MIT.EDU.
386:          5000 SOA <SOA information>
```

[2000](#) found at line 385:

```
383:
384:          99.128.IN-ADDR.ARPA. 2000 NS  Q.ISI.EDU.
385:          2000 NS  XX.MIT.EDU.
386:          5000 SOA <SOA information>
387:          Q.ISI.EDU.          2000 A    <address of Q.ISI.EDU.>
```

[2000](#) found at line 387:

```
385:          2000 NS  XX.MIT.EDU.
386:          5000 SOA <SOA information>
387:          Q.ISI.EDU.          2000 A    <address of Q.ISI.EDU.>
388:          XX.MIT.EDU.         2000 A    <address of XX.MIT.EDU.>
389:
```

[2000](#) found at line 388:

```
386:          5000 SOA <SOA information>
387:          Q.ISI.EDU.          2000 A    <address of Q.ISI.EDU.>
388:          XX.MIT.EDU.         2000 A    <address of XX.MIT.EDU.>
389:
390:      SOA serials
```

+=+=+=+=+= File [rfc0977](#).txt +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 814:

```
812:      the same format as the LIST command.
813:
814:      The date is sent as 6 digits in the format YYMMDD, where YY is the
815:      last two digits of the year, MM is the two digits of the month (with
816:      leading zero, if appropriate), and DD is the day of the month (with
```

century found at line 817:

```
815:      last two digits of the year, MM is the two digits of the month (with
816:      leading zero, if appropriate), and DD is the day of the month (with
817:      leading zero, if appropriate). The closest century is assumed as
818:      part of the year (i.e., 86 specifies 1986, 30 specifies 2030, 99 is
819:      1999, 00 is 2000).
```

[2000](#) found at line 819:

```
817:      leading zero, if appropriate). The closest century is assumed as
818:      part of the year (i.e., 86 specifies 1986, 30 specifies 2030, 99 is
819:      1999, 00 is 2000).
820:
821:      Time must also be specified. It must be as 6 digits HHMMSS with HH
```

[2000](#) found at line 1190:

```
1188:
1189:      (client asks for new newsgroups since April 3, 1985)
```

1190: C: NEWGROUPS 850403 020000  
1191:  
1192: S: 231 New newsgroups since 03/04/85 02:00:00 follow

[2000](#) found at line 1275:

1273:  
1274: (client asks for new newsgroups since 2 am, May 15, 1985)  
1275: C: NEWGROUPS 850515 020000  
1276: S: 235 New newsgroups since 850515 follow  
1277: S: net.fluff

[2000](#) found at line 1282:

1280:  
1281: (client asks for new news articles since 2 am, May 15, 1985)  
1282: C: NEWNEWS \* 850515 020000  
1283: S: 230 New news since 850515 020000 follows  
1284: S: <1772@foo.UUCP>

[2000](#) found at line 1283:

1281: (client asks for new news articles since 2 am, May 15, 1985)  
1282: C: NEWNEWS \* 850515 020000  
1283: S: 230 New news since 850515 020000 follows  
1284: S: <1772@foo.UUCP>  
1285: S: <87623@baz.UUCP>

+++++= File [rfc0985](#).txt +=+=+=+=

[2000](#) found at line 505:

503: Very Distant Host (VDH) methods are not recommended for new  
504: implementations. The Distant Host (DH) method is used when the  
505: host and IMP are separated by not more than about 2000 feet of  
506: cable, while the HDLC Distant Host is used for greater distances  
507: where a modem is required. Retransmission, resequencing and flow

+++++= File [rfc0987](#).txt +=+=+=+=

UTCTime found at line 1100:

1098: X.408 (sections [4.2.2](#) and [5.2.2](#)).  
1099:  
1100: 3.3.5. UTCTime  
1101:  
1102: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year

UTCTime found at line 1102:

1100: 3.3.5. UTCTime  
1101:  
1102: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year  
1103: (lowest two digits), Month, Day of Month, hour, minute, second  
1104: (optional), and Timezone. 822.date-time also contains an

UTCTime found at line 1107:

1105: optional day of the week, but this is redundant. Therefore a  
1106: symmetrical mapping can be made between these constructs <5>.  
1107: The UTCTime format which specifies the timezone offset should  
1108: be used, in line with CEN/CENELEC recommendations.  
1109:

UTCTime found at line 3395:

3393:  
3394: The extended syntax of zone defined in the JNT Mail Protocol  
3395: should be used in the mapping of UTCTime defined in chapter 3.  
3396:  
3397: 5. Lack of separate 822-P1 originator specification

UTCTime found at line 3910:

3908: <5> In practice, a gateway will need to parse various illegal  
3909: variants on 822.date-time. In cases where 822.date-time cannot  
3910: be parsed, it is recommended that the derived UTCTime is set to  
3911: the value at the time of translation.  
3912:

2digit found at line 2785:

2783: last-trace ";"  
2784: "ext" 1\*DIGIT  
2785: "flags" 2DIGIT  
2786: [ "intended" mailbox ] ";"  
2787: [ "info" printablestring ]

+++++= File [rfc0990](#).txt +=+=+=+=

[2000](#) found at line 2265:

2263:	014.000.000.018	2624-522-80900	52	DFVLR5-X25	[GB7]
2264:	014.000.000.019	2041-170-10000	00	SHAPE-X25	[JFW]
2265:	014.000.000.020	5052-737-20000	50	UQNET	[AXH]
2266:	014.000.000.021	3020-801-00057	50	DMC-CRC1	[JR17]
2267:	014.000.000.022	2624-522-80902	77	DFVLRVAX-X25	[GB7]

[2000](#) found at line 2584:

2582: AEGIS  
2583: APOLLO  
2584: BS-2000  
2585: CEDAR  
2586: CGW

[2000](#) found at line 2945:

2943: HAZELTINE-1510  
2944: HAZELTINE-1520  
2945: HAZELTINE-2000  
2946: HP-2621  
2947: HP-2621A

+++++= File [rfc0996](#).txt ++++++=

[2000](#) found at line 76:

74:

75: Process type: 000027 options: 040000

76: Subnet: DMV status: 376 hello: 15 timeout: 2000

77: Foreign address: [192.5.39.87] max size: 576

78: Input packets 3645 Output packets 3690

+++++= File [rfc1000](#).txt ++++++=

[1900](#) found at line 3105:

3103: protocol provides a site-independent, machine readable date and

3104: time. The Time service sends back to the originating source the

3105: time in seconds since midnight on January first 1900.

3106:

3107: 867 Postel May 83 Daytime Protocol

+++++= File [rfc1009](#).txt ++++++=

[2000](#) found at line 1412:

1410: method is used when the host and IMP (the Defense Communication

1411: Agency calls it a Packet Switch Node or PSN) are separated by not

1412: more than about 2000 feet of cable, while the HDLC Distant Host

1413: (HDH) is used for greater distances where a modem is required.

1414: Under HDH, retransmission, resequencing and flow control are

+++++= File [rfc1010](#).txt ++++++=

[2000](#) found at line 969:

967: 014.000.000.018 2624-522-80900 52 DFVLR5-X25 [GB7]

968: 014.000.000.019 2041-170-10000 00 SHAPE-X25 [JFW]

969: 014.000.000.020 5052-737-20000 50 UQNET [AXH]

970: 014.000.000.021 3020-801-00057 50 DMC-CRC1 [JR17]

971: 014.000.000.022 2624-522-80902 77 DFVLRVAX-X25 [GB7]

[2000](#) found at line 1353:

1351: AEGIS

1352: APOLLO

1353: BS-2000

1354: CEDAR

1355: CGW

[2000](#) found at line 1719:

1717: HAZELTINE-1510

1718: HAZELTINE-1520

1719: HAZELTINE-2000

1720: HP-2621

1721: HP-2621A

+++++= File [rfc1024](#).txt ++++++=

[1900](#) found at line 535:

533:

534: The local system clock, measured in milliseconds since 00:00 1  
535: January 1900 UTC. Assumed to be only a local estimate of the time.  
536: The value 0 is reserved for an uninitialized clock (For example, an  
537: uninitialized time-of-day chip.)

[1900](#) found at line 546:

544: A network synchronized clock, which is assumed to be synchronized  
545: across some part of a network. The clock value is measured in  
546: milliseconds since 00:00 1 January 1900 UTC. Specific information  
547: about the synchronization protocol is found in the system variable  
548: dictionary. The value 0 is used to indicate an uninitialized clock.

+=+=+=+= File [rfc1036](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 196:

194: both is:

195:

196: Wdy, DD Mon YY HH:MM:SS TIMEZONE

197:

198: Several examples of valid dates appear in the sample message above.

+=+=+=+= File [rfc1037](#).txt +=+=+=+=

[1900](#) found at line 541:

539: Date A numeric data token. The date is expressed in  
540: Universal Time format, which measures a time as  
541: the number of seconds since January 1, 1900, at  
542: midnight GMT.  
543:

[1900](#) found at line 2544:

2542: The creation date of the file. The date is expressed in Universal  
2543: Time format, which measures a time as the number of seconds since  
2544: January 1, 1900, at midnight GMT. Creation date does not necessarily  
2545: mean the time the file system created the directory entry or records  
2546: of the file. For systems that support modification or appending to

+=+=+=+= File [rfc1038](#).txt +=+=+=+=

[2000](#) found at line 317:

315:

316: The values of this field are assigned by DCA Code R130, Washington,  
317: D.C. 20305-2000. Each value corresponds to a requestor who, once  
318: assigned, becomes the authority for the remainder of the option  
319: definition for that value.

+=+=+=+= File [rfc1050](#).txt +=+=+=+=

[2000](#) found at line 323:



321: 7.3 Program Number Assignment  
322:  
323: Program numbers are given out in groups of hexadecimal 20000000  
324: (decimal 536870912) according to the following chart:  
325:

[2000](#) found at line 327:

325:  
326: 0 - 1fffffff defined by Sun  
327: 20000000 - 3fffffff defined by user  
328: 40000000 - 5fffffff transient  
329: 60000000 - 7fffffff reserved

+=+=+=+= File [rfc1057.txt](#) +=+=+=+=

[2000](#) found at line 339:

337: 7.3 Program Number Assignment  
338:  
339: Program numbers are given out in groups of hexadecimal 20000000  
340: (decimal 536870912) according to the following chart:  
341:

[2000](#) found at line 343:

341:  
342: 0 - 1fffffff defined by Sun  
343: 20000000 - 3fffffff defined by user  
344: 40000000 - 5fffffff transient  
345: 60000000 - 7fffffff reserved

+=+=+=+= File [rfc1059.txt](#) +=+=+=+=

century found at line 142:

140: mechanisms to synchronize time in principle to precisions in the  
141: order of nanoseconds while preserving a non-ambiguous date well into  
142: the next century. The protocol includes provisions to specify the  
143: characteristics and estimate the error of the local clock and the  
144: time server to which it may be synchronized. It also includes

[1900](#) found at line 574:

572: frequency to the TA time scale. At 0000 hours on 1 January 1972 the  
573: NTP time scale was set to 2,272,060,800, representing the number of  
574: TA seconds since 0000 hours on 1 January 1900. The insertion of leap  
575: seconds in UTC does not affect the oscillator itself, only the  
576: translation between TA and UTC, or conventional civil time. However,

[1900](#) found at line 649:

647: main product of the protocol, a special timestamp format has been  
648: established. NTP timestamps are represented as a 64-bit unsigned  
649: fixed-point number, in seconds relative to 0000 UT on 1 January 1900.  
650: The integer part is in the first 32 bits and the fraction part in the  
651: last 32 bits, as shown in the following diagram.

[1900](#) found at line 690:

688: the Integer Part) has been set and that the 64-bit field will  
689: overflow some time in 2036. Should NTP be in use in 2036, some  
690: external means will be necessary to qualify time relative to 1900 and  
691: time relative to 2036 (and other multiples of 136 years).  
692: Timestamped data requiring such qualification will be so precious

==== File [rfc1060](#).txt =====

'yy' on a line without 'yyyy' found at line 2324:

2322:	AB-00-03-00-00-00	6004	DEC Local Area Transport (LAT) - old
2323:	AB-00-04-00-xx-xx	????	Reserved DEC customer private use
2324:	AB-00-04-01-xx-yy	6007	DEC Local Area VAX Cluster groups
2325:			System Communication Architecture (SCA)
2326:	CF-00-00-00-00-00	9000	Ethernet Configuration Test protocol

[2000](#) found at line 2729:

2727:	014.000.000.018	2624-522-80900	52	FGAN-SIEMENS-X25	[GB7]
2728:	014.000.000.019	2041-170-10000	00	SHAPE-X25	[JFW]
2729:	014.000.000.020	5052-737-20000	50	UQNET	[AXH]
2730:	014.000.000.021	3020-801-00057	50	DMC-CRC1	[VXT]
2731:	014.000.000.022	2624-522-80329	02	FGAN-FGANFFMVAX-X25	[GB7]

[2000](#) found at line 3155:

3153:	AEGIS	MACOS	TP3010
3154:	APOLLO	MINOS	TRSDOS
3155:	BS-2000	MOS	ULTRIX
3156:	CEDAR	MPE5	UNIX
3157:	CGW	MSDOS	UNIX-BSD

[2000](#) found at line 3508:

3506:	HAZELTINE-1520	IBM-3278-5-E
3507:	HAZELTINE-1552	IBM-3279-2-E
3508:	HAZELTINE-2000	IBM-3279-3-E
3509:	HAZELTINE-ESPRIT	IMLAC
3510:	HP-2392	INFOTON-100

==== File [rfc1064](#).txt =====

'yy' on a line without 'yyyy' found at line 1321:

1319: "NO" SP text\_line / "BAD" SP text\_line)  
1320:  
1321: date ::= string in form "dd-mmm-yy hh:mm:ss-zzz"  
1322:  
1323: envelope ::= "(" env\_date SP env\_subject SP env\_from SP

==== File [rfc1085](#).txt =====

UTCTime found at line 1501:

1499:

```
1500:          commonReference
1501:          UTCTime,
1502:
1503:          additionalReferenceInformation[0]
```

==== File [rfc1094.txt](#) ===

[2000](#) found at line 878:

```
876:
877:      0040000 This is a directory; "type" field should be NFDIR.
878:      0020000 This is a character special file; "type" field should
879:      be NFCHR.
880:      0060000 This is a block special file; "type" field should be
```

[2000](#) found at line 883:

```
881:      NFBLK.
882:      0100000 This is a regular file; "type" field should be NFREG.
883:      0120000 This is a symbolic link file; "type" field should be
884:      NFLNK.
885:      0140000 This is a named socket; "type" field should be NFNON.
```

[2000](#) found at line 887:

```
885:      0140000 This is a named socket; "type" field should be NFNON.
886:      0004000 Set user id on execution.
887:      0002000 Set group id on execution.
888:      0001000 Save swapped text even after use.
889:      0000400 Read permission for owner.
```

==== File [rfc1108.txt](#) ===

[2000](#) found at line 187:

```
185:      throughout DoD common user data networks, users of these networks
186:      should submit requirements for additional Protection Authority Flags
187:      to DISA DISDB, Washington, D.C. 20305-2000, for review and approval.
188:      Such review and approval should be sought prior to design,
189:      development or deployment of any system which would make use of
```

[2000](#) found at line 774:

```
772:      data networks, and to maximize interoperability, each activity should
773:      submit its plans for the definition and use of an Additional Security
774:      Info Format Code to DISA DISDB, Washington, D.C. 20305-2000 for
775:      review and approval. DISA DISDB will forward plans to the Internet
776:      Activities Board for architectural review and, if required, a cleared
```

==== File [rfc1114.txt](#) ===

UTCTime found at line 922:

```
920:      issuer          Name,
921:      list            SEQUENCE RCLEntry,
922:      lastUpdate      UTCTime,
923:      nextUpdate      UTCTime}
```

924:

UTCTime found at line 923:

```
921:          list          SEQUENCE RCLEntry,
922:          lastUpdate      UTCTime,
923:          nextUpdate      UTCTime}
924:
925:      RCLEntry ::= SEQUENCE {
```

UTCTime found at line 927:

```
925:      RCLEntry ::= SEQUENCE {
926:          subject      CertificateSerialNumber,
927:          revocationDate UTCTime}
928:
929: 3.4 Certificate Definition and Usage
```

UTCTime found at line 1296:

```
1294:
1295:      Validity ::= SEQUENCE{
1296:          notBefore      UTCTime,
1297:          notAfter       UTCTime}
1298:
```

UTCTime found at line 1297:

```
1295:      Validity ::= SEQUENCE{
1296:          notBefore      UTCTime,
1297:          notAfter       UTCTime}
1298:
1299:      SubjectPublicKeyInfo ::= SEQUENCE{
```

+=+=+=+=+= File [rfc1117.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 4965:

```
4963:      jwmanly%amherst.bitnet@MITVMA.MIT.EDU
4964: [JWN10] Norris, James W      a02jwn1%niu.bitnet@CUNYVM.CUNY.EDU
4965: [JY24] Yu, Jessica          jyy@MERIT.EDU
4966: [JY33] Yoshida, Jun        ---none---
4967: [KA4] Auerbach, Karl      auerbach@CSL.SRI.COM
```

+=+=+=+=+= File [rfc1123.txt](#) +=+=+=+=+=

2digit found at line 3239:

```
3237:      The syntax for the date is hereby changed to:
3238:
3239:      date = 1*2DIGIT month 2*4DIGIT
3240:
3241:
```

century found at line 3253:

```
3251:
3252:      All mail software SHOULD use 4-digit years in dates, to ease
```

3253:           the transition to the next century.  
3254:  
3255:           There is a strong trend towards the use of numeric timezone

+=+=+=+= File [rfc1133](#).txt +=+=+=+=  
'yy' on a line without 'yyyy' found at line 493:  
491:       Telephone:       313 936-2655  
492:       Fax:            313 747-3745  
493:       EMail:          jyy@merit.edu  
494:  
495:       Hans-Werner Braun

+=+=+=+= File [rfc1138](#).txt +=+=+=+=  
UTCTime found at line 1471:  
1469:       the full BNF easier to parse.  
1470:  
1471:    3.3.5.   UTCTime  
1472:  
1473:       Both UTCTime and the [RFC 822](#) 822.date-time syntax contain:   Year

UTCTime found at line 1473:  
1471:    3.3.5.   UTCTime  
1472:  
1473:       Both UTCTime and the [RFC 822](#) 822.date-time syntax contain:   Year  
1474:       (lowest two digits), Month, Day of Month, hour, minute, second  
1475:       (optional), and Timezone.   822.date-time also contains an optional

UTCTime found at line 1482:  
1480:       In practice, a gateway will need to parse various illegal  
1481:       variants on 822.date-time.   In cases where 822.date-time  
1482:       cannot be parsed, it is recommended that the derived UTCTime  
1483:       is set to the value at the time of translation.  
1484:

UTCTime found at line 1485:  
1483:       is set to the value at the time of translation.  
1484:  
1485:       The UTCTime format which specifies the timezone offset should be  
1486:       used.  
1487:

UTCTime found at line 4469:  
4467:  
4468:       The extended syntax of zone defined in the JNT Mail Protocol should  
4469:       be used in the mapping of UTCTime defined in Chapter 3.  
4470:  
4471:    6.   Lack of 822-MTS originator specification

+++++= File [rfc1147](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 9715:

9713: cerns to security and management personnel at DDN facilities.  
9714: ties. It is available online, via kermi or anonymous FTP,  
9715: from nic.ddn.mil, in SCC:DDN-SECURITY-yy-nn.TXT (where "yy"  
9716: is the year and "nn" is the bulletin number). The SCC provides  
9717: immediate assistance with DDN-related host security

century found at line 1096:

1094: "NETMON." These tools were independently developed, are  
1095: functionally different, run in different environments, and  
1096: are no more related than Richard Burton the 19th century  
1097: explorer and Richard Burton the 20th century actor. BYU's  
1098: tool "NETMON" is listed as "NETMON (I)," MITRE's as "NETMON

century found at line 1097:

1095: functionally different, run in different environments, and  
1096: are no more related than Richard Burton the 19th century  
1097: explorer and Richard Burton the 20th century actor. BYU's  
1098: tool "NETMON" is listed as "NETMON (I)," MITRE's as "NETMON  
1099: (II)," and the tool from SNMP Research as "NETMON (III)."

[2000](#) found at line 4134:

4132: libraries), but this has not been done. Curses is very  
4133: slow and cpu intensive on VMS, but the tool has been  
4134: run in a window on a VAXstation 2000. Just don't try  
4135: to run it on a terminal connected to a 11/750.  
4136:

+++++= File [rfc1148](#).txt ++++++=

UTCTime found at line 1475:

1473: the full BNF easier to parse.  
1474:  
1475: 3.3.5. UTCTime  
1476:  
1477: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year

UTCTime found at line 1477:

1475: 3.3.5. UTCTime  
1476:  
1477: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year  
1478: (lowest two digits), Month, Day of Month, hour, minute, second  
1479: (optional), and Timezone. 822.date-time also contains an optional

UTCTime found at line 1486:

1484: In practice, a gateway will need to parse various illegal  
1485: variants on 822.date-time. In cases where 822.date-time  
1486: cannot be parsed, it is recommended that the derived UTCTime  
1487: is set to the value at the time of translation.  
1488:

UTCTime found at line 1489:

1487:           is set to the value at the time of translation.

1488:

1489:       The UTCTime format which specifies the timezone offset should be  
1490:       used.

1491:

UTCTime found at line 4566:

4564:

4565:       The extended syntax of zone defined in the JNT Mail Protocol should  
4566:       be used in the mapping of UTCTime defined in Chapter 3.

4567:

4568: 6. Lack of 822-MTS originator specification

+=+=+=+= File [rfc1152.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 937:

935:       Reservation Multiple-Access).

936:

937:       Finally, Yechiam Yemeni (YY, Columbia University) discussed his work

938:       on a protocol silicon compiler. In order to exploit the potential

939:       parallelism, he is planning to use one processor per connection.

+=+=+=+= File [rfc1153.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 119:

117:

118:

119: Date: ddd, dd mmm yy hh:mm:ss zzz

120: From: listname-REQUEST@fqhn

121: Reply-To: listname@fqhn

'yy' on a line without 'yyyy' found at line 122:

120: From: listname-REQUEST@fqhn

121: Reply-To: listname@fqhn

122: Subject: listname Digest Vyy #nn

123: To: listname@fqhn

124:

'yy' on a line without 'yyyy' found at line 125:

123: To: listname@fqhn

124:

125: listname Digest                           ddd, dd mmm yy           Volume yy : Issue   nn

126:

127: Today's Topics:

'yy' on a line without 'yyyy' found at line 137:

135: -----

136:

137: Date: ddd, dd mmm yy hh:mm:ss zzz

138: From: Joe User <username@fqhn>  
139: Subject: Message One Subject

'yy' on a line without 'yyyy' found at line 147:

145: -----  
146:  
147: Date: ddd, dd mmm yy hh:mm:ss zzz  
148: From: Jane User <username@fqhn>  
149: Subject: Message Two Subject

'yy' on a line without 'yyyy' found at line 157:

155: -----  
156:  
157: End of listname Digest Vyy Issue #nn  
158: \*\*\*\*\*  
159:

+=+=+=+= File [rfc1161.txt](#) +=+=+=+=

[1900](#) found at line 322:

320: on the protocol-ID  
321:  
322: 03019000  
323:  
324: 5. Acknowledgements

[2000](#) found at line 210:

208: (1) <nsap> is a hex string defining the nsap, e.g.,  
209:  
210: "snmp"/NS+4900590800200038bafe00  
211:  
212: Similarly, SNMP traps are, by convention, sent to a manager listening

[2000](#) found at line 291:

289: (1) <nsap> is a hex string defining the nsap, e.g.,  
290:  
291: "snmp"/NS+4900590800200038bafe00  
292:  
293: Similarly, SNMP traps are, by convention, sent to a manager listening

+=+=+=+= File [rfc1164.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 1267:

1265: Phone: (313) 936-3000  
1266:  
1267: Email: JYY@MERIT.EDU  
1268:  
1269:

+=+=+=+= File [rfc1166.txt](#) +=+=+=+=



'yy' on a line without 'yyyy' found at line 8270:

```
8268:      [JWN10]      Norris, James W.
8269:      a02jwn1%niu.bitnet@CUNYVM.CUNY.EDU
8270:      [JY24]      Yu, Jessica      jyy@MERIT.EDU
8271:      [JY33]      Yoshida, Jun      ---none---
8272:      [JY35]      Young, Jeff      ---none---
```

++++++ File [rfc1167.txt](#) +++++++

[2000](#) found at line 89:

```
87:      are also likely play a role along with Switched Multi-megabit Data
88:      Service (SMDS) provided by telecommunications carriers. It also
89:      would be fair to ask what role FTS-2000 might play in the system, at
90:      least in support of government access to the NREN, and possibly in
91:      support of national agency network facilities.
```

++++++ File [rfc1173.txt](#) +++++++

century found at line 72:

```
70:      only choice; I don't see any prospect of either the government or
71:      private enterprise building a monolithic, centralized, ubiquitous "Ma
72:      Datagram" network provider in this century.
```

73:

74: 2. Responsibilities of Network Managers

++++++ File [rfc1176.txt](#) +++++++

'yy' on a line without 'yyyy' found at line 1435:

```
1433:      "NO" SP text_line / "BAD" SP text_line)
```

1434:

```
1435:      date      ::= string in form "dd-mmm-yy hh:mm:ss-zzz"
```

1436:

```
1437:      envelope      ::= "(" env_date SP env_subject SP env_from SP
```

++++++ File [rfc1185.txt](#) +++++++

[2000](#) found at line 208:

```
206:      1.1MBps, no matter how high the theoretical transfer rate of the
207:      path. This corresponds to cycling the sequence number space in
208:      Twrap= 2000 secs, which is safe in today's Internet.
```

209:

```
210:      Based on this reasoning, an earlier RFC [McKenzie89] has cautioned
```

++++++ File [rfc1190.txt](#) +++++++

[2000](#) found at line 7630:

```
7628:      link failure
```

7629:

```
7630:      2000  DefaultRecoveryTimeout Interval between successive
```

```
7631:      HELLOs to/from active neighbors
```

7632:

+=+=+=+= File [rfc1191.txt](#) +=+=+=+=

[2000](#) found at line 925:

```
923:          65535  Hyperchannel          RFC 1044
924:      65535
925:      32000          Just in case
926:          17914  16Mb IBM Token Ring          ref. [6]
927:      17914
```

+=+=+=+= File [rfc1203.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 2102:

```
2100:          "NO" SP text_line / "BAD" SP text_line)
2101:
2102:  date          ::= string in form "dd-mmm-yy hh:mm:ss-zzz"
2103:
2104:  envelope      ::= "(" env_date SP env_subject SP env_from SP
```

[2000](#) found at line 2614:

```
2612:          question.  For example:
2613:
2614:          tag42 FETCH 197 BODY 2000:3999
2615:
2616:          would fetch the second two thousand bytes of the body of message
```

+=+=+=+= File [rfc1207.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 136:

```
134:          directory.  Information includes packet counts by NSS and byte
135:          counts for type of use (ftp, smtp, telnet, etc.).  Filenames are
136:          of the form 'NSFyy-mm.type'.
137:
138:          Files are available for anonymous ftp; use 'guest' as the
```

+=+=+=+= File [rfc1210.txt](#) +=+=+=+=

[2000](#) found at line 1548:

```
1546:      Franci Bigi (1)
1547:      CEC
1548:      Rue de la Loi 2000
1549:      B-1049
1550:      Brussels
```

[2000](#) found at line 1756:

```
1754:      Rolf Speth (1)
1755:      CEC
1756:      Rue de la Loi 2000
1757:      B-1049
1758:      Brussels
```

[2000](#) found at line 1773:

1771: Jose Torcato (1), (2)  
1772: CEC, TR 61 0/10  
1773: Rue de la Loi 2000  
1774: B-1049  
1775: Brussels

[2000](#) found at line 1801:

1799: Karel De Vriendt (1)  
1800: CEC  
1801: Rue de la Loi 2000  
1802: B-1049  
1803: Brussels

[2000](#) found at line 1837:

1835: Rosalie Zobel (1) (2)  
1836: CEC  
1837: Rue de la Loi 2000  
1838: B-1049  
1839: Brussels

+++++= File [rfc1211](#).txt ++++++=

[1900](#) found at line 1591:

1589:  
1590: westine 49% mconnect OSI3.NCSL.NIST.GOV  
1591: connecting to host OSI3.NCSL.NIST.GOV (0x6c300681), port 0x1900  
1592: connection open  
1593: 220 osi3.ncsl.nist.gov sendmail 4.0/NIST(rbj/doug) ready at

[2000](#) found at line 2363:

2361: Office Automation Division  
2362: Code H610  
2363: Washington, DC 20305-2000  
2364:  
2365: Hostname: DCA-EMS.DCA.MIL

+++++= File [rfc1218](#).txt ++++++=

[2000](#) found at line 1249:

1247: Rapport Communication, Inc.  
1248: 3055 Q Street NW  
1249: Washington, DC 20007  
1250:  
1251: Tel: +1 202-342-2727

+++++= File [rfc1224](#).txt ++++++=

[2000](#) found at line 983:

981: and placed in an ethernet packet). 120 request packets are sent  
982: each cycle (3 for each of 40 nodes), and 120 response packets are

983: expected. 72000 bytes (240 packets at 300 bytes each) must be  
984: transferred during each poll cycle, merely to determine that the  
985: network is fine.

+=+=+=+= File [rfc1244.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 2481:

2479: and concerns to security and management personnel at DDN  
2480: facilities. It is available online, via kermit or anonymous  
2481: FTP, from the host NIC.DDN.MIL, in SCC:DDN-SECURITY-yy-  
2482: nn.TXT (where "yy" is the year and "nn" is the bulletin  
2483: number). The SCC provides immediate assistance with DDN-

'yy' on a line without 'yyyy' found at line 2482:

2480: facilities. It is available online, via kermit or anonymous  
2481: FTP, from the host NIC.DDN.MIL, in SCC:DDN-SECURITY-yy-  
2482: nn.TXT (where "yy" is the year and "nn" is the bulletin  
2483: number). The SCC provides immediate assistance with DDN-  
2484: related host security problems; call (800) 235-3155 (6:00

+=+=+=+= File [rfc1251.txt](#) +=+=+=+=

[2000](#) found at line 316:

314: where growing above 100 network numbers seemed excessive.  
315: Todays number of networks in the global infrastructure  
316: exceeds 2000 connected networks, and many more if isolated  
317: network islands get included.  
318:

+=+=+=+= File [rfc1254.txt](#) +=+=+=+=

[2000](#) found at line 592:

590: number of packet arrivals, over which packets are dropped with  
591: uniform probability. For instance, in a sample implementation, if  
592: this interval spanned 2000 packet arrivals, and a suitable  
593: probability of drop was 0.001, then two random variables would be  
594: drawn in a uniform distribution in the range of 1 to 2,000. The

[2000](#) found at line 859:

857: indicates that to get good, consistent performance, we may need to  
858: have up to 5 to 10 times the number of active source-destination  
859: pairs. In a typical gateway, this may require around 1000 to 2000  
860: queues.  
861:

+=+=+=+= File [rfc1255.txt](#) +=+=+=+=

[2000](#) found at line 1361:

1359: Rapport Communication, Inc.  
1360: 3055 Q Street NW  
1361: Washington, DC 20007

1362:  
1363:       Tel: +1 202-342-2727

+=+=+=+= File [rfc1259.txt](#) +=+=+=+=

century found at line 345:

343:       should never go back to any monopoly arrangement like the pre-  
344:       divestiture AT&T which held back market-driven innovation in  
345:       telecommunications for half a century. Given the interconnection  
346:       technology now available, we should never again have to accept the  
347:       argument that we have to sacrifice interoperability for efficiency,

century found at line 594:

592:  
593:       In light of the possibilities for new service offerings by the  
594:       21st century, as well as the growing importance of  
595:       telecommunications and information services to US economic and  
596:       social development, limiting our concept of universal service to

century found at line 744:

742:       If we have the vision and commitment to try this, the transformation  
743:       of the network frontier from wilderness to civilization need not  
744:       display the brutality of 19th century imperialism. As commercial  
745:       opportunities to offer applications and services develop,  
746:       entrepreneurs will discover that ease of use sells. The normal,

[2000](#) found at line 1115:

1113:       California v. FCC (9th Cir. 1990).  
1114:  
1115:       18. NTIA Telecomm 2000 at 79.  
1116:  
1117:       19. Committee on Energy and Commerce, Subcommittee on

+=+=+=+= File [rfc1270.txt](#) +=+=+=+=

[2000](#) found at line 594:

592:       Hopkinton, Mass. 01748  
593:  
594:       Phone: (508) 435-2000  
595:  
596:       Email: kasten@europa.clearpoint.com

+=+=+=+= File [rfc1274.txt](#) +=+=+=+=

UTCTime found at line 1051:

1049:       lastModifiedTime ATTRIBUTE  
1050:       WITH ATTRIBUTE-SYNTAX  
1051:       uTCTimeSyntax  
1052:       ::= {pilotAttributeType 23}  
1053:

```

UTCTime found at line 2990:
2988:      lastModifiedTime ATTRIBUTE
2989:      WITH ATTRIBUTE-SYNTAX
2990:      uTCTimeSyntax
2991:      ::= {pilotAttributeType 23}
2992:

```

+++++= File [rfc1276.txt](#) +=+=+=+=

UTCTime found at line 558:

```

556:      }
557:
558:  EDBVersion ::= UTCTime
559:
560:  _____Figure_2:__Replication_Protocol_____

```

40

UTCTime found at line 938:

```

936:      }
937:
938:  EDBVersion ::= UTCTime
939:  END
940:

```

+++++= File [rfc1283.txt](#) +=+=+=+=

[1900](#) found at line 317:

```

315:      on the protocol-ID
316:
317:      03019000
318:
319:      This is an X.25 protocol-ID assigned for local purposes.

```

[2000](#) found at line 206:

```

204:      (1) <nsap> is a hex string defining the nsap, e.g.,
205:
206:      "snmp"/NS+4900590800200038baf00
207:

```

208: Similarly, SNMP traps are, by convention, sent to a manager listening

[2000](#) found at line 278:

```

276:      (1) <nsap> is a hex string defining the nsap, e.g.,
277:
278:      "snmp"/NS+4900590800200038baf00
279:
280:

```

+++++= File [rfc1284.txt](#) +=+=+=+=

[2000](#) found at line 1146:

```

1144:      Hopkinton Mass 01748
1145:

```

1146: Phone: 508-435-2000  
1147: EMail: kasten@europa.clearpoint.com  
1148:

+=+=+=+= File [rfc1285.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 219:

217: -- The unique identifier for the FDDI station. This is a  
218: -- string of 8 octets, represented as  
219: -- X' yy yy xx xx xx xx xx xx'  
220: -- with the low order 6 octet (xx) from a unique IEEE  
221: -- assigned address. The high order two bits of the IEEE

'yy' on a line without 'yyyy' found at line 232:

230:  
231: -- (Universal/Local) bit should both be zero. The first two  
232: -- octets, the yy octets, are implementor-defined.  
233: --  
234: -- The representation of the address portion of the station id

+=+=+=+= File [rfc1290.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 549:

547: Anonymous FTP to nis.nsf.net  
548: cd stats  
549: get nsfyy-mm.ptraffic where yy is year, 91 and mm is month, 06  
550: get nsf91-06.ptraffic ptraffic is the packet traffic  
551:

'yy' on a line without 'yyyy' found at line 552:

550: get nsf91-06.ptraffic ptraffic is the packet traffic  
551:  
552: get nsfyy-mm.btraffic where yy is year, 91 and mm is month, 06  
553: get nsf91-06.btraffic btraffic is the byte traffic  
554:

+=+=+=+= File [rfc1292.txt](#) +=+=+=+=

UTCTime found at line 3648:

3646:  
3647:  
3648: When comparing attributes of UTCTime syntax, if the seconds field  
3649: is omitted, QUIPU does not perform the match correctly (i.e., the  
3650: seconds field in the attribute values should be ignored, but ar

[2000](#) found at line 4158:

4156:  
4157: UCOM.X 500 runs on: Sun 3, Sun 4, IBM RS 6000, Philips P 9000, DEC  
4158: machines, Bull DPX 2000, HP 9000/300, Siemens IN 6000 and 386-based  
4159: PCs. It can easily be ported to any UNIX machine.  
4160:

[2000](#) found at line 4803:

4801: HARDWARE PLATFORMS  
4802:  
4803: 3Com's OSI/TCP CS/2000 and CS/2100.  
4804:  
4805: SOFTWARE PLATFORMS

[2000](#) found at line 4807:

4805: SOFTWARE PLATFORMS  
4806:  
4807: The "SW/2000-OT Vers 1.0" software runs on 3Com's OSI/TCP CS/2000 and  
4808: CS/2100, both stand-alone systems.  
4809:

[2000](#) found at line 4812:

4810: AVAILABILITY  
4811:  
4812: The dual-stack OSI/TCP terminal server and its "SW/2000-OT Vers 1.0"  
4813: software is available from:  
4814:

+=+=+=+= File [rfc1295](#).txt +=+=+=+=

[2000](#) found at line 98:

96: Rapport Communication  
97: 3055 Q Street NW  
98: Washington, DC 20007  
99:  
100: Phone: +1 202-342-2727

+=+=+=+= File [rfc1303](#).txt +=+=+=+=

UTCTime found at line 189:

187: TYPE NOTATION ::=  
188: "LAST-UPDATED"  
189: value(update UTCTime)  
190: "PRODUCT-RELEASE"  
191: value(release DisplayString)

+=+=+=+= File [rfc1305](#).txt +=+=+=+=

century found at line 428:

426: mechanisms to synchronize time in principle to precisions in the order  
427: of nanoseconds while preserving a non-ambiguous date well into the next  
428: century. The protocol includes provisions to specify the characteristics  
429: and estimate the error of the local clock and the time server to which  
430: it may be synchronized. It also includes provisions for operation with a

century found at line 4529:

4527: political and ritual needs characteristic of the societies in which they



4528: flourished. Astronomical observations to establish the winter and summer  
4529: solstices were in use three to four millennia ago. By the 14th century  
4530: BC the Shang Chinese had established the solar year as 365.25 days and  
4531: the lunar month as 29.5 days. The lunisolar calendar, in which the

century found at line 4548:

4546: with the Shang Chinese, the ancient Egyptians had thus established the  
4547: solar year at 365.25 days, or within about 11 minutes of the present  
4548: measured value. In 432 BC, about a century after the Chinese had done  
4549: so, the Greek astronomer Meton calculated there were 110 lunar months of  
4550: 29 days and 125 lunar months of 30 days for a total of 235 lunar months

century found at line 4565:

4563: not complete until 8 AD.

4564:

4565: The seven-day Sumerian week was introduced only in the fourth century AD  
4566: by Emperor Constantine I. During the Roman era a 15-year census cycle,  
4567: called the Indiction cycle, was instituted for taxation purposes. The

century found at line 4588:

4586: but 14 of these were removed in the Gregorian calendar. While the  
4587: Gregorian calendar is in use throughout most of the world today, some  
4588: countries did not adopt it until early in the twentieth century.  
4589: While it remains a fascinating field for time historians, the above  
4590: narrative provides conclusive evidence that conjugating calendar dates

century found at line 4620:

4618: sometimes used to represent dates near our own era in conventional time  
4619: and with fewer digits, is defined as  $MJD = JD \langle 196 \rangle 2,400,000.5$ .  
4620: Following the convention that our century began at 0h on 1 January 1900,  
4621: at which time the tropical year was already 12h old, that eclectic  
4622: instant corresponds to MJD 15,020.0. Thus, the Julian timescale ticks in

century found at line 4640:

4638: through observations of the Sun, Moon and planets. In 1958 the standard  
4639: second was defined as  $1/31,556,925.9747$  of the tropical year that began  
4640: this century. On this scale the tropical year is 365.2421987 days and  
4641: the lunar month – one complete revolution of the Moon around the Earth –  
4642: is 29.53059 days; however, the actual tropical year can be determined

[1900](#) found at line 851:

849: product of the protocol, a special timestamp format has been  
850: established. NTP timestamps are represented as a 64-bit unsigned fixed-  
851: point number, in seconds relative to 0h on 1 January 1900. The integer  
852: part is in the first 32 bits and the fraction part in the last 32 bits.  
853: This format allows convenient multiple-precision arithmetic and

[1900](#) found at line 873:

871: integer part) has been set and that the 64-bit field will overflow some  
872: time in 2036. Should NTP be in use in 2036, some external means will be  
873: necessary to qualify time relative to 1900 and time relative to 2036

874: (and other multiples of 136 years). Timestamped data requiring such  
875: qualification will be so precious that appropriate means should be

[1900](#) found at line 4620:

4618: sometimes used to represent dates near our own era in conventional time  
4619: and with fewer digits, is defined as MJD = JD <196> 2,400,000.5.  
4620: Following the convention that our century began at 0h on 1 January 1900,  
4621: at which time the tropical year was already 12h old, that eclectic  
4622: instant corresponds to MJD 15,020.0. Thus, the Julian timescale ticks in

[1900](#) found at line 4724:

4722: always coincident with it. At 0h on 1 January 1972 (MJD 41,317.0), the  
4723: first tick of the UTC Era, the NTP clock was set to 2,272,060,800,  
4724: representing the number of standard seconds since 0h on 1 January 1900  
4725: (MJD 15,020.0). The insertion of leap seconds in UTC and subsequently  
4726: into NTP does not affect the UTC or NTP oscillator, only the conversion

[2000](#) found at line 4489:

4487: the Mid-Continent Chain, the deployment of LORAN-C transmitters now  
4488: provides complete coverage of the U.S. LORAN-C timing receivers, such as  
4489: the Austron 2000, are specialized and extremely expensive (up to  
4490: \$20,000). They are used primarily to monitor local cesium clocks and are  
4491: not suited for unattended, automatic operation. While the LORAN-C system

+++++= File [rfc1309.txt](#) +=+=+=+=+=

century found at line 48:

46:

47: As the pace of industry, science, and technological development  
48: quickened over the past century, it became increasingly probable that  
49: someone in a geographically distant location would be trying to solve  
50: the same problems you were trying to solve, or that someone in a

+++++= File [rfc1314.txt](#) +=+=+=+=+=

[2000](#) found at line 1109:

1107:	00DE	YPosition	011F	0005	00000001	0000016C
1108:	00EA	Group4Options	0125	0004	00000001	00000002
1109:	00F6	ResolutionUnit	0128	0003	00000001	00020000
1110:	0102	Software	0131	0002	00000008	00000174
1111:	010E	DateTime	0132	0002	00000014	0000017C

+++++= File [rfc1323.txt](#) +=+=+=+=+=

[2000](#) found at line 320:

318: 1.1MBps, no matter how high the theoretical transfer rate of the  
319: path. This corresponds to cycling the sequence number space in  
320: Twrap= 2000 secs, which is safe in today's Internet.

321:

322: It is important to understand that the culprit is not the larger

+=+=+=+= File [rfc1325.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 611:

609: In addition, back issues of the Report are available for anonymous  
610: FTP from the host NIS.NSF.NET in the 'imr' directory with the file  
611: names in the form IMRYY-MM.TXT, where YY is the last two digits of  
612: the year and MM two digits for the month. For example, the June  
613: 1991 Report is in the file IMR91-06.TXT.

+=+=+=+= File [rfc1327.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 2618:

2616: attributes remaining in the O/R address shall be encoded on  
2617: the LHS. This is to ensure a reversible mapping. For  
2618: example, if the is an addres /S=XX/O=YY/ADMD=A/C=NN/ and a  
2619: mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is  
2620: encoded on the LHS.

'yy' on a line without 'yyyy' found at line 2619:

2617: the LHS. This is to ensure a reversible mapping. For  
2618: example, if the is an addres /S=XX/O=YY/ADMD=A/C=NN/ and a  
2619: mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is  
2620: encoded on the LHS.  
2621:

'yy' on a line without 'yyyy' found at line 2665:

2663:  
2664: C = "XX"  
2665: ADMD = "YY"  
2666: O = "ZZ"  
2667: "[RFC-822](#)" = "Smith(a)ZZ.YY.XX"

'yy' on a line without 'yyyy' found at line 2667:

2665: ADMD = "YY"  
2666: O = "ZZ"  
2667: "[RFC-822](#)" = "Smith(a)ZZ.YY.XX"

2668:

2669: This is mapped first to an [RFC 822](#) address, and then back to the

'yy' on a line without 'yyyy' found at line 2673:

2671:  
2672: C = "XX"  
2673: ADMD = "YY"  
2674: O = "ZZ"  
2675: Surname = "Smith"

UTCTime found at line 1483:

1481: the full BNF easier to parse.  
1482:  
1483: 3.3.5. UTCTime  
1484:

1485: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year

UTCTime found at line 1485:

1483: 3.3.5. UTCTime

1484:

1485: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year

1486: (lowest two digits), Month, Day of Month, hour, minute, second

1487: (optional), and Timezone. 822.date-time also contains an optional

UTCTime found at line 1494:

1492: In practice, a gateway will need to parse various illegal

1493: variants on 822.date-time. In cases where 822.date-time

1494: cannot be parsed, it is recommended that the derived UTCTime

1495: is set to the value at the time of translation.

1496:

UTCTime found at line 1497:

1495: is set to the value at the time of translation.

1496:

1497: When mapping to X.400, the UTCTime format which specifies the

1498: timezone offset shall be used.

1499:

UTCTime found at line 5143:

5141:

5142: The extended syntax of zone defined in the JNT Mail Protocol shall

5143: be used in the mapping of UTCTime defined in Chapter 3.

5144:

5145: 7. Lack of 822-MTS originator specification

+=+=+=+= File [rfc1330](#).txt +=+=+=+=

[2000](#) found at line 1770:

1768: While ESnet will provide X.400 routing service for systems, it cannot

1769: provide routing via commercial X.400 carriers at this time. The

1770: FTS-2000 charge for routing X.400 messages is \$.45 (US) plus X.25

1771: packet charges. This could result in a charge of several dollars for

1772: large messages, a real possibility with the multi-media capacity of

+=+=+=+= File [rfc1336](#).txt +=+=+=+=

[2000](#) found at line 378:

376: where growing above 100 network numbers seemed excessive.

377: Todays number of networks in the global infrastructure

378: exceeds 2000 connected networks, and many more if isolated

379: network islands get included.

380:

+=+=+=+= File [rfc1338](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 401:

399: 3.2. Historic growth rates

400:

401:	MM/YY	ROUTES	MM/YY	ROUTES
402:		ADVERTISED		ADVERTISED
403:	-----		-----	

'yy' on a line without 'yyyy' found at line 1060:

1058: 1071 Beal Ave.

1059: Ann Arbor, MI 48109

1060: email: jyy@merit.edu

1061:

1062:

+++++= File [rfc1340.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 3390:

3388: AB-00-03-00-00-00 6004 DEC Local Area Transport (LAT) - old

3389: AB-00-04-00-xx-xx ???? Reserved DEC customer private use

3390: AB-00-04-01-xx-yy 6007 DEC Local Area VAX Cluster groups

3391: Sys. Communication Architecture (SCA)

3392: CF-00-00-00-00-00 9000 Ethernet Configuration Test protocol

[1900](#) found at line 4066:

4064: 014.000.000.063 2422-650-23500 00 Tollpost-Globe AS [OXG

4065: 014.000.000.064 2422-330-02500 00 Tollpost-Globe AS [OXG

4066: 014.000.000.065 2422-350-01900 00 Tollpost-Globe AS [OXG

4067: 014.000.000.066 2422-410-00700 00 Tollpost-Globe AS [OXG

4068: 014.000.000.067 2422-539-06200 00 Tollpost-Globe AS [OXG

[2000](#) found at line 1300:

1298: nkd 1650/tcp

1299: nkd 1650/udp

1300: callbook 2000/tcp

1301: callbook 2000/udp

1302: dc 2001/tcp

[2000](#) found at line 1301:

1299: nkd 1650/udp

1300: callbook 2000/tcp

1301: callbook 2000/udp

1302: dc 2001/tcp

1303: wizard 2001/udp curry

[2000](#) found at line 4013:

4011: 014.000.000.018 2624-522-80900 52 FGAN-SIEMENS-X25 [GB7

4012: 014.000.000.019 2041-170-10000 00 SHAPE-X25 [JFW

4013: 014.000.000.020 5052-737-20000 50 UQNET [AXH

4014: 014.000.000.021 3020-801-00057 50 DMC-CRC1 [VXT

4015: 014.000.000.022 2624-522-80329 02 FGAN-FGANFFMVAX-X25 [GB7

[2000](#) found at line 4838:

4836:	AIX/370	LOCUS	SWIFT
4837:	AIX-PS/2	MACOS	TAC
4838:	BS-2000	MINOS	TANDEM
4839:	CEDAR	MOS	TENEX
4840:	CGW	MPE5	TOPS10

[2000](#) found at line 5188:

5186:	HAZELTINE-1520	IBM-3278-3
5187:	HAZELTINE-1552	IBM-3278-4
5188:	HAZELTINE-2000	IBM-3278-5
5189:	HAZELTINE-ESPRIT	IBM-3279-2
5190:	HITACHI-5601	IBM-3279-3

==== File [rfc1348](#).txt =====

[2000](#) found at line 143:

```

141:      Or in net 11110031f67293.nsap-in-addr.arpa:
142:
143:      67894444333322220000  NSAP-PTR          host.school.de.
144:
145:      The RR data is the ASCII representation of the digits.  It is encoded

```

==== File [rfc1357](#).txt =====

'yy' on a line without 'yyyy' found at line 260:

```

258:
259:  ID (M) -- This is the second field of any record.  It is also a
260:          mandatory field.  Its format is "ID:: XXX//YYY", where XXX is
261:          the publisher-ID (the controlled symbol of the publisher)
262:          and YYY is the ID (e.g., report number) of the publication as

```

'yy' on a line without 'yyyy' found at line 262:

```

260:          mandatory field.  Its format is "ID:: XXX//YYY", where XXX is
261:          the publisher-ID (the controlled symbol of the publisher)
262:          and YYY is the ID (e.g., report number) of the publication as
263:          assigned by the publisher.  This ID is typically printed on
264:          the cover, and may contain slashes.

```

'yy' on a line without 'yyyy' found at line 682:

```

680:
681:      In order to avoid conflicts among the symbols of the publishing
682:      organizations (the XXX part of the "ID:: XXX//YYY") it is suggested
683:      that the various organizations that publish reports (such as
684:      universities, departments, and laboratories) register their

```

2-digit found at line 291:

```

289:
290:          The format for ENTRY date is "Month Day, Year".  The month must
291:          be alphabetic (spelled out).  The "Day" is a 1- or 2-digit
292:          number.  The "Year" is a 4-digit number.
293:

```

2-digit found at line 457:

455: DATE (0) -- The publication date. The formats are "Month Year" and  
456: "Month Day, Year". The month must be alphabetic (spelled out).  
457: The "Day" is a 1- or 2-digit number. The "Year" is a 4-digit  
458: number.  
459:

==== File [rfc1361.txt](#) =====

[1900](#) found at line 132:

130: main product of the protocol, a special timestamp format has been  
131: established. NTP timestamps are represented as a 64-bit unsigned  
132: fixed-point number, in seconds relative to 0h on 1 January 1900. The  
133: integer part is in the first 32 bits and the fraction part in the  
134: last 32 bits. This format allows convenient multiple-precision

[1900](#) found at line 145:

143: overflow some time in 2036. Should NTP or SNTP be in use in 2036,  
144: some external means will be necessary to qualify time relative to  
145: 1900 and time relative to 2036 (and other multiples of 136 years).  
146: Timestamped data requiring such qualification will be so precious  
147: that appropriate means should be readily available. There will exist

==== File [rfc1379.txt](#) =====

[2000](#) found at line 847:

845:  
846:  
847: objective an MSL of at least 2000 seconds. If there were no TIME-  
848: WAIT delay, the ultimate limit on transaction rate would be set by  
849: speed-of-light delays in the network and by the latency of host

[2000](#) found at line 988:

986: the official delay of 240 seconds, formula [1] implies a upper  
987: bound (as  $RTT \rightarrow 0$ ) of  $TR_{max} = 268$  Tps; with our target MSL of  
988: 2000 sec,  $TR_{max} = 32$  Tps. These values are unacceptably low.  
989:  
990: To improve this transaction rate, we could use TCP timestamps to

[2000](#) found at line 1079:

1077: segment lifetime MSL. For reasonable limiting values of R, Ts,  
1078: and MSL, formula [6] leads to a very low value of  $TR_{max}$ . For  
1079: example, with  $MSL = 2000$  secs,  $R = 10^9$  Bps, and  $T_s = 0.5$  sec,  $TR_{max}$   
1080:  $< 2 \cdot 10^{-3}$  Tps.  
1081:

[2000](#) found at line 1136:

1134:  $TR_{max} * MSL < 2^{31}$   
1135:  
1136: For example, if  $MSL = 2000$  seconds then  $TR_{max} < 10^6$  Tp. These

1137: are acceptable limits for transaction processing. However, if  
1138: they are not, we could augment CC with TCP timestamps to obtain

[2000](#) found at line 1276:

1274:  
1275: (a) no timestamps                     $2 \times 31 / \text{MSL}$                     MSL                    3rd sequence  
1276:    e.g., MSL=2000 sec    space  
1277:     $\text{TRmax} = 10 \times 6$   
1278:

+++++= File [rfc1405.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 378:

376: maps into  
377:  
378: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
379: DD.Mail-11=route::node::localpart;  
380:

'yy' on a line without 'yyyy' found at line 384:

382:  
383: xx = country code of the gateway performing the conversion  
384: yyy = Admd of the gateway performing the conversion  
385: zzz = Prmd of the gateway performing the conversion  
386: ooo = Organisation of the gateway performing the conversion

'yy' on a line without 'yyyy' found at line 474:

472: it is connected to. In this case the mapping is trivial:  
473:  
474: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
475: DD.Mail-11=route::node::localpart;  
476:

'yy' on a line without 'yyyy' found at line 477:

475: DD.Mail-11=route::node::localpart;  
476:  
477: (see sect. 5.2 for explication of 'xx','yyy','zzz','ooo','uuu','net')  
478:  
479: maps into

'yy' on a line without 'yyyy' found at line 487:

485: described into [section 5.4](#) apply:  
486:  
487: C=xx; ADMD=yyy; PRMD=www; DD.Dnet=net;  
488: DD.Mail-11=route::node::localpart;  
489:

'yy' on a line without 'yyyy' found at line 492:

490: maps into  
491:  
492: gwnode::gw%"C=xx;ADMD=yyy;PRMD=www;DD.Dnet=net;



493: DD.Mail-11=route::node::localpart;"  
494:

'yy' on a line without 'yyyy' found at line 595:

593: maps into

594:

595: C=xx; ADMD=yyy; DD.Dnet=net;

596: DD.Mail-11=route::gwnode::gw(p)(q)x400-text-address(q);

597:

+++++= File [rfc1409](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 311:

309: IAC SB AUTHENTICATION REPLY

310: KERBEROS\_V4 CLIENT|MUTUAL

311: RESPONSE yy yy yy yy yy yy yy yy

312: IAC SE

313:

+++++= File [rfc1411](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 163:

161: IAC SB AUTHENTICATION REPLY

162: KERBEROS\_V4 CLIENT|MUTUAL

163: RESPONSE yy yy yy yy yy yy yy yy

164: IAC SE

165:

+++++= File [rfc1415](#).txt ++++++=

[2000](#) found at line 2814:

2812:	2	1016 Grouping threshold violation		503
-------	---	-----------------------------------	--	-----

2813:	2	1017 Inconsistent PDU request		503
-------	---	-------------------------------	--	-----

2814:	2	2000 Association with user not allowed		532
-------	---	--	--	-----

2815:	2	2002 Unsupported service class		504
-------	---	--------------------------------	--	-----

2816:	0	2003 Unsupported functional unit		211
-------	---	----------------------------------	--	-----

+++++= File [rfc1416](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 318:

316: IAC SB AUTHENTICATION REPLY

317: KERBEROS\_V4 CLIENT|MUTUAL

318: RESPONSE yy yy yy yy yy yy yy yy

319: IAC SE

320:

+++++= File [rfc1417](#).txt ++++++=

[2000](#) found at line 156:

154: c/o Rapport Communication

155: 3055 Q Street NW

156: Washington, DC 20007  
157: US  
158:

[2000](#) found at line 198:

196: Rapport Communication  
197: 3055 Q Street NW  
198: Washington, DC 20007  
199:  
200: Phone: +1 202-342-2727

+=+=+=+= File [rfc1421](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1148:

1146: BAoTF1JTQSBEXRhIFNlY3VyaXR5LCBJbmMuMQ8wDQYDVQQLEwZCZXRhIDExDTAL  
1147: BgNVBAStBFRMQ0EwHhcNOTewOTAxMDgwMDAwWhcNOTIwOTAxMDc1OTU5WjBRMQsw  
1148: CQYDVQQGEwJVUzEgMGB4GA1UEChMXUlnBIERhdGEgU2VjdXJpdHksIEluYy4xDzAN  
1149: BgNVBAStBkjlGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwDYgAw  
1150: XwJYCsn6lQCxYyKnl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt05XW

'yy' on a line without 'yyyy' found at line 1150:

1148: CQYDVQQGEwJVUzEgMGB4GA1UEChMXUlnBIERhdGEgU2VjdXJpdHksIEluYy4xDzAN  
1149: BgNVBAStBkjlGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwDYgAw  
1150: XwJYCsn6lQCxYyKnl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt05XW  
1151: cqAz/7R7XhjYcm0PcqbdzoACZtIETrKrcJiDYOp+DkZ8k1gCk7hQHpbIwIDAQAB  
1152: MA0GCSqGSib3DQEBAGUAA38AAICPv4f9Gx/tY4+p+4DB7MV+tKZnvBoy8zgoMG0x

'yy' on a line without 'yyyy' found at line 1256:

1254: BAoTF1JTQSBEXRhIFNlY3VyaXR5LCBJbmMuMQ8wDQYDVQQLEwZCZXRhIDExDTAL  
1255: BgNVBAStBFRMQ0EwHhcNOTewOTAxMDgwMDAwWhcNOTIwOTAxMDc1OTU5WjBRMQsw  
1256: CQYDVQQGEwJVUzEgMGB4GA1UEChMXUlnBIERhdGEgU2VjdXJpdHksIEluYy4xDzAN  
1257: BgNVBAStBkjlGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwDYgAw  
1258: XwJYCsn6lQCxYyKnl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt05XW

'yy' on a line without 'yyyy' found at line 1258:

1256: CQYDVQQGEwJVUzEgMGB4GA1UEChMXUlnBIERhdGEgU2VjdXJpdHksIEluYy4xDzAN  
1257: BgNVBAStBkjlGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwDYgAw  
1258: XwJYCsn6lQCxYyKnl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt05XW  
1259: cqAz/7R7XhjYcm0PcqbdzoACZtIETrKrcJiDYOp+DkZ8k1gCk7hQHpbIwIDAQAB  
1260: MA0GCSqGSib3DQEBAGUAA38AAICPv4f9Gx/tY4+p+4DB7MV+tKZnvBoy8zgoMG0x

+=+=+=+= File [rfc1422](#).txt +=+=+=+=

UTCTime found at line 1596:

1594:  
1595: Validity ::= SEQUENCE{  
1596:       notBefore       UTCTime,  
1597:       notAfter        UTCTime}  
1598:

UTCTime found at line 1597:

```

1595:      Validity ::=      SEQUENCE{
1596:          notBefore      UTCTime,
1597:          notAfter       UTCTime}
1598:
1599:      SubjectPublicKeyInfo ::=      SEQUENCE{

```

UTCTime found at line 1640:

```

1638:          signature      AlgorithmIdentifier,
1639:          issuer          Name,
1640:          lastUpdate      UTCTime,
1641:          nextUpdate      UTCTime,
1642:          revokedCertificates

```

UTCTime found at line 1641:

```

1639:          issuer          Name,
1640:          lastUpdate      UTCTime,
1641:          nextUpdate      UTCTime,
1642:          revokedCertificates
1643:          SEQUENCE OF CRLEntry OPTIONAL}

```

UTCTime found at line 1647:

```

1645:      CRLEntry ::= SEQUENCE{
1646:          userCertificate SerialNumber,
1647:          revocationDate UTCTime}
1648:
1649: References

```

century found at line 463:

```

461:      confusion relating to daylight savings time. Note that UTCT
462:      expresses the value of a year modulo 100 (with no indication of
463:      century), hence comparisons involving dates in different centuries
464:      must be performed with care.
465:

```

+=+=+=+=+= File [rfc1432.txt](#) +=+=+=+=+=

[2000](#) found at line 711:

```

709:      Digital Press
710:      buddenhagen@cecv01.enet.dec.com McGraw-Hill
711:      617-276-1498                212-512-2000
712:      fax: 617-276-4314            1221 Ave. of the Americas
713:      Digital Equipment Corporation New York, NY 10020

```

+=+=+=+=+= File [rfc1437.txt](#) +=+=+=+=+=

[2000](#) found at line 185:

```

183:      generation of the X.400 specification, X.400-1996. This will give
184:      the community ample time to define a more complete specification for
185:      matter transport as part of X.400-2000, and possibly even a readily-
186:      implementable specification as part of X.400-2004, although some will
187:      no doubt argue that this would be too strong a break with tradition.

```

+=+=+=+= File [rfc1440.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 332:

330: The time stamp on the file as it appears at the sending site may be  
331: sent and applied to the copy at the receiving site. The form is US  
332: mm/dd/yy and hh:mm:ss. A time zone is optional. If the time zone is  
333: omitted, local time is assumed. If the DATE command is omitted, time  
334: and date of arrival are assumed.

+=+=+=+= File [rfc1442.txt](#) +=+=+=+=

UTCTime found at line 362:

360: BEGIN  
361: TYPE NOTATION ::=  
362: "LAST-UPDATED" value(Update UTCTime)  
363: "ORGANIZATION" Text  
364: "CONTACT-INFO" Text

UTCTime found at line 378:

376: | Revisions Revision  
377: Revision ::=  
378: "REVISION" value(Update UTCTime)  
379: "DESCRIPTION" Text  
380:

+=+=+=+= File [rfc1453.txt](#) +=+=+=+=

[1900](#) found at line 516:

514:  
515: [XTP92] Xpress Transfer Protocol, version 3.6, XTP Forum,  
516: 1900 State Street, Suite D, Santa Barbara, California  
517: 93101 USA, January 11, 1992.  
518:

+=+=+=+= File [rfc1458.txt](#) +=+=+=+=

[2000](#) found at line 1026:

1024: Reading, MA 01867  
1025:  
1026: Phone: (617) 942-2000  
1027: EMail: rebraudes@tasc.com  
1028:

[2000](#) found at line 1035:

1033: Reading, MA 01867  
1034:  
1035: Phone: (617) 942-2000  
1036: EMail: gszabele@tasc.com  
1037:

+=+=+=+=+= File [rfc1465.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 499:

497: Switzerland

498:

499: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

500: "; START=" 'yymmdd' \

501: ["; END=" 'yymmdd'] <CR>

'yy' on a line without 'yyyy' found at line 500:

498:

499: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

500: "; START=" 'yymmdd' \

501: ["; END=" 'yymmdd'] <CR>

502: The <Update-info> contains also the format identifier.

'yy' on a line without 'yyyy' found at line 501:

499: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

500: "; START=" 'yymmdd' \

501: ["; END=" 'yymmdd'] <CR>

502: The <Update-info> contains also the format identifier.

503:

'yy' on a line without 'yyyy' found at line 512:

510:

511: The date of the last update of a document is given in  
512: the form 'yymmdd'.

513: A start date must be set. A document can be published

514: this way before the information in it is valid. (This

'yy' on a line without 'yyyy' found at line 1673:

1671: | <DirectoryName> )

1672:

1673: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

1674: "; START=" 'yymmdd' \

1675: ["; END=" 'yymmdd'] <CR>

'yy' on a line without 'yyyy' found at line 1674:

1672:

1673: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

1674: "; START=" 'yymmdd' \

1675: ["; END=" 'yymmdd'] <CR>

1676:

'yy' on a line without 'yyyy' found at line 1675:

1673: <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \

1674: "; START=" 'yymmdd' \

1675: ["; END=" 'yymmdd'] <CR>

1676:

1677: <window-size> ::= "RTS-window-size: " \

+=+=+=+= File [rfc1467.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 408:

406:

407: [6] Solensky, F., Internet Growth Charts, "big-internet" mailing

408: list, munnari.oz.au:big-internet/nsf-netnumbers-<yymm>.ps

409:

410: 9. Other relevant documents

+=+=+=+= File [rfc1470.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 247:

245:

246: DATE OF MOST RECENT UPDATE TO THIS CATALOG ENTRY

247: <YYMMDD>

248:

249: Keywords

[2000](#) found at line 4696:

4694: libraries), but this has not been done. Curses is very

4695: slow and cpu intensive on VMS, but the tool has been

4696: run in a window on a VAXstation 2000. Just don't try

4697: to run it on a terminal connected to a 11/750.

4698:

+=+=+=+= File [rfc1479.txt](#) +=+=+=+=

century found at line 752:

750: We note that none of the IDPR protocols contain explicit provisions

751: for dealing with an exhausted timestamp space. As timestamp space

752: exhaustion will not occur until well into the next century, we expect

753: timestamp space viability to outlast the IDPR protocols.

754:

+=+=+=+= File [rfc1486.txt](#) +=+=+=+=

[2000](#) found at line 745:

743: Date: Sun, 11 Apr 1993 20:34:12 -0800

744: Subject: Comments on "An Experiment in Remote Printing"

745: Message-ID: <19930411203412000.123@tpd.org>

746: MIME-Version: 1.0

747: Content-Type: text/plain; charset=us-ascii

+=+=+=+= File [rfc1488.txt](#) +=+=+=+=

UTCTime found at line 302:

300: 2.21. UTC Time

301:

302: Values of type uTCTimeSyntax are encoded as if they were Printable

303: Strings with the strings containing a UTCTime value.

304:

UTCTime found at line 303:

301:

302: Values of type UTCTimeSyntax are encoded as if they were Printable

303: Strings with the strings containing a UTCTime value.

304:

305: 2.22. Guide (search guide)

UTCTime found at line 377:

375: <algorithm-id> ::= <oid> '#' <algorithm-parameters>

376:

377: <utc-time> ::= an encoded UTCTime value

378:

379: <hex-string> ::= <hex-digit> | <hex-digit> <hex-string>

+=+=+=+= File [rfc1500](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1950:

1948: The text version is sent.

1949:

1950: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

1951: and 'yyy' is 'txt' or 'ps'.

1952:

'yy' on a line without 'yyyy' found at line 1951:

1949:

1950: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

1951: and 'yyy' is 'txt' or 'ps'.

1952:

1953: help to get information on how to use

+=+=+=+= File [rfc1507](#).txt +=+=+=+=

UTCTime found at line 5111:

5109:

5110: Validity ::= SEQUENCE {

5111: NotBefore UTCTime,

5112: NotAfter UTCTime

5113: }

UTCTime found at line 5112:

5110: Validity ::= SEQUENCE {

5111: NotBefore UTCTime,

5112: NotAfter UTCTime

5113: }

5114:

UTCTime found at line 6297:

6295: Version ::= INTEGER { 1988(0)} SerialNumber ::= INTEGER Validity

6296: ::= SEQUENCE{

6297: notBefore UTCTime,

```
6298:          notAfter          UTCTime}
6299:
```

UTCTime found at line 6298:

```
6296:      ::=      SEQUENCE{
6297:          notBefore          UTCTime,
6298:          notAfter          UTCTime}
6299:
6300:      SubjectPublicKeyInfo ::= SEQUENCE {
```

+++++= File [rfc1512.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 243:

```
241:      FddiSMTStationIdType ::= OCTET STRING (SIZE (8))
242:      -- The unique identifier for the FDDI station. This is a
243:      -- string of 8 octets, represented as X' yy yy xx xx xx xx
244:      -- xx xx' with the low order 6 octet (xx) from a unique IEEE
245:      -- assigned address. The high order two bits of the IEEE
```

'yy' on a line without 'yyyy' found at line 248:

```
246:      -- address, the group address bit and the administration bit
247:      -- (Universal/Local) bit should both be zero. The first two
248:      -- octets, the yy octets, are implementor-defined.
249:      --
250:      -- The representation of the address portion of the station id
```

+++++= File [rfc1519.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 401:

```
399:      3.2 Historic growth rates
400:
401:      MM/YY      ROUTES      MM/YY      ROUTES
402:      ADVERTISED      ADVERTISED
403:      -----      -----
```

'yy' on a line without 'yyyy' found at line 1318:

```
1316:      Ann Arbor, MI 48109
1317:
1318:      EMail: jyy@merit.edu
1319:
1320:
```

+++++= File [rfc1527.txt](#) +=+=+=+=

century found at line 793:

```
791:      ubiquitous as the current telephone network and provides all
792:      Americans with access to information in much the same way as public
793:      libraries were created for a similar purpose a century ago.
794:
795:      Congress must understand that the NREN is not just a new technology
```



century found at line 875:

```
873:    regulated companies from becoming viable players. We must realize
874:    that we are about to enter a power struggle for the control of the
875:    information resources of the 21st century that promises to be every
876:    bit as harsh and bruising as the power struggle for natural resources
877:    was at the end of the last century.
```

century found at line 877:

```
875:    information resources of the 21st century that promises to be every
876:    bit as harsh and bruising as the power struggle for natural resources
877:    was at the end of the last century.
878:
879:    While the intentions of most appear to be good, as this study has
```

+=+=+=+=+= File [rfc1537.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 165:

```
163:    Example: zone file for foo.xx:
164:
165:    pqr            MX 100  relay.yy.
166:    xyz            MX 100  relay.yy          (no trailing dot!)
167:
```

'yy' on a line without 'yyyy' found at line 166:

```
164:
165:    pqr            MX 100  relay.yy.
166:    xyz            MX 100  relay.yy          (no trailing dot!)
167:
168:
```

'yy' on a line without 'yyyy' found at line 177:

```
175:    When fully written out this stands for:
176:
177:    pqr.foo.xx.   MX 100  relay.yy.
178:    xyz.foo.xx.   MX 100  relay.yy.foo.xx.  (name extension!)
179:
```

'yy' on a line without 'yyyy' found at line 178:

```
176:
177:    pqr.foo.xx.   MX 100  relay.yy.
178:    xyz.foo.xx.   MX 100  relay.yy.foo.xx.  (name extension!)
179:
180: 6. Missing secondary servers
```

'yy' on a line without 'yyyy' found at line 256:

```
254:
255:    foo.xx.       MX 100  gateway.xx.
256:                   MX 200  fallback.yy.
257:    *.foo.xx.     MX 100  gateway.xx.
258:                   MX 200  fallback.yy.
```

'yy' on a line without 'yyyy' found at line 258:  
256: MX 200 fallback.yy.  
257: \*.foo.xx. MX 100 gateway.xx.  
258: MX 200 fallback.yy.  
259: 8. Hostnames  
260:

[2000](#) found at line 89:

87: 86400 ; Refresh 24 hours  
88: 7200 ; Retry 2 hours  
89: 2592000 ; Expire 30 days  
90: 345600 ; Minimum TTL 4 days  
91:

+=+=+=+= File [rfc1540](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1838:

1836: The text version is sent.  
1837:  
1838: file /ftp/rfc/rfcnnnn.yy where 'nnnn' is the RFC number.  
1839: and 'yyy' is 'txt' or 'ps'.  
1840:

'yy' on a line without 'yyyy' found at line 1839:

1837:  
1838: file /ftp/rfc/rfcnnnn.yy where 'nnnn' is the RFC number.  
1839: and 'yyy' is 'txt' or 'ps'.  
1840:  
1841: help to get information on how to use

+=+=+=+= File [rfc1555](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 155:

153: In addition, Listserv usually maintains automatic archives of all  
154: postings to a list. These archives, contained in the file "listname  
155: LOGyymm", do not contain the MIME headers, so all encoding  
156: information will be lost. This is a limitation of the Listserv  
157: software.

+=+=+=+= File [rfc1564](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 811:

809:  
810: The following searches should be tried. Unless otherwise stated, the  
811: "XXX" or "YYY" part of the search filter should be chosen in such a  
812: way as to return a single result. Unless stated otherwise the  
813: results should return all attributes for the entry.

'yy' on a line without 'yyyy' found at line 848:

846:  
847: objectClass=person AND

848: (commonName=XXX\* OR telephoneNumber=\*YYY)  
849:  
850: 75. Search returning all entries (i.e., 100 entries in the single

[2000](#) found at line 527:

525:  
526: 42. If the DSA runs as a static server, state the start-up time for a  
527: DSA with a database of 20000 entries. If this varies widely  
528: according to configuration options, give figures for the various  
529: options. ....

[2000](#) found at line 709:

707:  
708: i. The tests should be made against an organisational database of  
709: 20000 entries. Some tests are against subsets of this data, and  
710: so the database should be set up according to the following  
711: instructions.

[2000](#) found at line 713:

711: instructions.  
712:  
713: Create an organisational DSA with 20000 entries below the  
714: organisation node. Sub-divide this data into a number of  
715: organisational units, one of which should contain 1000 entries,

[2000](#) found at line 808:

806: unit.  
807:  
808: ii. An organisation subtree search, on the subtree of 20000 entries.  
809:  
810: The following searches should be tried. Unless otherwise stated, the

[2000](#) found at line 851:

849:  
850: 75. Search returning all entries (i.e., 100 entries in the single  
851: level search, and all 20000 entries in the subtree search:  
852:  
853: objectClass=\*

+=+=+=+= File [rfc1578](#).txt +=+=+=+=

[2000](#) found at line 1946:

1944: 700 13th Street, NW  
1945: Suite 950  
1946: Washington, DC 20005  
1947: USA  
1948:

+=+=+=+= File [rfc1589](#).txt +=+=+=+=

[2000](#) found at line 1979:

```
1977:      presumably with negligible frequency error.
1978:
1979:      #define MAXPHASE 512000      /* max phase error (us) */
1980:      #ifdef PPS_SYNC
1981:      #define MAXFREQ 100          /* max frequency error (ppm) */
```

+++++ File [rfc1593.txt](#) +++++

[2000](#) found at line 1088:

```
1086:      response(6)
1087:
1088:      --      enumeration values between 2000 and 3999 are reserved
1089:      --      for IP socket traces,
1090:
```

[2000](#) found at line 1149:

```
1147:      testReq(26),
1148:
1149:      --      enumeration values between 2000 and 3999 are reserved
1150:      --      for IP socket traces.
1151:      ipTestFrame(2001),
```

+++++ File [rfc1594.txt](#) +++++

'yy' on a line without 'yyyy' found at line 379:

```
377:      The text version is sent.
378:
379:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
380:      and 'yyy' is 'txt' or 'ps'.
381:
```

'yy' on a line without 'yyyy' found at line 380:

```
378:
379:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
380:      and 'yyy' is 'txt' or 'ps'.
381:
382:      help      to get information on how to use
```

'yy' on a line without 'yyyy' found at line 574:

```
572:      In addition, back issues of the Report are available for anonymous
573:      FTP from the host ftp.isi.edu in the in-notes/imr directory, with
574:      the file names in the form imryymm.txt, where yy is the last two
575:      digits of the year and mm two digits for the month.  For example,
576:      the July 1992 Report is in the file imr9207.txt.
```

+++++ File [rfc1595.txt](#) +++++

[2000](#) found at line 300:

```
298:
299:      ifSpeed      Speed of line rate for SONET/SDH,
300:      (e.g., 155520000 bps).
```

301:  
302:                   ifPhysAddress       The value of the Circuit Identifier.

[2000](#) found at line 357:

355:                   ifSpeed            set to speed of SONET/SDH path  
356:                                   (e.g., an STS-1 path has a  
357:                                   rate of 50112000 bps.)  
358:  
359:                   ifPhysAddress       Circuit Identifier or OCTET STRING of

+++++= File [rfc1600](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 1950:

1948:                                   The text version is sent.  
1949:  
1950:                   file /ftp/rfc/rfcnnnn.yyy       where 'nnnn' is the RFC number.  
1951:                                   and 'yyy' is 'txt' or 'ps'.  
1952:

'yy' on a line without 'yyyy' found at line 1951:

1949:  
1950:                   file /ftp/rfc/rfcnnnn.yyy       where 'nnnn' is the RFC number.  
1951:                                   and 'yyy' is 'txt' or 'ps'.  
1952:  
1953:                   help               to get information on how to use

+++++= File [rfc1607](#).txt ++++++=

century found at line 12:

10:  
11:  
12:                                   A VIEW FROM THE 21ST CENTURY  
13:  
14:   Status of this Memo

century found at line 60:

58:   Cerf [Page 1]

---

59:  
60:   [RFC 1607](#)                   A View from the 21st Century           1 April 1994  
61:  
62:

century found at line 116:

114:   Cerf [Page 2]

---

115:  
116:   [RFC 1607](#)                   A View from the 21st Century           1 April 1994

117:

118:

century found at line 172:

170: Cerf

[Page 3]

---

171:

172: [RFC 1607](#)

A View from the 21st Century

1 April 1994

173:

174:

century found at line 228:

226: Cerf

[Page 4]

---

227:

228: [RFC 1607](#)

A View from the 21st Century

1 April 1994

229:

230:

century found at line 284:

282: Cerf

[Page 5]

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283:

284: [RFC 1607](#)

A View from the 21st Century

1 April 1994

285:

286:

century found at line 340:

338: Cerf

[Page 6]

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339:

340: [RFC 1607](#)

A View from the 21st Century

1 April 1994

341:

342:

century found at line 396:

394: Cerf

[Page 7]

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395:

396: [RFC 1607](#)

A View from the 21st Century

1 April 1994

397:

398:

century found at line 452:

450: Cerf

[Page 8]

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451:

452: [RFC 1607](#)

A View from the 21st Century

1 April 1994

453:

454:

century found at line 508:

506: Cerf

[Page 9]

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507:

508: [RFC 1607](#)

A View from the 21st Century

1 April 1994

509:

510:

century found at line 564:

562: Cerf

[Page 10]

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563:

564: [RFC 1607](#)

A View from the 21st Century

1 April 1994

565:

566:

century found at line 620:

618: Cerf

[Page 11]

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619:

620: [RFC 1607](#)

A View from the 21st Century

1 April 1994

621:

622:

century found at line 676:

674: Cerf

[Page 12]

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675:  
676: [RFC 1607](#) A View from the 21st Century 1 April 1994  
677:  
678:

century found at line 732:

730: Cerf [Page 13]

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731:  
732: [RFC 1607](#) A View from the 21st Century 1 April 1994  
733:  
734:

[2000](#) found at line 663:

661: transmission, switching and computing in a cost-effective  
662: way. For a long time, this technology involved rather  
663: bulky equipment - some of the early 3DV clips from 2000-  
664: 2005 showed rooms full of gear required to steer beams  
665: around. A very interesting combination of fiber optics and

+++++= File [rfc1608.txt](#) +=+=+=+=

UTCTime found at line 240:

238: provider :: DistinguishedNameSyntax,  
239: /\* points to network provider \*/  
240: onlineDate :: UTCTimeSyntax  
241: /\* date when network got connected to the Internet \*/  
242:

UTCTime found at line 370:

368: asGuardian :: DistinguishedNameSyntax, \*/  
369: /\* DN of guardian of this AS \*/  
370: lastModifiedDate :: UTCTimeSyntax \*/  
371: /\* important as routes change frequently \*/  
372:

UTCTime found at line 423:

421: that the number was assigned to. This does not  
422: imply that assTo "owns" this number now. \*/  
423: assDate :: UTCTimeSyntax,  
424: /\* date of assignment for this number \*/  
425: nicHandle :: CaseIgnoreStringSyntax,

UTCTime found at line 1048:

1046:	speed:	id-nw-at.10	:numericString
1047:	traffic:	id-nw-at.11	:numericString
1048:	configurationDate:	id-nw-at.12	:utcTime
1049:	configurationHistory:	id-nw-at.13	:caseIgnoreString



1050:        nodeName,nd:                    id-nw-at.14        :caseIgnoreString

UTCTime found at line 1071:

1069:

1070:

1071:        onlineDate:                    id-nw-at.27        :utcTime

1072:        ipNodeName,IPnd:            id-nw-at.28        :caseIgnoreString

1073:        protocol:                    id-nw-at.29        :caseIgnoreString

UTCTime found at line 1083:

1081:        assBy:                        id-nw-at.37        :DN

1082:        assTo:                        id-nw-at.38        :DN

1083:        assDate:                    id-nw-at.39        :utcTime

1084:        nicHandle:                  id-nw-at.40        :caseIgnoreString

1085:        relNwElement:                id-nw-at.41        :DN

+++++= File [rfc1609](#).txt +=+=+=+=

UTCTime found at line 588:

586:        /\* (average) use in percent of nominal bandwidth

587:            [ this needs more specification later ] \*/

588:        configurationDate :: UTCTimeSyntax,

589:        /\* date when network was configured in current

590:            shape \*/

+++++= File [rfc1610](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1950:

1948:                                    The text version is sent.

1949:

1950:        file /ftp/rfc/rfcnnnn.yyy        where 'nnnn' is the RFC number.

1951:                                    and 'yyy' is 'txt' or 'ps'.

1952:

'yy' on a line without 'yyyy' found at line 1951:

1949:

1950:        file /ftp/rfc/rfcnnnn.yyy        where 'nnnn' is the RFC number.

1951:                                    and 'yyy' is 'txt' or 'ps'.

1952:

1953:        help                                    to get information on how to use

century found at line 926:

924:        An Experimental protocol.

925:

926:        1607 - A View from the 21st Century

927:

928:        This is an information document and does not specify any

+++++= File [rfc1614](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1565:

1563:       The general format of a Gopher+ view descriptor is:  
1564:  
1565:       xxx/yyy zzz: <nnnK>  
1566:  
1567:

'yy' on a line without 'yyyy' found at line 1575:

1573:  
1574:  
1575:       where xxx is a general type-of-information advisory, yyy is what  
1576:       information format you need understand to interpret this information,  
1577:       zzz is a language advisory (coded using POSIX definitions), and nnn

'yy' on a line without 'yyyy' found at line 1584:

1582:       the need to be consistent in the use of type/encoding attributes with  
1583:       the MIME specification. The Gopher+ Type Registry may thus  
1584:       eventually disappear, together with the set of xxx/yyy values it  
1585:       currently contains.)  
1586:

+=+=+=+= File [rfc1625.txt](#) +=+=+=+=

[2000](#) found at line 255:

253:       ( use = "wb", relation = "ro", term = 0 )  
254:       AND  
255:       ( use = "wb", relation = "ro", term = 2000 )  
256:       )  
257:

+=+=+=+= File [rfc1632.txt](#) +=+=+=+=

UTCTime found at line 3795:

3793:       association is rejected. However, if a chain operation is required  
3794:       to check the DN, the bind IS allowed.  
3795:       - When comparing attributes of UTCTime syntax, if the seconds field  
3796:       is omitted, QUIPU does not perform the match correctly (i.e., the  
3797:       seconds field in the attribute values should be ignored, but are

[2000](#) found at line 1214:

1212:       1-800-257-OPEN (U.S. and Canada)  
1213:       1-612-482-6736 (worldwide)  
1214:       FAX: 1-612-482-2000 (worldwide)  
1215:       EMAIL: info@cdc.com  
1216:       or

+=+=+=+= File [rfc1635.txt](#) +=+=+=+=

[1900](#) found at line 605:

603:       Most archive machines perform other functions as well. Please  
604:       respect the needs of their primary users and restrict your FTP access  
605:       to non-prime hours (generally between 1900 and 0600 hours local time

606: for that site) whenever possible. It is especially important to  
607: remember this for sites located on another continent or across a

+=+=+=+= File [rfc1645.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 590:

588: 554 Error, failed (technical reason)

589:

590: 4.4.6 HOLDuntil <YYMMDDHHMMSS> [+/-GMTdifference]

591:

592: The HOLDuntil command allows for the delayed delivery of a message,

+=+=+=+= File [rfc1646.txt](#) +=+=+=+=

[2000](#) found at line 428:

426:

427: Command Rejected 0X10030000

428: Intervention Required 0X08020000

429: Data Check 0X10010000

430: Operation Check 0X10050000

[2000](#) found at line 431:

429: Data Check 0X10010000

430: Operation Check 0X10050000

431: Component Disconnected (LU) 0X08020000

432:

433: Note 2\*: Device End - A positive response to the Server's data

+=+=+=+= File [rfc1647.txt](#) +=+=+=+=

[2000](#) found at line 1355:

1353: 0x00 Command Reject 0x10030000

1354:

1355: 0x01 Intervention Required 0x08020000

1356:

1357: 0x02 Operation Check 0x10050000

+=+=+=+= File [rfc1671.txt](#) +=+=+=+=

[1900](#) found at line 410:

408: Phone: +41 22 767-4967

409: Fax: +41 22 767-7155

410: Telex: 419000 cer ch

411: EMail: brian@dxcoms.cern.ch

412:

+=+=+=+= File [rfc1679.txt](#) +=+=+=+=

century found at line 95:

93: examined below. The time frame for design, development, and

94: deployment of HPN based systems and subsystems is 1996 into the

95: twenty first century.  
96:  
97: Three general problem domains have been identified by the HPN working

==== File [rfc1689](#).txt =====

century found at line 6899:

6897: vision of how information management must change in the 1990s to meet  
6898: the social and economic opportunities and challenges of the 21st  
6899: century. Members of the Coalition Task Force include, among others,  
6900: higher education institutions, publishers, network service providers,  
6901: computer hardware, software, and systems companies, library networks

[2000](#) found at line 421:

419: archie did for the world of ftp. A central server periodically  
420: scans the complete menu hierarchies of Gopher servers appearing on  
421: an ever-expanding list (over 2000 sites as of November 1993). The  
422: resulting index is provided by a veronica server and can be  
423: accessed by any gopher client.

[2000](#) found at line 471:

469:  
470: There are currently (as of November 1993) some 500 registered WAIS  
471: databases with an estimated 2000 additional databases that are not  
472: yet registered. There are approximately another 100 commercial  
473: WAIS databases.

==== File [rfc1693](#).txt =====

[2000](#) found at line 574:

572:	4	Baker	Boston	\$849	Sportswear
573:	5	Baker	Washington	\$3,100	Weights
574:	6	Baker	Washington	\$2000	Camping Gear
575:	7	Baker	Atlanta	\$290	Baseball Gloves
576:	8	Baker	Boston	\$1,500	Sportswear

==== File [rfc1696](#).txt =====

[2000](#) found at line 109:

107:  
108: mdmMIB MODULE-IDENTITY  
109: LAST-UPDATED "9406120000Z"  
110: ORGANIZATION "IETF Modem Management Working Group"  
111:

==== File [rfc1698](#).txt =====

'yy' on a line without 'yyyy' found at line 513:

511: 31 80 {1 - RDN, [SET OF]  
512: 30 80 {2 - AttributeValueAssertion, [SEQUENCE]  
513: 06 03 5504yy -- OID identifying an attribute named in

514: -- the Directory standard  
515: -- which one is determined by yy

'yy' on a line without 'yyyy' found at line 515:

513: 06 03 5504yy -- OID identifying an attribute named in  
514: -- the Directory standard  
515: -- which one is determined by yy  
516: 13 La xxxxxx -- [Printable string]  
517: -- could be T61 string, with tag 14

'yy' on a line without 'yyyy' found at line 522:

520:  
521: The most likely attributes for an RDN have the following hex values  
522: for yy.  
523:  
524: CommonName 03

'yy' on a line without 'yyyy' found at line 903:

901:  
902:  
903: yy is exactly one octet (i.e., one hex digit per y) holding part  
904: of the length  
905:

'yy' on a line without 'yyyy' found at line 918:

916: innermost nest of construction)  
917:  
918: yy - as part of a value - a variable value, each y represents one  
919: hex digit  
920:

+=+=+=+= File [rfc1699.txt](#) +=+=+=+=

century found at line 1050:

1048:  
1049:  
1050: 1607 Cerf Apr 94 A VIEW FROM THE 21ST CENTURY  
1051:  
1052: This document is a composition of letters discussing a possible future.

+=+=+=+= File [rfc1700.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 9905:

9903: AB-00-03-00-00-00 6004 DEC Local Area Transport (LAT) - old  
9904: AB-00-04-00-xx-xx ???? Reserved DEC customer private use  
9905: AB-00-04-01-xx-yy 6007 DEC Local Area VAX Cluster groups  
9906: Sys. Communication Architecture (SCA)  
9907: CF-00-00-00-00-00 9000 Ethernet Configuration Test protocol

[1900](#) found at line 10173:

10171: 014.000.000.063 2422-650-23500 00 Tollpost-Globe AS [OXG]

10172:	014.000.000.064	2422-330-02500 00	Tollpost-Globe AS	[OXG]
10173:	014.000.000.065	2422-350-01900 00	Tollpost-Globe AS	[OXG]
10174:	014.000.000.066	2422-410-00700 00	Tollpost-Globe AS	[OXG]
10175:	014.000.000.067	2422-539-06200 00	Tollpost-Globe AS	[OXG]

[1900](#) found at line 10255:

10253:

10254:

10255:	014.000.000.131	2422-190-41900 00	T-G Airfreight AS	[OXG]
10256:	014.000.000.132	2422-616-16100 00	Tollpost-Globe AS	[OXG]
10257:	014.000.000.133	2422-150-50700-00	Tollpost-Globe Int.	[OXG]

[1900](#) found at line 11112:

11110:	1569	621	??	Something from Emulex
11111:	1571	623	UNKNOWN???	Running on a Novell Server
11112:	1900	076C	Xerox	
11113:	2857	0b29	Site Lock	
11114:	3113	0c29	Site Lock Applications	

[2000](#) found at line 2822:

2820:	tcp-id-port	1999/tcp	cisco identification port
2821:	tcp-id-port	1999/udp	cisco identification port
2822:	callbook	2000/tcp	
2823:	callbook	2000/udp	
2824:	dc	2001/tcp	

[2000](#) found at line 2823:

2821:	tcp-id-port	1999/udp	cisco identification port
2822:	callbook	2000/tcp	
2823:	callbook	2000/udp	
2824:	dc	2001/tcp	
2825:	wizard	2001/udp	curry

[2000](#) found at line 10120:

10118:	014.000.000.018	2624-522-80900 52	FGAN-SIEMENS-X25	[GB7]
10119:	014.000.000.019	2041-170-10000 00	SHAPE-X25	[JFW]
10120:	014.000.000.020	5052-737-20000 50	UQNET	[AXH]
10121:	014.000.000.021	3020-801-00057 50	DMC-CRC1	[VXT]
10122:	014.000.000.022	2624-522-80329 02	FGAN-FGANFFMVAX-X25	[GB7]

[2000](#) found at line 11572:

11570:	AMIGA-1200/LC040
11571:	AMIGA-1200/040
11572:	AMIGA-2000
11573:	AMIGA-2000/010
11574:	AMIGA-2000/020

[2000](#) found at line 11573:

11571:	AMIGA-1200/040
11572:	AMIGA-2000
11573:	AMIGA-2000/010

11574: AMIGA-2000/020  
11575: AMIGA-2000/EC030

[2000](#) found at line 11574:

11572: AMIGA-2000  
11573: AMIGA-2000/010  
11574: AMIGA-2000/020  
11575: AMIGA-2000/EC030  
11576: AMIGA-2000/030

[2000](#) found at line 11575:

11573: AMIGA-2000/010  
11574: AMIGA-2000/020  
11575: AMIGA-2000/EC030  
11576: AMIGA-2000/030  
11577: AMIGA-2000/LC040

[2000](#) found at line 11576:

11574: AMIGA-2000/020  
11575: AMIGA-2000/EC030  
11576: AMIGA-2000/030  
11577: AMIGA-2000/LC040  
11578: AMIGA-2000/EC040

[2000](#) found at line 11577:

11575: AMIGA-2000/EC030  
11576: AMIGA-2000/030  
11577: AMIGA-2000/LC040  
11578: AMIGA-2000/EC040  
11579: AMIGA-2000/040

[2000](#) found at line 11578:

11576: AMIGA-2000/030  
11577: AMIGA-2000/LC040  
11578: AMIGA-2000/EC040  
11579: AMIGA-2000/040  
11580: AMIGA-3000

[2000](#) found at line 11579:

11577: AMIGA-2000/LC040  
11578: AMIGA-2000/EC040  
11579: AMIGA-2000/040  
11580: AMIGA-3000  
11581: AMIGA-3000/EC040

[2000](#) found at line 12014:

12012: AIX/370  
12013: AIX-PS/2  
12014: BS-2000  
12015: CEDAR  
12016: CGW

[2000](#) found at line 12356:

12354: HAZELTINE-1520  
12355: HAZELTINE-1552  
12356: HAZELTINE-2000  
12357: HAZELTINE-ESPRIT  
12358: HITACHI-5601

+=+=+=+= File [rfc1705](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1166:

1164: will be made.  
1165:  
1166: node.sub.domain.name IN TA xx.yy.zz.aa.bb.cc.dd.ee  
1167:  
1168: ee.dd.cc.bb.aa.zz.yy.aa.in-addr.tcp IN PTR node.sub.domain.name.

'yy' on a line without 'yyyy' found at line 1168:

1166: node.sub.domain.name IN TA xx.yy.zz.aa.bb.cc.dd.ee  
1167:  
1168: ee.dd.cc.bb.aa.zz.yy.aa.in-addr.tcp IN PTR node.sub.domain.name.  
1169:  
1170: Using these entries, along with the existing DNS A records, a

'yy' on a line without 'yyyy' found at line 1172:

1170: Using these entries, along with the existing DNS A records, a  
1171: requesting node can determine where the remote node is located. The  
1172: format xx.yy.zz is the IEEE assigned portion and aa.bb.cc.dd.ee is  
1173: the encoded machine serial number as described in [section 4.1](#).  
1174:

+=+=+=+= File [rfc1712](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 208:

206: @ IN SOA marsh.cs.curtin.edu.au. postmaster.cs.curtin.edu.au.  
207: (  
208: 94070503 ; Serial (yymddnn)  
209: 10800 ; Refresh (3 hours)  
210: 3600 ; Retry (1 hour)

+=+=+=+= File [rfc1713](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 104:

102: University, but then Eric Wassenaar from Nikhef did a major rewrite  
103: and still seems to be actively working on improving it. The program  
104: is available from [ftp://ftp.nikhef.nl/pub/network/host\\_YYMMDD.tar.Z](ftp://ftp.nikhef.nl/pub/network/host_YYMMDD.tar.Z)  
105: (YYMMDD is the date of the latest release).  
106:

'yy' on a line without 'yyyy' found at line 105:

103: and still seems to be actively working on improving it. The program



104: is available from [ftp://ftp.nikhef.nl/pub/network/host\\_YYMMDD.tar.Z](ftp://ftp.nikhef.nl/pub/network/host_YYMMDD.tar.Z)  
105: (YYMMDD is the date of the latest release).  
106:  
107: By default, host just maps host names to Internet addresses, querying

+++++= File [rfc1714](#).txt +=+=+=+=

[2000](#) found at line 414:

412: Example of use:

413:

414: -limit 2000

415:

416: 2.3.3 schema

+++++= File [rfc1718](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 969:

967: mailing list. File names beginning with "1" (one) contain general

968: IETF information. This is only a partial list of the available

969: files. (The 'yymm' below refers to the year and month.)

970:

971: o 0mtg-agenda.txt Agenda for the meeting

'yy' on a line without 'yyyy' found at line 972:

970:

971: o 0mtg-agenda.txt Agenda for the meeting

972: o 0mtg-at-a-glance-yymm.txt Logistics information for the meeting

973: o 0mtg-rsvp.txt Meeting registration form

974: o 0mtg-sites.txt Future meeting sites and dates

'yy' on a line without 'yyyy' found at line 975:

973: o 0mtg-rsvp.txt Meeting registration form

974: o 0mtg-sites.txt Future meeting sites and dates

975: o 0mtg-multicast-guide-yymm.txt Schedule for MBone-multicast session

976: o 0mtg-traveldirections-yymm.txt Directions to the meeting site

977: o 0tao.txt This document

'yy' on a line without 'yyyy' found at line 976:

974: o 0mtg-sites.txt Future meeting sites and dates

975: o 0mtg-multicast-guide-yymm.txt Schedule for MBone-multicast session

976: o 0mtg-traveldirections-yymm.txt Directions to the meeting site

977: o 0tao.txt This document

978:

+++++= File [rfc1720](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 2230:

2228: The text version is sent.

2229:

2230: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

2231: and 'yy' is 'txt' or 'ps'.

2232:

'yy' on a line without 'yyyy' found at line 2231:

2229:

2230:           file /ftp/rfc/rfcnnnn.yyy       where 'nnnn' is the RFC number.  
2231:   and 'yyy' is 'txt' or 'ps'.

2232:

2233:           help                           to get information on how to use

+=+=+=+=+= File [rfc1730.txt](#) +=+=+=+=+=

2digit found at line 3334:

3332:       date                    ::= date\_text / "<" date\_text "<"

3333:

3334:       date\_day               ::= 1\*2digit

3335:                               ;; Day of month

3336:

2digit found at line 3337:

3335:                               ;; Day of month

3336:

3337:       date\_day\_fixed       ::= (SPACE digit) / 2digit

3338:                               ;; Fixed-format version of date\_day

3339:

2digit found at line 3348:

3346:       date\_year             ::= 4digit

3347:

3348:       date\_year\_old        ::= 2digit

3349:                               ;; OBSOLETE, (year - 1900)

3350:

2digit found at line 3657:

3655:       TEXT\_CHAR            ::= <any CHAR except CR and LF>

3656:

3657:       time                  ::= 2digit ":" 2digit ":" 2digit

3658:                               ;; Hours minutes seconds

3659:

[1900](#) found at line 3349:

3347:

3348:       date\_year\_old        ::= 2digit

3349:                               ;; OBSOLETE, (year - 1900)

3350:

3351:       date\_time             ::= "<" (date\_time\_new / date\_time\_old) "<"

+=+=+=+=+= File [rfc1732.txt](#) +=+=+=+=+=

century found at line 254:

252:

253:       The format of dates and times has changed due to the impending end

254: of the century. Clients that fail to accept a four-digit year or  
255: a signed four-digit timezone value will not work properly with  
256: IMAP4.

==== File [rfc1733](#).txt =====

[2000](#) found at line 94:

92: message or part of a message. For example, a user connected to an  
93: IMAP4 server via a dialup link can determine that a message has a  
94: 2000 byte text segment and a 40 megabyte video segment, and elect to  
95: fetch only the text segment.  
96:

==== File [rfc1739](#).txt =====

century found at line 1044:

1042: 1.EDU Reserved Domain  
1043: 2.EDU Reserved Domain  
1044: 22CF.EDU 22nd Century Foundation  
1045: 3.EDU Reserved Domain  
1046: \*\* There are 1499 more matches. Show them? N

==== File [rfc1740](#).txt =====

[2000](#) found at line 383:

381: This field denotes the version of AppleSingle format in the event  
382: the format evolves (more fields may be added to the header). The  
383: version described in this note is version \$00020000 or  
384: 0x00020000.  
385:

[2000](#) found at line 384:

382: the format evolves (more fields may be added to the header). The  
383: version described in this note is version \$00020000 or  
384: 0x00020000.  
385:  
386: Filler

[2000](#) found at line 590:

588: #define F\_fStationary 0x0800 /\* file is a stationary pad \*/  
589: #define F\_fNameLocked 0x1000 /\* file can't be renamed by Finder \*/  
590: #define F\_fHasBundle 0x2000 /\* file has a bundle \*/  
591: #define F\_fInvisible 0x4000 /\* file's icon is invisible \*/  
592: #define F\_fAlias 0x8000 /\* file is an alias file (System 7) \*/

[2000](#) found at line 624:

622:  
623: uint32 magicNum; /\* internal file type tag \*/  
624: uint32 versionNum; /\* format version: 2 = 0x00020000 \*/  
625: uchar8 filler[16]; /\* filler, currently all bits 0 \*/  
626: uint16 numEntries; /\* number of entries which follow \*/

[2000](#) found at line 752:

```
750:
751:      /* Times are stored as a "signed number of seconds before or after
752:       * 12:00 a.m. (midnight), January 1, 2000 Greenwich Mean Time (GMT).
753:       * Applications must convert to their native date and time
754:       * conventions." Any unknown entries are set to 0x80000000
```

+==+==+==+ File [rfc1747](#).txt +==+==+==+

[2000](#) found at line 736:

```
734:
735:                                sdlcPortAdminTopology == multipoint "
736:                                DEFVAL { 2000 }
737:                                ::= { sdlcPortAdminEntry 9 }
738:
```

+==+==+==+ File [rfc1752](#).txt +==+==+==+

'yy' on a line without 'yyyy' found at line 1929:

```
1927:
1928:      We recommend that a new IPng Transition (NGTRANS) Working Group be
1929:      formed with Bob Gilligan of Sun Microsystems and xxx of yyy as co-
1930:      chairs to design the mechanisms and procedures to support the
1931:      transition of the Internet from IPv4 to IPv6 and to give advice on
```

+==+==+==+ File [rfc1758](#).txt +==+==+==+

[2000](#) found at line 180:

```
178:                                c/o Rapport Communication
179:                                2721 N Street NW
180:                                Washington, DC 20007
181:                                US
182:
```

[2000](#) found at line 205:

```
203:      Rapport Communication
204:      2721 N Street NW
205:      Washington, DC 20007
206:
207:      Phone: +1 202-342-2727
```

+==+==+==+ File [rfc1759](#).txt +==+==+==+

[2000](#) found at line 1488:

```
1486:      -- on Unicode in the MIBenum range of 1000-1999.
1487:      -- See IANA Registry for vendor developed character sets
1488:      -- in the MIBenum range of 2000-xxxx.
1489:      }
1490:
```

+=+=+=+= File [rfc1769](#).txt +=+=+=+=

[1900](#) found at line 218:

216: main product of the protocol, a special timestamp format has been  
217: established. NTP timestamps are represented as a 64-bit unsigned  
218: fixed-point number, in seconds relative to 0h on 1 January 1900. The  
219: integer part is in the first 32 bits and the fraction part in the  
220: last 32 bits. In the fraction part, the non-significant low-order

[1900](#) found at line 248:

246: overflow some time in 2036. Should NTP or SNTP be in use in 2036,  
247: some external means will be necessary to qualify time relative to  
248: 1900 and time relative to 2036 (and other multiples of 136 years).  
249: Timestamped data requiring such qualification will be so precious  
250: that appropriate means should be readily available. There will exist

+=+=+=+= File [rfc1778](#).txt +=+=+=+=

UTCTime found at line 309:

307: 2.21. UTC Time  
308:  
309: Values of type uTCTimeSyntax are encoded as if they were Printable  
310: Strings with the strings containing a UTCTime value.  
311:

UTCTime found at line 310:

308:  
309: Values of type uTCTimeSyntax are encoded as if they were Printable  
310: Strings with the strings containing a UTCTime value.  
311:  
312: 2.22. Guide (search guide)

UTCTime found at line 399:

397:  
398:  
399: <utc-time> ::= an encoded UTCTime value  
400:  
401: <hex-string> ::= <hex-digit> | <hex-digit> <hex-string>

+=+=+=+= File [rfc1780](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 2118:

2116: The text version is sent.  
2117:  
2118: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.  
2119: and 'yyy' is 'txt' or 'ps'.  
2120:

'yy' on a line without 'yyyy' found at line 2119:

2117:  
2118: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

2119: and 'yyy' is 'txt' or 'ps'.  
2120:  
2121: help to get information on how to use

+=+=+=+= File [rfc1786.txt](#) +=+=+=+=  
'yy' on a line without 'yyyy' found at line 2992:  
2990: USA  
2991: +1 313 936 2655  
2992: jyy@merit.edu  
2993:  
2994:

'yy' on a line without 'yyyy' found at line 3694:  
3692:  
3693: Format:  
3694: <email-address> YYMMDD  
3695:  
3696:

'yy' on a line without 'yyyy' found at line 3704:  
3702:  
3703: <email-address> should be the address of the person who made  
3704: the last change. YYMMDD denotes the date this change was made.  
3705:  
3706: Example:

'yy' on a line without 'yyyy' found at line 3950:  
3948:  
3949: Format:  
3950: <email-address> YYMMDD  
3951:  
3952: <email-address> should be the address of the person who

'yy' on a line without 'yyyy' found at line 3953:  
3951:  
3952: <email-address> should be the address of the person who  
3953: made the last change. YYMMDD denotes the date this change  
3954: was made.  
3955:

'yy' on a line without 'yyyy' found at line 4170:  
4168:  
4169: Format:  
4170: <email-address> YYMMDD  
4171:  
4172: <email-address> should be the address of the person who

'yy' on a line without 'yyyy' found at line 4173:  
4171:  
4172: <email-address> should be the address of the person who

4173:                   made the last change. YYMMDD denotes the date this change  
4174:                   was made.  
4175:

'yy' on a line without 'yyyy' found at line 4305:

4303:  
4304:                   Format:  
4305:                   YYMMDD  
4306:  
4307:                   YYMMDD denotes the date this route was withdrawn.

'yy' on a line without 'yyyy' found at line 4307:

4305:                   YYMMDD  
4306:  
4307:                   YYMMDD denotes the date this route was withdrawn.  
4308:  
4309:

'yy' on a line without 'yyyy' found at line 4394:

4392:  
4393:                   Format:  
4394:                   <email-address> YYMMDD  
4395:  
4396:                   <email-address> should be the address of the person who

'yy' on a line without 'yyyy' found at line 4397:

4395:  
4396:                   <email-address> should be the address of the person who  
4397:                   made the last change. YYMMDD denotes the date this change  
4398:                   was made.  
4399:

+=+=+=+= File [rfc1800.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 1950:

1948:                   The text version is sent.  
1949:  
1950:                   file /ftp/rfc/rfcnnnn.yyy           where 'nnnn' is the RFC number.  
1951:                   and 'yyy' is 'txt' or 'ps'.  
1952:

'yy' on a line without 'yyyy' found at line 1951:

1949:  
1950:                   file /ftp/rfc/rfcnnnn.yyy           where 'nnnn' is the RFC number.  
1951:                   and 'yyy' is 'txt' or 'ps'.  
1952:  
1953:                   help                               to get information on how to use

+=+=+=+= File [rfc1806.txt](#) +=+=+=+=

century found at line 8:

6:  
7: Network Working Group R. Troost  
8: Request for Comments: 1806 New Century Systems  
9: Category: Experimental S. Dorner  
10: QUALCOMM Incorporated

century found at line 402:  
400:  
401: Rens Troost  
402: New Century Systems  
403: 324 East 41st Street #804  
404: New York, NY, 10017 USA

century found at line 408:  
406: Phone: +1 (212) 557-2050  
407: Fax: +1 (212) 557-2049  
408: EMail: [rens@century.com](mailto:rens@century.com)  
409:  
410:

+=+=+=+= File [rfc1807.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 318:  
316: mandatory field. The ID field identifies the bibliographic  
317: record and is used in management of these records.  
318: Its format is "ID:: XXX//YYY", where XXX is the  
319: publisher-ID (the controlled symbol of the publisher)  
320: and YYY is the ID (e.g., report number) of the

'yy' on a line without 'yyyy' found at line 320:  
318: Its format is "ID:: XXX//YYY", where XXX is the  
319: publisher-ID (the controlled symbol of the publisher)  
320: and YYY is the ID (e.g., report number) of the  
321: publication as assigned by the publisher. This ID is  
322: typically printed on the cover, and may contain slashes.

'yy' on a line without 'yyyy' found at line 767:  
765: in its "ID::".  
766:  
767: Format: END:: XXX//YYY  
768:  
769: Example: END:: OUKS//CS-TR-91-123

'yy' on a line without 'yyyy' found at line 778:  
776:  
777: In order to avoid conflicts among the symbols of the publishing  
778: organizations (the XXX part of the "ID:: XXX//YYY") it is suggested  
779: that the various organizations that publish reports (such as  
780: universities, departments, and laboratories) register their

2-digit found at line 348:



346: The format for ENTRY date is "Month Day, Year". The  
347: month must be alphabetic (spelled out). The "Day" is a  
348: 1- or 2-digit number. The "Year" is a 4-digit number.  
349:  
350: Format: ENTRY:: <date>

2-digit found at line 513:

511: DATE (0) -- The publication date. The formats are "Month Year"  
512: and "Month Day, Year". The month must be alphabetic  
513: (spelled out). The "Day" is a 1- or 2-digit number. The  
514: "Year" is a 4- digit number.  
515:

[1900](#) found at line 406:

404: omitted, the record is assumed to be a new record and not  
405: a revision. If the revision date is specified as 0, this  
406: is assumed to be January 1, 1900 (the previous RFC, used  
407: revision data of 0, 1, 2, 3, etc. this specification is for  
408: programs that might process records from [RFC1357](#)).

+=+=+=+= File [rfc1815.txt](#) +=+=+=+=

[2000](#) found at line 187:

185:	8 BASIC GREEK	0370-03CF	
186:	10 CYRILLIC	0400-04FF	
187:	32 GENERAL PUNCTUATION	2000-206F	See note 1, below.
188:	39 MATHEMATICAL OPERATORS	2200-22FF	See note 1, below.
189:	44 BOX DRAWING	2500-257F	

+=+=+=+= File [rfc1819.txt](#) +=+=+=+=

[2000](#) found at line 5855:

5853:	5 HelloLossFactor	Number of consecutively missed HELLO
5854:		messages before declaring link failure
5855:	2000 DefaultRecoveryTimeout	Interval between successive HELLOs
5856:		to/from active neighbors
5857:		

+=+=+=+= File [rfc1831.txt](#) +=+=+=+=

[2000](#) found at line 401:

399: 7.3 Program Number Assignment  
400:  
401: Program numbers are given out in groups of hexadecimal 20000000  
402: (decimal 536870912) according to the following chart:  
403:

[2000](#) found at line 405:

403:		
404:	0 - 1fffffff	defined by rpc@sun.com
405:	20000000 - 3fffffff	defined by user

406: 40000000 - 5fffffff transient  
407: 60000000 - 7fffffff reserved

==== File [rfc1848.txt](#) =====

'yy' on a line without 'yyyy' found at line 1881:

1879: Content-Transfer-Encoding: base64

1880:

1881: AfR1WSeyLhy5AtcX0ktUVlbFC1vvcoCjYWy/yYjVj48eqzUVvGTGMSV6MdlYnU

1882: d4jcJgRnQIQvIxm2VRgH8W8MkAlul+RWGu7jnxjp0sNsU562+RZr0f4F3K3n4w

1883: onUUP265UvvMj23RSTguZ/nl/OxnFM6SzDgV39V/i/RofqI=

'yy' on a line without 'yyyy' found at line 1994:

1992: U6B13vzpE8wMSVefzaCTSpXRSC08ceVEZrIYS53/CKZV2/Sga71pGNlux8MsJpY

1993: Lwdj5Q3NKocg1LMngMo8yrMAe+avMjf0nhui49Xon1Gft+N5XDH/+wI9qxI9fkQv

1994: NZVDlWIhCYEkxd5ke549tLkJjEqHQbgJW5C+K/uxdiD2dBt+nRCXcu00Px3yKRyY

1995: g/9BgTf36padSHuv48xBg5YaqaEWpEzLI0Qd31vAyP23rqiPhfBn6sjhQ2KrWhiF

1996: 2l3TV8kQsIGHHZUkaUbqkXJe6PEdWWhwsqCFPDdkpjzQRrTuJH6xleNUFg+CG1V+

==== File [rfc1861.txt](#) =====

'yy' on a line without 'yyyy' found at line 766:

764: 554 Error, failed (technical reason)

765:

766: 4.5.6 HOLDuntil <YMMDDHHMMSS> [+/-GMTdifference]

767:

768: The HOLDuntil command allows for the delayed delivery of a message,

'yy' on a line without 'yyyy' found at line 1061:

1059: the current transaction should be kept in the following format:

1060:

1061: YMMDDHHMMSS+GMT (example: 950925143501+7)

1062:

1063:

==== File [rfc1865.txt](#) =====

[1900](#) found at line 1564:

1562:

1563: START

1564: GET ITU-1900

1565: END

1566:

[2000](#) found at line 1745:

1743: Logistics Management Institute

1744: Attn. Library

1745: 2000 Corporate Ridge

1746: McLean, Virginia, 22102-7805

1747:

```

+=+=+=+=+= File rfc1866.txt +=+=+=+=+=
'yy' on a line without 'yyyy' found at line 1078:
1076:      <div class=chapter><h1>foo</h1><p>...</div>
1077:      => <H1>,"foo",</H1>,<P>,"..."
1078:      xxx <P ID=z23> yyy
1079:      => "xxx ",<P>," yyy
1080:      Let &alpha; &amp; &beta; be finite sets.

```

```

'yy' on a line without 'yyyy' found at line 1079:
1077:      => <H1>,"foo",</H1>,<P>,"..."
1078:      xxx <P ID=z23> yyy
1079:      => "xxx ",<P>," yyy
1080:      Let &alpha; &amp; &beta; be finite sets.
1081:      => "Let &alpha; & &beta; be finite sets."

```

```

+=+=+=+=+= File rfc1876.txt +=+=+=+=+=
2000 found at line 103:
101:      exponent.
102:
103:      Since 200000000m (represented by the value 0x29) is greater
104:      than the equatorial diameter of the WGS 84 ellipsoid
105:      (12756274m), it is therefore suitable for use as a

```

```

2000 found at line 219:
217:
218:  rwy04L.logan-airport.boston.  LOC    42 21 28.764 N 71 00 51.617 W
219:                                -44m 2000m
220:
221:

```

```

+=+=+=+=+= File rfc1880.txt +=+=+=+=+=
'yy' on a line without 'yyyy' found at line 2062:
2060:      The text version is sent.
2061:
2062:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
2063:      and 'yyy' is 'txt' or 'ps'.
2064:

```

```

'yy' on a line without 'yyyy' found at line 2063:
2061:
2062:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
2063:      and 'yyy' is 'txt' or 'ps'.
2064:
2065:      help                            to get information on how to use

```

```

+=+=+=+=+= File rfc1888.txt +=+=+=+=+=
1900 found at line 859:

```

857: Group Leader, Communications Systems Phone: +41 22 767-4967  
 858: Computing and Networks Division Fax: +41 22 767-7155  
 859: CERN Telex: 419000 cer ch  
 860: European Laboratory for Particle Physics Email: brian@dxcoms.cern.ch  
 861: 1211 Geneva 23, Switzerland

+=+=+=+= File [rfc1889](#).txt +=+=+=+=

[1900](#) found at line 518:

516: Wallclock time (absolute time) is represented using the timestamp  
 517: format of the Network Time Protocol (NTP), which is in seconds  
 518: relative to 0h UTC on 1 January 1900 [5]. The full resolution NTP  
 519: timestamp is a 64-bit unsigned fixed-point number with the integer  
 520: part in the first 32 bits and the fractional part in the last 32

[2000](#) found at line 1526:

1524:		v		^
1525:	ntp_sec =0xb44db705	v		^ dlsr=0x0005.4000 ( 5.250s)
1526:	ntp_frac=0x20000000	v		^ lsr =0xb705:2000 (46853.125s)
1527:	(3024992016.125 s)	v		^
1528:	r	v		^ RR(n)

[2000](#) found at line 1535:

1533: A 0xb710:8000 (46864.500 s)  
 1534: DLSR -0x0005:4000 ( 5.250 s)  
 1535: LSR -0xb705:2000 (46853.125 s)  
 1536: -----  
 1537: delay 0x 6:2000 ( 6.125 s)

[2000](#) found at line 1537:

1535: LSR -0xb705:2000 (46853.125 s)  
 1536: -----  
 1537: delay 0x 6:2000 ( 6.125 s)

1538:  
 1539: Figure 2: Example for round-trip time computation

[2000](#) found at line 3182:

3180: \* Big-endian mask for version, padding bit and packet type pair  
 3181: \*/  
 3182: #define RTCP\_VALID\_MASK (0xc000 | 0x2000 | 0xfe)  
 3183: #define RTCP\_VALID\_VALUE ((RTP\_VERSION << 14) | RTCP\_SR)  
 3184:

+=+=+=+= File [rfc1890](#).txt +=+=+=+=

[2000](#) found at line 293:

291:  
 292: The sampling frequency should be drawn from the set: 8000, 11025,  
 293: 16000, 22050, 24000, 32000, 44100 and 48000 Hz. (The Apple Macintosh  
 294: computers have native sample rates of 22254.54 and 11127.27, which  
 295: can be converted to 22050 and 11025 with acceptable quality by

[2000](#) found at line 568:

```
566:
567:     Sampling rate and channel count are contained in the payload. MPEG-I
568:     audio supports sampling rates of 32000, 44100, and 48000 Hz (ISO/IEC
569:     11172-3, section 1.1; "Scope"). MPEG-II additionally supports ISO/IEC
570:     11172-3 Audio...").
```

+=+=+=+=+= File [rfc1898](#).txt +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 1271:

```
1269:     3rWM5Ir3ier3/7WM5Ir36+v35v73ife1j0WK94n3/7T3/ffm5uD+7N339/f39/eq3ff3
1270:     9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d9/exuKX3
1271:     5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KjtL+2pf/wi7nw
1272:     3ard3Q==
1273:     $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==--$$
```

'yy' on a line without 'yyyy' found at line 1273:

```
1271:     5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KjtL+2pf/wi7nw
1272:     3ard3Q==
1273:     $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==--$$
1274:
1275:     #####
```

'yy' on a line without 'yyyy' found at line 1328:

```
1326:     merchant-date: 19950121100505.nnn
1327:     merchant-response-code: failure/success/etc.
1328:     pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1329:     pr-signed-hash:
1330:     a/0meaMHRinNVd8nq/fKsYg5AfTZZUCX0S3gkjAhZTmcrkp6RZvppmDd/P7lboFLFDBh
```

'yy' on a line without 'yyyy' found at line 1340:

```
1338:     rHzP5YqaMnk5iRBHvwKb5MaxKXG00ef5ms8M5W8lI2d0XPech4xNBn8BMAJ6iSkZmszo
1339:     QfDeWgga48g2tqlA6ifZGp7daDR81lumtGMCvg==
1340:     $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==--$$
1341:
1342:     #####
```

'yy' on a line without 'yyyy' found at line 1474:

```
1472:     mjD6ickhd+SQZhbRCNerlTiQGhuL4wUAXzGh8aHk2oXjoMpVzWw2EImPu5QaPEc36xgr
1473:     mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=
1474:     $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==--$$
1475:
1476:     #####
```

'yy' on a line without 'yyyy' found at line 1482:

```
1480:     order-id: 12313424234242
1481:     merchant-amount: usd 10.00
1482:     pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1483:     pr-signed-hash:
1484:     a/0meaMHRinNVd8nq/fKsYg5AfTZZUCX0S3gkjAhZTmcrkp6RZvppmDd/P7lboFLFDBh
```

'yy' on a line without 'yyyy' found at line 1490:

```
1488:    date: 19950121100505.nnn
1489:    merchant-signature:
1490:        v4qZMe2d7mUXztVdC3ZPMmMgYHlBA7bhR96LSehKP15ylqR/1KwwbBAX8CEqns55UIY
1491:        GGMwPMGoF+GDPM7GlC6fReQ5wyvV1PnETSV09/LAYRz0zzRYuyVue0jWdlr5
1492:
```

'yy' on a line without 'yyyy' found at line 1593:

```
1591:    mjd6ickhd+SQZhbRCNerlTiQGhuL4wUAXzGh8aHk2oXjoMpVzWw2EImPu5QaPEc36xgr
1592:    mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=
1593:    $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$
1594:
1595:    #####
```

'yy' on a line without 'yyyy' found at line 1602:

```
1600:    order-id: 1231-3424-234242
1601:    merchant-amount: usd 10.00
1602:    pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1603:    pr-signed-hash:
1604:    a/0meaMHRinNVd8nq/fKsYg5AfTZZUCX0S3gkjAhZTmcrkp6RZvppmDd/P7lboFLFDBh
```

'yy' on a line without 'yyyy' found at line 1692:

```
1690:    mjd6ickhd+SQZhbRCNerlTiQGhuL4wUAXzGh8aHk2oXjoMpVzWw2EImPu5QaPEc36xgr
1691:    mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=
1692:    $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$
1693:
1694:    #####
```

'yy' on a line without 'yyyy' found at line 1804:

```
1802:    mjd6ickhd+SQZhbRCNerlTiQGhuL4wUAXzGh8aHk2oXjoMpVzWw2EImPu5QaPEc36xgr
1803:    mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=
1804:    $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$
1805:
1806:    #####
```

'yy' on a line without 'yyyy' found at line 1821:

```
1819:    response-code: failure/success/etc.
1820:    order-id: 1231-3424-234242
1821:    pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1822:    pr-signed-hash:
1823:    8zqw0ipqtLtte0tBz5/5VPNJPPonfTwkfZPbtuk5lqMykKdvThh00ycrfT7eXrn/hLUC
```

'yy' on a line without 'yyyy' found at line 1827:

```
1825:    retrieval-reference-number: 432112344321
1826:    authorization-code: a12323
1827:    card-hash: 7Tm/djB05pLIw3JAyy5E7A==
1828:    {
1829:    card-prefix: nnxxxx [Returned if merchant is not full-PAN]
```

'yy' on a line without 'yyyy' found at line 1948:

1946: mjd6ickhd+SQZhbRCNerlTiQGhuL4wUAxzGh8aHk2oXjoMpVzWw2EImPu5QaPEc36xgr  
1947: mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=  
1948: \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==\$\$  
1949:  
1950: #####

'yy' on a line without 'yyyy' found at line 1958:

1956: order-id: 12313424234242  
1957: merchant-amount: usd 10.00  
1958: pr-hash: 7Tm/djB05pLIw3JAyy5E7A==  
1959:  
1960:

'yy' on a line without 'yyyy' found at line 2050:

2048: CEUEvQhcmruopwEeehv+bejc3fDDZ23JKrbhlZ17lSvFR14PKFsi32pXFqT00ej9GTc5  
2049: L6c8nM3tI1qdHNCe0N5f7ASdKS0tYSxAYJLIR6MqPrXjNJEaRx7Vu1odMlkgrzGOV1fo  
2050: 5w33BQHK3U2h+1e5zYBeHY3ZYG4nmylYYXIye4xpuPN4QU0dGrWZoImYE44Q0wjd5ozl  
2051: xulPBjj6cpEI/9wTwR3tpkBb4ZfYirxxnoj9JUkPK9Srv9iJ  
2052: \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==\$\$

'yy' on a line without 'yyyy' found at line 2052:

2050: 5w33BQHK3U2h+1e5zYBeHY3ZYG4nmylYYXIye4xpuPN4QU0dGrWZoImYE44Q0wjd5ozl  
2051: xulPBjj6cpEI/9wTwR3tpkBb4ZfYirxxnoj9JUkPK9Srv9iJ  
2052: \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==\$\$  
2053:  
2054: #####

'yy' on a line without 'yyyy' found at line 2064:

2062: response-code: failure/success/etc.  
2063: order-id: 1231-3424-234242  
2064: pr-hash: 7Tm/djB05pLIw3JAyy5E7A==  
2065: pr-signed-hash:  
2066: IV8gWHx1f8eCkWsCsM0E3M8mnTbQ7IBBcEmyGDAwjdbaLu5Qm/bh060X1npe2d3Hijxy

'yy' on a line without 'yyyy' found at line 2068:

2066: IV8gWHx1f8eCkWsCsM0E3M8mnTbQ7IBBcEmyGDAwjdbaLu5Qm/bh060X1npe2d3Hijxy  
2067: +X8vKcVE6l6To27u7A7UmGm+po9lCUSLxgtyqyn3jWhHZpc5NZpwoTCf2pAK  
2068: card-hash: 7Tm/djB05pLIw3JAyy5E7A==  
2069: card-number: 4811123456781234  
2070: card-type: visa

'yy' on a line without 'yyyy' found at line 2151:

2149: transaction: 123123213  
2150: date: 19950121100505.nnn  
2151: \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==\$\$  
2152:  
2153: #####

'yy' on a line without 'yyyy' found at line 2193:

2191: by their CyberCash application...  
2192: supported-versions: 08.win, 0.81win, 0.8mac

2193:        \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-\$  
2194:  
2195:        #####

'yy' on a line without 'yyyy' found at line 2359:

2357:  
2358:  
2359:        35XiC9Yn8fLE4Va14UxMf2RCR1B/XoV6AE64KwPeCYy0YvwbRcYpRMBXFLyYgWM+ME1  
2360:        +yp7c66SrCBhW4Q8AJYQ+5j5uy07uKyyq70hrV0IMpRDPjiQXZMooLZ0ifJPmpvJ66hC  
2361:        VZuWMuA6LR+TJzWUm4sUP9Zb6zMQShedUyOPrtw1vkJXU1vZ5aI80JAgUcLEitcD+dsY

'yy' on a line without 'yyyy' found at line 2360:

2358:  
2359:        35XiC9Yn8fLE4Va14UxMf2RCR1B/XoV6AE64KwPeCYy0YvwbRcYpRMBXFLyYgWM+ME1  
2360:        +yp7c66SrCBhW4Q8AJYQ+5j5uy07uKyyq70hrV0IMpRDPjiQXZMooLZ0ifJPmpvJ66hC  
2361:        VZuWMuA6LR+TJzWUm4sUP9Zb6zMQShedUyOPrtw1vkJXU1vZ5aI80JAgUcLEitcD+dsY  
2362:        Df4CzA00fC10P0kJ58HZB/pSBfUrHAa+IqMHYzkV/HBi9TjTwmktJi+8T9orXS0jSvor

'yy' on a line without 'yyyy' found at line 2502:

2500:        lw51IHbmo1Jj7H6wyNnRpEjy4tM73jcosBfGeQDHxgyH1uaiFNr2D+WvmuYo7eun2dsy  
2501:        Wve20/FwicWHvkg5aDPsg0jzetsn1JCNZzbW  
2502:        \$\$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-\$  
2503:  
2504:        #####

'yy' on a line without 'yyyy' found at line 2591:

2589:        x-opaque: [if can't decrypt]  
2590:        9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d9/exuKX3  
2591:        5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6Kjtl+2pf/wi7nw  
2592:  
2593:        #####

'yy' on a line without 'yyyy' found at line 2653:

2651:        x-opaque: [if can't decrypt]  
2652:        9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d9/exuKX3  
2653:        5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6Kjtl+2pf/wi7nw  
2654:  
2655:        #####

+=+=+=+= File [rfc1900.txt](#) +=+=+=+=

[1900](#) found at line 8:

6:

7: Network Working Group

8: Request for Comments: 1900

9: Category: Informational

10:

B. Carpenter

Y. Rekhter

IAB

February 1996

[1900](#) found at line 60:

58: Carpenter & Rekhter

Informational

[Page 1]



59:  
60: [RFC 1900](#) Renumbering Needs Work February 1996  
61:  
62:

[1900](#) found at line 116:

114: Carpenter & Rekhter Informational [Page 2]

---

115:  
116: [RFC 1900](#) Renumbering Needs Work February 1996  
117:  
118:

[1900](#) found at line 172:

170: Carpenter & Rekhter Informational [Page 3]

---

171:  
172: [RFC 1900](#) Renumbering Needs Work February 1996  
173:  
174:

[1900](#) found at line 207:

205: Phone: +41 22 767-4967  
206: Fax: +41 22 767-7155  
207: Telex: 419000 cer ch  
208: EMail: brian@dxcoms.cern.ch  
209:

+=+=+=+= File [rfc1902.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 2027:

2025: Several clauses defined in this document use the UTC Time format:

2026:

2027: YYMMDDHHMMZ

2028:

2029: where: YY - last two digits of year

'yy' on a line without 'yyyy' found at line 2029:

2027: YYMMDDHHMMZ

2028:

2029: where: YY - last two digits of year

2030: MM - month (01 through 12)

2031: DD - day of month (01 through 31)

UTCTime found at line 136:

134: BEGIN

135: TYPE NOTATION ::=

```
136:          "LAST-UPDATED" value(Update UTCTime)
137:          "ORGANIZATION" Text
138:          "CONTACT-INFO" Text
```

UTCTime found at line 152:

```
150:          | Revisions Revision
151:      Revision ::=
152:          "REVISION" value(Update UTCTime)
153:          "DESCRIPTION" Text
154:
```

==== File [rfc1910](#).txt =====

[2000](#) found at line 1702:

```
1700:
1701:  usecMIB MODULE-IDENTITY
1702:      LAST-UPDATED "9601120000Z"
1703:      ORGANIZATION "IETF SNMPv2 Working Group"
1704:      CONTACT-INFO
```

==== File [rfc1917](#).txt =====

century found at line 259:

```
257:      should be noted that careful extrapolations of the current trends
258:      suggest that the address space will be exhausted early in the next
259:      century.
260:
261:  3. Problem
```

==== File [rfc1920](#).txt =====

'yy' on a line without 'yyyy' found at line 2174:

```
2172:          The text version is sent.
2173:
2174:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
2175:                                     and 'yyy' is 'txt' or 'ps'.
2176:
```

'yy' on a line without 'yyyy' found at line 2175:

```
2173:
2174:      file /ftp/rfc/rfcnnnn.yyy      where 'nnnn' is the RFC number.
2175:                                     and 'yyy' is 'txt' or 'ps'.
2176:
2177:      help                            to get information on how to use
```

[1900](#) found at line 851:

```
849:          An Experimental protocol.
850:
851:      1900 - Renumbering Needs Work
852:
853:          This is an information document and does not specify any
```

+=+=+=+= File [rfc1941.txt](#) +=+=+=+=

[2000](#) found at line 2826:

2824: 700 13th Street, NW  
2825: Suite 950  
2826: Washington, DC 20005  
2827: Phone: 202-434-8954  
2828: EMail: sellers@quest.arc.nasa.gov

+=+=+=+= File [rfc1945.txt](#) +=+=+=+=

2-digit found at line 500:

498: Specific repetition: "<n>(element)" is equivalent to  
499: "<n>\*<n>(element)"; that is, exactly <n> occurrences of  
500: (element). Thus 2DIGIT is a 2-digit number, and 3ALPHA is a  
501: string of three alphabetic characters.  
502:

2digit found at line 500:

498: Specific repetition: "<n>(element)" is equivalent to  
499: "<n>\*<n>(element)"; that is, exactly <n> occurrences of  
500: (element). Thus 2DIGIT is a 2-digit number, and 3ALPHA is a  
501: string of three alphabetic characters.  
502:

2digit found at line 872:

870: asctime-date = wkday SP date3 SP time SP 4DIGIT  
871:  
872: date1 = 2DIGIT SP month SP 4DIGIT  
873: ; day month year (e.g., 02 Jun 1982)  
874: date2 = 2DIGIT "-" month "-" 2DIGIT

2digit found at line 874:

872: date1 = 2DIGIT SP month SP 4DIGIT  
873: ; day month year (e.g., 02 Jun 1982)  
874: date2 = 2DIGIT "-" month "-" 2DIGIT  
875: ; day-month-year (e.g., 02-Jun-82)  
876: date3 = month SP ( 2DIGIT | ( SP 1DIGIT ) )

2digit found at line 876:

874: date2 = 2DIGIT "-" month "-" 2DIGIT  
875: ; day-month-year (e.g., 02-Jun-82)  
876: date3 = month SP ( 2DIGIT | ( SP 1DIGIT ) )  
877: ; month day (e.g., Jun 2)  
878:

2digit found at line 879:

877: ; month day (e.g., Jun 2)  
878:  
879: time = 2DIGIT ":" 2DIGIT ":" 2DIGIT

880: ; 00:00:00 - 23:59:59  
881:

+=+=+=+= File [rfc1967.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 276:

274: +-----+-----.....-----+

275:

276: where: C0 and 80 are representative LZS-DCP headers; nn, xx, yy,

277: and zz are values determined by the packet's context.

278:

+=+=+=+= File [rfc1980.txt](#) +=+=+=+=

century found at line 301:

299: ALT="Our products">

300: <AREA SHAPE=RECT COORDS="0,51,100,100 HREF="technology.html"

301: ALT="Technology for the next century">

302: </MAP>

303:

+=+=+=+= File [rfc1997.txt](#) +=+=+=+=

[2000](#) found at line 130:

128: 690 may define research, educational and commercial community values

129: that may be used for policy routing as defined by the operators of

130: that AS using community attribute values 0x02B20000 through

131: 0x02B2FFFF).

132:

+=+=+=+= File [rfc1999.txt](#) +=+=+=+=

[1900](#) found at line 14:

12: Request for Comments Summary

13:

14: RFC Numbers 1900-1999

15:

16: Status of This Memo

[1900](#) found at line 18:

16: Status of This Memo

17:

18: This RFC is a slightly annotated list of the 100 RFCs from [RFC 1900](#)

19: through RFCs 1999. This is a status report on these RFCs. This memo

20: provides information for the Internet community. It does not specify

[1900](#) found at line 60:

58: Elliott

Informational

[Page 1]

---

59:  
60: [RFC 1999](#) Summary of 1900-1999 January 1997  
61:  
62:

[1900](#) found at line 116:  
114: Elliott Informational [Page 2]

---

115:  
116: [RFC 1999](#) Summary of 1900-1999 January 1997  
117:  
118:

[1900](#) found at line 172:  
170: Elliott Informational [Page 3]

---

171:  
172: [RFC 1999](#) Summary of 1900-1999 January 1997  
173:  
174:

[1900](#) found at line 228:  
226: Elliott Informational [Page 4]

---

227:  
228: [RFC 1999](#) Summary of 1900-1999 January 1997  
229:  
230:

[1900](#) found at line 284:  
282: Elliott Informational [Page 5]

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283:  
284: [RFC 1999](#) Summary of 1900-1999 January 1997  
285:  
286:

[1900](#) found at line 340:  
338: Elliott Informational [Page 6]

---

339:

340: [RFC 1999](#) Summary of 1900-1999 January 1997  
341:  
342:

[1900](#) found at line 396:

394: Elliott Informational [Page 7]

---

395:  
396: [RFC 1999](#) Summary of 1900-1999 January 1997  
397:  
398:

[1900](#) found at line 452:

450: Elliott Informational [Page 8]

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451:  
452: [RFC 1999](#) Summary of 1900-1999 January 1997  
453:  
454:

[1900](#) found at line 508:

506: Elliott Informational [Page 9]

---

507:  
508: [RFC 1999](#) Summary of 1900-1999 January 1997  
509:  
510:

[1900](#) found at line 564:

562: Elliott Informational [Page 10]

---

563:  
564: [RFC 1999](#) Summary of 1900-1999 January 1997  
565:  
566:

[1900](#) found at line 620:

618: Elliott Informational [Page 11]

---

619:  
620: [RFC 1999](#) Summary of 1900-1999 January 1997  
621:

622:

[1900](#) found at line 676:

674: Elliott Informational [Page 12]

---

675:

676: [RFC 1999](#) Summary of 1900–1999 January 1997

677:

678:

[1900](#) found at line 732:

730: Elliott Informational [Page 13]

---

731:

732: [RFC 1999](#) Summary of 1900–1999 January 1997

733:

734:

[1900](#) found at line 788:

786: Elliott Informational [Page 14]

---

787:

788: [RFC 1999](#) Summary of 1900–1999 January 1997

789:

790:

[1900](#) found at line 844:

842: Elliott Informational [Page 15]

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843:

844: [RFC 1999](#) Summary of 1900–1999 January 1997

845:

846:

[1900](#) found at line 900:

898: Elliott Informational [Page 16]

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899:

900: [RFC 1999](#) Summary of 1900–1999 January 1997

901:

902:

[1900](#) found at line 956:

954: Elliott

Informational

[Page 17]

---

955:

956: [RFC 1999](#)

Summary of 1900-1999

January 1997

957:

958:

[1900](#) found at line 1012:

1010: Elliott

Informational

[Page 18]

---

1011:

1012: [RFC 1999](#)

Summary of 1900-1999

January 1997

1013:

1014:

[1900](#) found at line 1068:

1066: Elliott

Informational

[Page 19]

---

1067:

1068: [RFC 1999](#)

Summary of 1900-1999

January 1997

1069:

1070:

[1900](#) found at line 1095:

1093:

1094:

1095: 1900 Carpenter Feb 96 Renumbering Needs Work

1096:

1097: Hosts in an IP network are identified by IP addresses, and the IP

+=+=+=+= File [rfc2000](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 3070:

3068: The text version is sent.

3069:

3070: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

3071: and 'yyy' is 'txt' or 'ps'.

3072:

'yy' on a line without 'yyyy' found at line 3071:

3069:

3070: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.

3071: and 'yyy' is 'txt' or 'ps'.

3072:

3073: help to get information on how to use



[1900](#) found at line 1264:

1262:                   This memo.

1263:

1264:           1999 - Request for Comments Summary RFC Numbers 1900-1999

1265:

1266:           This is an information document and does not specify any

[2000](#) found at line 8:

6:

7: Network Working Group

Internet Architecture Board

8: Request for Comments: 2000

J. Postel, Editor

9: Obsoletes: 1920, 1880, 1800, 1780, 1720,

February 1997

10: 1610, 1600, 1540, 1500, 1410, 1360,

[2000](#) found at line 60:

58: Internet Architecture Board Standards Track

[Page 1]

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59:

60: [RFC 2000](#)

Internet Standards

February 1997

61:

62:

[2000](#) found at line 116:

114: Internet Architecture Board Standards Track

[Page 2]

---

115:

116: [RFC 2000](#)

Internet Standards

February 1997

117:

118:

[2000](#) found at line 172:

170: Internet Architecture Board Standards Track

[Page 3]

---

171:

172: [RFC 2000](#)

Internet Standards

February 1997

173:

174:

[2000](#) found at line 228:

226: Internet Architecture Board Standards Track

[Page 4]

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227:

228: [RFC 2000](#)

Internet Standards

February 1997

229:  
230:

[2000](#) found at line 284:

282: Internet Architecture Board Standards Track [Page 5]

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283:  
284: [RFC 2000](#) Internet Standards February 1997  
285:  
286:

[2000](#) found at line 340:

338: Internet Architecture Board Standards Track [Page 6]

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339:  
340: [RFC 2000](#) Internet Standards February 1997  
341:  
342:

[2000](#) found at line 396:

394: Internet Architecture Board Standards Track [Page 7]

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395:  
396: [RFC 2000](#) Internet Standards February 1997  
397:  
398:

[2000](#) found at line 452:

450: Internet Architecture Board Standards Track [Page 8]

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451:  
452: [RFC 2000](#) Internet Standards February 1997  
453:  
454:

[2000](#) found at line 508:

506: Internet Architecture Board Standards Track [Page 9]

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507:  
508: [RFC 2000](#) Internet Standards February 1997  
509:  
510:

[2000](#) found at line 564:

562: Internet Architecture Board Standards Track [Page 10]

---

563:

564: [RFC 2000](#) Internet Standards February 1997

565:

566:

[2000](#) found at line 620:

618: Internet Architecture Board Standards Track [Page 11]

---

619:

620: [RFC 2000](#) Internet Standards February 1997

621:

622:

[2000](#) found at line 676:

674: Internet Architecture Board Standards Track [Page 12]

---

675:

676: [RFC 2000](#) Internet Standards February 1997

677:

678:

[2000](#) found at line 732:

730: Internet Architecture Board Standards Track [Page 13]

---

731:

732: [RFC 2000](#) Internet Standards February 1997

733:

734:

[2000](#) found at line 788:

786: Internet Architecture Board Standards Track [Page 14]

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787:  
788:     [RFC 2000](#)                             Internet Standards                     February 1997  
789:  
790:

[2000](#) found at line 844:

842:   Internet Architecture Board Standards Track                             [Page 15]

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843:  
844:     [RFC 2000](#)                             Internet Standards                     February 1997  
845:  
846:

[2000](#) found at line 900:

898:   Internet Architecture Board Standards Track                             [Page 16]

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899:  
900:     [RFC 2000](#)                             Internet Standards                     February 1997  
901:  
902:

[2000](#) found at line 956:

954:   Internet Architecture Board Standards Track                             [Page 17]

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955:  
956:     [RFC 2000](#)                             Internet Standards                     February 1997  
957:  
958:

[2000](#) found at line 1012:

1010:   Internet Architecture Board Standards Track                             [Page 18]

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1011:  
1012:     [RFC 2000](#)                             Internet Standards                     February 1997  
1013:  
1014:

[2000](#) found at line 1068:

1066:   Internet Architecture Board Standards Track                             [Page 19]

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1067:

1068: [RFC 2000](#) Internet Standards February 1997  
1069:  
1070:

[2000](#) found at line 1124:

1122: Internet Architecture Board Standards Track [Page 20]

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1123:  
1124: [RFC 2000](#) Internet Standards February 1997  
1125:  
1126:

[2000](#) found at line 1180:

1178: Internet Architecture Board Standards Track [Page 21]

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1179:  
1180: [RFC 2000](#) Internet Standards February 1997  
1181:  
1182:

[2000](#) found at line 1236:

1234: Internet Architecture Board Standards Track [Page 22]

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1235:  
1236: [RFC 2000](#) Internet Standards February 1997  
1237:  
1238:

[2000](#) found at line 1260:

1258: A Proposed Standard protocol.  
1259:  
1260: 2000 - Internet Official Protocol Standards  
1261:  
1262: This memo.

[2000](#) found at line 1292:

1290: Internet Architecture Board Standards Track [Page 23]

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1291:  
1292:     [RFC 2000](#)                             Internet Standards                     February 1997  
1293:  
1294:

[2000](#) found at line 1348:

1346:   Internet Architecture Board Standards Track                             [Page 24]

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1347:  
1348:     [RFC 2000](#)                             Internet Standards                     February 1997  
1349:  
1350:

[2000](#) found at line 1404:

1402:   Internet Architecture Board Standards Track                             [Page 25]

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1403:  
1404:     [RFC 2000](#)                             Internet Standards                     February 1997  
1405:  
1406:

[2000](#) found at line 1460:

1458:   Internet Architecture Board Standards Track                             [Page 26]

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1459:  
1460:     [RFC 2000](#)                             Internet Standards                     February 1997  
1461:  
1462:

[2000](#) found at line 1516:

1514:   Internet Architecture Board Standards Track                             [Page 27]

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1515:  
1516:     [RFC 2000](#)                             Internet Standards                     February 1997  
1517:  
1518:

[2000](#) found at line 1572:

1570:   Internet Architecture Board Standards Track                             [Page 28]

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1571:

1572: [RFC 2000](#) Internet Standards February 1997  
1573:  
1574:

[2000](#) found at line 1628:

1626: Internet Architecture Board Standards Track [Page 29]

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1627:  
1628: [RFC 2000](#) Internet Standards February 1997  
1629:  
1630:

[2000](#) found at line 1684:

1682: Internet Architecture Board Standards Track [Page 30]

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1683:  
1684: [RFC 2000](#) Internet Standards February 1997  
1685:  
1686:

[2000](#) found at line 1740:

1738: Internet Architecture Board Standards Track [Page 31]

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1739:  
1740: [RFC 2000](#) Internet Standards February 1997  
1741:  
1742:

[2000](#) found at line 1796:

1794: Internet Architecture Board Standards Track [Page 32]

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1795:  
1796: [RFC 2000](#) Internet Standards February 1997  
1797:  
1798:

[2000](#) found at line 1852:

1850: Internet Architecture Board Standards Track [Page 33]

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1851:  
1852: [RFC 2000](#) Internet Standards February 1997  
1853:

1854:

[2000](#) found at line 1859:

1857:	Protocol	Name	Status	RFC	STD	*
1858:	=====	=====	=====	=====	=====	=====
1859:	-----	Internet Official Protocol Standards	Req	2000	1	
1860:	-----	Assigned Numbers	Req	1700	2	
1861:	-----	Host Requirements - Communications	Req	1122	3	

[2000](#) found at line 1908:

1906: Internet Architecture Board Standards Track [Page 34]

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1907:

1908: [RFC 2000](#) Internet Standards February 1997

1909:

1910:

[2000](#) found at line 1964:

1962: Internet Architecture Board Standards Track [Page 35]

---

1963:

1964: [RFC 2000](#) Internet Standards February 1997

1965:

1966:

[2000](#) found at line 2020:

2018: Internet Architecture Board Standards Track [Page 36]

---

2019:

2020: [RFC 2000](#) Internet Standards February 1997

2021:

2022:

[2000](#) found at line 2076:

2074: Internet Architecture Board Standards Track [Page 37]

---

2075:

2076: [RFC 2000](#) Internet Standards February 1997

2077:

2078:

[2000](#) found at line 2132:

2130: Internet Architecture Board Standards Track [Page 38]

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2131:  
2132: [RFC 2000](#) Internet Standards February 1997  
2133:  
2134:

[2000](#) found at line 2188:

2186: Internet Architecture Board Standards Track [Page 39]

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2187:  
2188: [RFC 2000](#) Internet Standards February 1997  
2189:  
2190:

[2000](#) found at line 2244:

2242: Internet Architecture Board Standards Track [Page 40]

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2243:  
2244: [RFC 2000](#) Internet Standards February 1997  
2245:  
2246:

[2000](#) found at line 2300:

2298: Internet Architecture Board Standards Track [Page 41]

---

2299:  
2300: [RFC 2000](#) Internet Standards February 1997  
2301:  
2302:

[2000](#) found at line 2356:

2354: Internet Architecture Board Standards Track [Page 42]

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2355:  
2356: [RFC 2000](#) Internet Standards February 1997  
2357:  
2358:

[2000](#) found at line 2412:

2410: Internet Architecture Board Standards Track [Page 43]

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2411:

2412: [RFC 2000](#) Internet Standards February 1997  
2413:  
2414:

[2000](#) found at line 2468:

2466: Internet Architecture Board Standards Track [Page 44]

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2467:  
2468: [RFC 2000](#) Internet Standards February 1997  
2469:  
2470:

[2000](#) found at line 2524:

2522: Internet Architecture Board Standards Track [Page 45]

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2523:  
2524: [RFC 2000](#) Internet Standards February 1997  
2525:  
2526:

[2000](#) found at line 2580:

2578: Internet Architecture Board Standards Track [Page 46]

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2579:  
2580: [RFC 2000](#) Internet Standards February 1997  
2581:  
2582:

[2000](#) found at line 2636:

2634: Internet Architecture Board Standards Track [Page 47]

---

2635:  
2636: [RFC 2000](#) Internet Standards February 1997  
2637:  
2638:

[2000](#) found at line 2692:

2690: Internet Architecture Board Standards Track [Page 48]

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2691:  
2692: [RFC 2000](#) Internet Standards February 1997  
2693:

2694:

[2000](#) found at line 2748:

2746: Internet Architecture Board Standards Track

[Page 49]

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2747:

2748: [RFC 2000](#)

Internet Standards

February 1997

2749:

2750:

[2000](#) found at line 2804:

2802: Internet Architecture Board Standards Track

[Page 50]

---

2803:

2804: [RFC 2000](#)

Internet Standards

February 1997

2805:

2806:

[2000](#) found at line 2860:

2858: Internet Architecture Board Standards Track

[Page 51]

---

2859:

2860: [RFC 2000](#)

Internet Standards

February 1997

2861:

2862:

[2000](#) found at line 2916:

2914: Internet Architecture Board Standards Track

[Page 52]

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2915:

2916: [RFC 2000](#)

Internet Standards

February 1997

2917:

2918:

[2000](#) found at line 2972:

2970: Internet Architecture Board Standards Track

[Page 53]

---

2971:

2972: [RFC 2000](#)

Internet Standards

February 1997

2973:

2974:

[2000](#) found at line 3028:

3026: Internet Architecture Board Standards Track

[Page 54]

---

3027:

3028: [RFC 2000](#)

Internet Standards

February 1997

3029:

3030:

[2000](#) found at line 3084:

3082: Internet Architecture Board Standards Track

[Page 55]

---

3083:

3084: [RFC 2000](#)

Internet Standards

February 1997

3085:

3086:

+++++ File [rfc2007.txt](#) +++++

[2000](#) found at line 1156:

1154:

1155: Access-Type: gopher

1156: URL: <URL:gopher://gopher.cic.net:2000/11/hunt>

1157:

1158: Access-Type: www

+++++ File [rfc2015.txt](#) +++++

'yy' on a line without 'yyyy' found at line 153:

151:

152: hIwDY32hYGCE8MkBA/wOu7d45aUxF4Q0RKJprD3v5Z9K1YcRJ2fve87lMlDlx40j

153: eW4GDdBfLbJE7VUpp13N19GL8e/AqbyyjHH4aS0YoTk10QQ9nnRvjY8nZL3MPXSZ

154: g9VGQxFeGqzykzmykU6A26MSMexR4ApeeON6xzzWfo+0y0qAq6lb46wsvldZ96YA

155: AABH78hyX7YX4uT1tNCWEIIBoqqvCeIMpp7UQ2IzBrXg6GtukS8NxbukLeamqVW3

+++++ File [rfc2025.txt](#) +++++

UTCTime found at line 751:

749: context-id Random-Integer, -- see [Section 6.3](#)

750: pvno BIT STRING, -- protocol version number

751: timestamp UTCTime OPTIONAL, -- mandatory for SPKM-2

752: randSrc Random-Integer,

753: targ-name Name,

UTCTime found at line 923:

921: context-id Random-Integer, -- see [Section 6.3](#)

922: pvno [0] BIT STRING OPTIONAL, -- prot. version number

923: timestamp UTCTime OPTIONAL, -- mandatory for SPKM-2

924: randTarg Random-Integer,

```

925:          src-name [1]      Name OPTIONAL,

UTCTime found at line 2159:
2157:          context-id      Random-Integer,
2158:          pvno              BIT STRING,
2159:          timestamp         UTCTime OPTIONAL, -- mandatory for SPKM-2
2160:          randSrc            Random-Integer,
2161:          targ-name          Name,

UTCTime found at line 2248:
2246:
2247:          pvno [0]           BIT STRING OPTIONAL,
2248:          timestamp         UTCTime OPTIONAL, -- mandatory for SPKM-2
2249:          randTarg           Random-Integer,
2250:          src-name [1]       Name OPTIONAL,

UTCTime found at line 2459:
2457:
2458:      Validity ::= SEQUENCE {
2459:          notBefore          UTCTime,
2460:          notAfter           UTCTime
2461:      }

UTCTime found at line 2460:
2458:      Validity ::= SEQUENCE {
2459:          notBefore          UTCTime,
2460:          notAfter           UTCTime
2461:      }
2462:

UTCTime found at line 2493:
2491:          signature          AlgorithmIdentifier,
2492:          issuer              Name,
2493:          thisUpdate          UTCTime,
2494:          nextUpdate          UTCTime OPTIONAL,
2495:          revokedCertificates SEQUENCE OF SEQUENCE {

UTCTime found at line 2494:
2492:          issuer              Name,
2493:          thisUpdate          UTCTime,
2494:          nextUpdate          UTCTime OPTIONAL,
2495:          revokedCertificates SEQUENCE OF SEQUENCE {
2496:              userCertificate CertificateSerialNumber,

UTCTime found at line 2497:
2495:          revokedCertificates SEQUENCE OF SEQUENCE {
2496:              userCertificate CertificateSerialNumber,
2497:              revocationDate  UTCTime                } OPTIONAL
2498:      }
2499:

```

+=+=+=+= File [rfc2028](#).txt +=+=+=+=

[2000](#) found at line 320:

318: Digital Equipment Corporation  
319: 1401 H Street NW  
320: Washington DC 20005  
321:  
322: Phone: +1 202 383 5615

+=+=+=+= File [rfc2030](#).txt +=+=+=+=

[1900](#) found at line 321:

319: main product of the protocol, a special timestamp format has been  
320: established. NTP timestamps are represented as a 64-bit unsigned  
321: fixed-point number, in seconds relative to 0h on 1 January 1900. The  
322: integer part is in the first 32 bits and the fraction part in the  
323: last 32 bits. In the fraction part, the non-significant low order can

[1900](#) found at line 362:

360: 64-bit field will overflow some time in 2036 (second 4,294,967,296).  
361: Should NTP or SNTP be in use in 2036, some external means will be  
362: necessary to qualify time relative to 1900 and time relative to 2036  
363: (and other multiples of 136 years). There will exist a 200-picosecond  
364: interval, henceforth ignored, every 136 years when the 64-bit field

[1900](#) found at line 375:

373: following convention: If bit 0 is set, the UTC time is in the  
374: range 1968-2036 and UTC time is reckoned from 0h 0m 0s UTC on 1  
375: January 1900. If bit 0 is not set, the time is in the range 2036-  
376: 2104 and UTC time is reckoned from 6h 28m 16s UTC on 7 February  
377: 2036. Note that when calculating the correspondence, 2000 is not a

[2000](#) found at line 377:

375: January 1900. If bit 0 is not set, the time is in the range 2036-  
376: 2104 and UTC time is reckoned from 6h 28m 16s UTC on 7 February  
377: 2036. Note that when calculating the correspondence, 2000 is not a  
378: leap year. Note also that leap seconds are not counted in the  
379: reckoning.

+=+=+=+= File [rfc2048](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 738:

736:  
737: To: ietf-types@iana.org  
738: Subject: Registration of MIME media type XXX/YYY  
739:  
740: MIME media type name:

+=+=+=+= File [rfc2050](#).txt +=+=+=+=

[1900](#) found at line 638:

636:       [[RFC 1814](#)] Gerich, E., "Unique Addresses are Good", June 1995.  
637:  
638:       [[RFC 1900](#)] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work",  
639:           February 1996.  
640:

+=+=+=+=+= File [rfc2052.txt](#) +=+=+=+=+=

[1900](#) found at line 420:

418:           Errors", [RFC 1912](#), February 1996.  
419:  
420:       [RFC 1900](#): Carpenter, B., and Y. Rekhter, "Renumbering Needs Work",  
421:           [RFC 1900](#), February 1996.  
422:

[1900](#) found at line 421:

419:  
420:       [RFC 1900](#): Carpenter, B., and Y. Rekhter, "Renumbering Needs Work",  
421:           [RFC 1900](#), February 1996.  
422:  
423:       [RFC 1920](#): Postel, J., "INTERNET OFFICIAL PROTOCOL STANDARDS",

+=+=+=+=+= File [rfc2060.txt](#) +=+=+=+=+=

2digit found at line 3782:

3780:   date                ::= date\_text / <"> date\_text <">  
3781:  
3782:   date\_day             ::= 1\*2digit  
3783:                        ;; Day of month  
3784:

2digit found at line 3785:

3783:                        ;; Day of month  
3784:  
3785:   date\_day\_fixed       ::= (SPACE digit) / 2digit  
3786:                        ;; Fixed-format version of date\_day  
3787:

2digit found at line 4101:

4099:   TEXT\_CHAR           ::= <any CHAR except CR and LF>  
4100:  
4101:   time                  ::= 2digit ":" 2digit ":" 2digit  
4102:                        ;; Hours minutes seconds  
4103:

+=+=+=+=+= File [rfc2062.txt](#) +=+=+=+=+=

2digit found at line 330:

328:                        ::= partial  
329:  
330:   date\_year\_old        ::= 2digit

```
331:                ;; (year - 1900)
332:
```

[1900](#) found at line 331:

```
329:
330:    date_year_old    ::= 2digit
331:                ;; (year - 1900)
332:
333:    date_time_old    ::= <"> date_day_fixed "-" date_month "-" date_year
```

+++++= File [rfc2063](#).txt ++++++=

[2000](#) found at line 716:

```
714:
715:                start time = 1                start time = 1
716:    Usage record N:    flow count = 2000        flow count = 2000 (done)
717:
718:                start time = 1                start time = 5
```

[2000](#) found at line 725:

```
723:
724:    In the continuing flow case, the same flow was reported when its
725:    count was 2000, and again at 3000:  the total count to date is 3000.
726:    In the OLD/NEW case, the old flow had a count of 2000.  Its record
727:
```

[2000](#) found at line 726:

```
724:    In the continuing flow case, the same flow was reported when its
725:    count was 2000, and again at 3000:  the total count to date is 3000.
726:    In the OLD/NEW case, the old flow had a count of 2000.  Its record
727:
728:
```

+++++= File [rfc2068](#).txt ++++++=

2-digit found at line 772:

```
770:    Specific repetition: "<n>(element)" is equivalent to
771:    "<n>*<n>(element)"; that is, exactly <n> occurrences of (element).
772:    Thus 2DIGIT is a 2-digit number, and 3ALPHA is a string of three
773:    alphabetic characters.
774:
```

2digit found at line 772:

```
770:    Specific repetition: "<n>(element)" is equivalent to
771:    "<n>*<n>(element)"; that is, exactly <n> occurrences of (element).
772:    Thus 2DIGIT is a 2-digit number, and 3ALPHA is a string of three
773:    alphabetic characters.
774:
```

2digit found at line 1163:

```
1161:        asctime-date = wkday SP date3 SP time SP 4DIGIT
```



1162:  
1163:           date1           = 2DIGIT SP month SP 4DIGIT  
1164:                           ; day month year (e.g., 02 Jun 1982)  
1165:           date2           = 2DIGIT "-" month "-" 2DIGIT

2digit found at line 1165:

1163:           date1           = 2DIGIT SP month SP 4DIGIT  
1164:                           ; day month year (e.g., 02 Jun 1982)  
1165:           date2           = 2DIGIT "-" month "-" 2DIGIT  
1166:                           ; day-month-year (e.g., 02-Jun-82)  
1167:           date3           = month SP ( 2DIGIT | ( SP 1DIGIT ) )

2digit found at line 1167:

1165:           date2           = 2DIGIT "-" month "-" 2DIGIT  
1166:                           ; day-month-year (e.g., 02-Jun-82)  
1167:           date3           = month SP ( 2DIGIT | ( SP 1DIGIT ) )  
1168:                           ; month day (e.g., Jun 2)  
1169:

2digit found at line 1170:

1168:                           ; month day (e.g., Jun 2)  
1169:  
1170:           time           = 2DIGIT ":" 2DIGIT ":" 2DIGIT  
1171:                           ; 00:00:00 - 23:59:59  
1172:

2digit found at line 7652:

7650:  
7651:           warning-value = warn-code SP warn-agent SP warn-text  
7652:           warn-code   = 2DIGIT  
7653:           warn-agent = ( host [ ":" port ] ) | pseudonym  
7654:                           ; the name or pseudonym of the server adding

[1900](#) found at line 1083:

1081:       for TCP connections on that port of that host, and the Request-URI  
1082:       for the resource is abs\_path. The use of IP addresses in URL's SHOULD  
1083:       be avoided whenever possible (see [RFC 1900](#) [24]). If the abs\_path is  
1084:       not present in the URL, it MUST be given as "/" when used as a  
1085:       Request-URI for a resource ([section 5.1.2](#)).

[1900](#) found at line 8249:

8247:  
8248:       [24] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work", RFC  
8249:       1900, IAB, February 1996.  
8250:  
8251:       [25] Deutsch, P., "GZIP file format specification version 4.3." RFC

[2000](#) found at line 8453:

8451:       o HTTP/1.1 clients and caches should assume that an [RFC-850](#) date  
8452:       which appears to be more than 50 years in the future is in fact  
8453:       in the past (this helps solve the "year 2000" problem).

8454:  
8455:

+=+=+=+= File [rfc2071.txt](#) +=+=+=+=

[1900](#) found at line 738:

736: December 1995.  
737:  
738: [16] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work", [RFC 1900](#),  
739: February 1996.  
740:

+=+=+=+= File [rfc2072.txt](#) +=+=+=+=

[1900](#) found at line 206:

204: Many discussions of renumbering emphasize interactions among  
205: organizations' numbering plans and those of the global Internet  
206: [[RFC1900](#)]. There can be equally strong motivations for renumbering  
207: in organizations that never connect to the global Internet.  
208:

[1900](#) found at line 209:

207: in organizations that never connect to the global Internet.  
208:  
209: According to [RFC1900](#), "Unless and until viable alternatives are  
210: developed, extended deployment of Classless Inter-Domain Routing  
211: (CIDR) is vital to keep the Internet routing system alive and to

[1900](#) found at line 2606:

2604: February 1996.  
2605:  
2606: [[RFC1900](#)] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work", RFC  
2607: 1900, February 1996.  
2608:

[1900](#) found at line 2607:

2605:  
2606: [[RFC1900](#)] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work", RFC  
2607: 1900, February 1996.  
2608:  
2609: [RPS] Alaettinoglu, C., Bates, T., Gerich, E., Terpstra, M., and C.

+=+=+=+= File [rfc2074.txt](#) +=+=+=+=

[2000](#) found at line 2041:

2039: From [[RFC1831](#)]:  
2040:  
2041: Program numbers are given out in groups of hexadecimal 20000000  
2042: (decimal 536870912) according to the following chart:  
2043:

[2000](#) found at line 2045:

```
2043:
2044:          0 - 1fffffff    defined by rpc@sun.com
2045:        20000000 - 3fffffff    defined by user
2046:        40000000 - 5fffffff    transient
2047:        60000000 - 7fffffff    reserved
```

==== File [rfc2077](#).txt =====

'yy' on a line without 'yyyy' found at line 315:

```
313:      Subject: model data file
314:
315:      I1ZSTUwgVjEuMCBhc2NpaQojIFRoaxMgZmlsZSB3YXMgIGdlbmVyY...
316:      byBDb21tdW5pY2F0aW9ucwojIGh0dHA6Ly93d3cuY2hhY28uY29tC...
317:      IyB1c2VkIGluIHJvb20gMTkyICh0ZXN0IHJvb20pCiAgIAojIFRvc...
```

==== File [rfc2095](#).txt =====

'yy' on a line without 'yyyy' found at line 131:

```
129:      C: A0001 AUTHENTICATE CRAM-MD5
130:      S: + PDE40TYuNjk3MTcwOTUyQHBvc3RvZmZpY2UucmVzdG9uLm1jaS5uZXQ+
131:      C: dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWl0ZTZlNzMzNGQzODkw
132:      S: A0001 OK CRAM authentication successful
133:
```

'yy' on a line without 'yyyy' found at line 161:

```
159:      AUTHENTICATE command (or the similar POP3 AUTH command), yielding
160:
161:      dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWl0ZTZlNzMzNGQzODkw
162:
163:
```

==== File [rfc2096](#).txt =====

[1900](#) found at line 134:

```
132:
133:  ipForward MODULE-IDENTITY
134:      LAST-UPDATED "9609190000Z"      -- Thu Sep 26 16:34:47 PDT 1996
135:      ORGANIZATION "IETF OSPF Working Group"
136:      CONTACT-INFO
```

[1900](#) found at line 147:

```
145:      DESCRIPTION
146:          "The MIB module for the display of CIDR multipath IP Routes."
147:      REVISION      "9609190000Z"
148:      DESCRIPTION
149:          "Revisions made by the OSPF WG."
```

==== File [rfc2099](#).txt =====

[2000](#) found at line 14:

12: Request for Comments Summary  
13:  
14: RFC Numbers 2000-2099  
15:  
16: Status of This Memo

[2000](#) found at line 18:

16: Status of This Memo  
17:

18: This RFC is a slightly annotated list of the 100 RFCs from [RFC 2000](#)  
19: through RFCs 2099. This is a status report on these RFCs. This memo  
20: provides information for the Internet community. It does not specify

[2000](#) found at line 60:

58: Elliott Informational [Page 1]

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59:  
60: [RFC 2099](#) Summary of 2000-2099 March 1997  
61:  
62:

[2000](#) found at line 116:

114: Elliott Informational [Page 2]

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115:  
116: [RFC 2099](#) Summary of 2000-2099 March 1997  
117:  
118:

[2000](#) found at line 172:

170: Elliott Informational [Page 3]

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171:  
172: [RFC 2099](#) Summary of 2000-2099 March 1997  
173:  
174:

[2000](#) found at line 228:

226: Elliott Informational [Page 4]

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227:  
228: [RFC 2099](#) Summary of 2000-2099 March 1997  
229:  
230:

[Page 5]

283:

284: [RFC 2099](#)

## Summary of 2000-2099

March 1997

285:

286:

2000 found at line 340:

338: Elliott

Informational

[Page 6]

339:

340: [RFC 2099](#)

## Summary of 2000-2099

March 1997

341:

342:

2000 found at line 396:

394: Elliott

Informational

[Page 7]

395:

396: [RFC 2099](#)

## Summary of 2000-2099

March 1997

397:

398:

2000 found at line 452:

450: Elliott

Informational

[Page 8]

451:

452: [RFC 2099](#)

## Summary of 2000-2099

March 1997

453:

454:

2000 found at line 508:

506: Elliott

Informational

[Page 9]

507:  
508: [RFC 2099](#) Summary of 2000-2099 March 1997  
509:  
510:

[2000](#) found at line 564:  
562: Elliott Informational [Page 10]

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563:  
564: [RFC 2099](#) Summary of 2000-2099 March 1997  
565:  
566:

[2000](#) found at line 620:  
618: Elliott Informational [Page 11]

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619:  
620: [RFC 2099](#) Summary of 2000-2099 March 1997  
621:  
622:

[2000](#) found at line 676:  
674: Elliott Informational [Page 12]

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675:  
676: [RFC 2099](#) Summary of 2000-2099 March 1997  
677:  
678:

[2000](#) found at line 732:  
730: Elliott Informational [Page 13]

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731:  
732: [RFC 2099](#) Summary of 2000-2099 March 1997  
733:  
734:

[2000](#) found at line 788:  
786: Elliott Informational [Page 14]

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787:

788:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
789:			
790:			

[2000](#) found at line 844:

842:	Elliott	Informational	[Page 15]
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843:			
844:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
845:			
846:			

[2000](#) found at line 900:

898:	Elliott	Informational	[Page 16]
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899:			
900:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
901:			
902:			

[2000](#) found at line 956:

954:	Elliott	Informational	[Page 17]
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955:			
956:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
957:			
958:			

[2000](#) found at line 1012:

1010:	Elliott	Informational	[Page 18]
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1011:			
1012:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
1013:			
1014:			

[2000](#) found at line 1068:

1066:	Elliott	Informational	[Page 19]
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1067:			
1068:	<a href="#">RFC 2099</a>	Summary of 2000-2099	March 1997
1069:			

1070:

[2000](#) found at line 1124:

1122: Elliott

Informational

[Page 20]

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1123:

1124: [RFC 2099](#)

Summary of 2000-2099

March 1997

1125:

1126:

[2000](#) found at line 1144:

1142:

1143:

1144: 2000 I.A.B. Feb 97 INTERNET OFFICIAL PROTOCOL STANDARDS

1145:

1146: This memo describes the state of standardization of protocols used in

+=+=+=+= File [rfc2101](#).txt +=+=+=+=

[1900](#) found at line 353:

351:

352: Changing providers is just one possible reason for renumbering.

353: The informational document [[RFC 1900](#)] shows why renumbering is an

354: increasingly frequent event. Both DHCP [[RFC 1541](#)] and PPP [[RFC](#)

355: 1661] promote the use of dynamic address allocation.

[1900](#) found at line 534:

532: solutions for renumbering sites. The need to contain the overhead

533: in a rapidly growing Internet routing system is likely to make

534: renumbering more and more common [[RFC 1900](#)].

535:

536: The need to scale the Internet routing system, and the use of CIDR as

[1900](#) found at line 632:

630: Protocol", [RFC 1825](#), September 1995.

631:

632: [[RFC 1900](#)] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work",

633: [RFC 1900](#), February 1996.

634:

[1900](#) found at line 633:

631:

632: [[RFC 1900](#)] Carpenter, B., and Y. Rekhter, "Renumbering Needs Work",

633: [RFC 1900](#), February 1996.

634:

635: [[RFC 1918](#)] Rekhter, Y., Moskowitz, B., Karrenberg, D., de Groot, G.

+=+=+=+= File [rfc2109](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 1054:



1052: date value in a fixed-length variant format in place of Max-Age:  
1053:  
1054: Wdy, DD-Mon-YY HH:MM:SS GMT  
1055:  
1056: Note that the Expires date format contains embedded spaces, and that

+=+=+=+= File [rfc2116.txt](#) +=+=+=+=

[2000](#) found at line 4132:

4130: \* MAIL.X-OD V2.3  
4131:  
4132: \* MAIL.2000 V1.2, AKOM  
4133:  
4134: \* MS-Mail

[2000](#) found at line 5393:

5391: 1-800-257-OPEN (U.S. and Canada)  
5392: 1-612-482-6736 (worldwide)  
5393: FAX: 1-612-482-2000 (worldwide)  
5394: EMAIL: info@cdc.com  
5395: or

+=+=+=+= File [rfc2134.txt](#) +=+=+=+=

[2000](#) found at line 30:

28:  
29: To: Department of Consumer and Regulatory Affairs  
30: Washington, D.C. 20001  
31:  
32: We, the undersigned natural persons of the age of eighteen years

[2000](#) found at line 140:

138: 8. The address, including street and number, of the initial  
139: registered office of the corporation is c/o C T Corporation  
140: System, 1030 15th Street, N.W., Washington, D.C. 20005, and the  
141: name of its initial registered agent at such address is C T  
142: Corporation System.

+=+=+=+= File [rfc2150.txt](#) +=+=+=+=

century found at line 2197:

2195: scholarly music resources. <http://rism.harvard.edu/RISM/>  
2196:  
2197: Crescendo is used in the web pages at <http://mcentury.citi.doc.ca>  
2198: along with a growing number of others. One very interesting use of  
2199: Crescendo occurs on the Music Theory Online publication, a serious

century found at line 3150:

3148: Joseph Aiuto  
3149: Sepideh Boroumand  
3150: Michael Century

3151: Kelly Cooper  
3152: Lile Elam

+==+==+== File [rfc2151.txt](#) +==+==+==

[2000](#) found at line 1805:

1803: \* About Hill Associates  
1804: \* HAI Products and Services Catalog  
1805: \* Datacomm/2000-ED Series  
1806: \* Contacting Hill Associates  
1807: \* Employment Opportunities

[2000](#) found at line 2808:

2806:  
2807: [23] \_\_\_\_\_, Editor, "Internet Official Protocol Standards,"  
2808: STD 1/RFC 2000, Internet Architecture Board, February 1997.  
2809:  
2810: [24] \_\_\_\_\_, "Introduction to the STD Notes," [RFC 1311](#), USC/Information

+==+==+== File [rfc2156.txt](#) +==+==+==

'yy' on a line without 'yyyy' found at line 3210:

3208: the prefix, all attributes remaining in the OR address shall be  
3209: encoded on the LHS. This is to ensure a reversible mapping. For  
3210: example, if there is an address /S=XX/O=YY/ADMD=A/C=NN/ and a  
3211: mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is encoded  
3212: on the LHS.

'yy' on a line without 'yyyy' found at line 3211:

3209: encoded on the LHS. This is to ensure a reversible mapping. For  
3210: example, if there is an address /S=XX/O=YY/ADMD=A/C=NN/ and a  
3211: mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is encoded  
3212: on the LHS.  
3213:

'yy' on a line without 'yyyy' found at line 3317:

3315:  
3316: C = "XX"  
3317: ADMD = "YY"  
3318: O = "ZZ"  
3319: "[RFC-822](#)" = "Smith(a)ZZ.YY.XX"

'yy' on a line without 'yyyy' found at line 3319:

3317: ADMD = "YY"  
3318: O = "ZZ"  
3319: "[RFC-822](#)" = "Smith(a)ZZ.YY.XX"  
3320:

3321: This is mapped first to an [RFC 822](#) address, and then back to the

'yy' on a line without 'yyyy' found at line 3325:

3323:

3324: C = "XX"  
3325: ADMD = "YY"  
3326: 0 = "ZZ"  
3327: Surname = "Smith"

UTCTime found at line 1705:

1703: "yen\*{165}"

1704:

1705: 3.3.5. UTCTime

1706:

1707: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year,

UTCTime found at line 1707:

1705: 3.3.5. UTCTime

1706:

1707: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year,

1708: Month, Day of Month, hour, minute, second (optional), and Timezone

1709: (technically a time differential in UTCTime). 822.date-time also

UTCTime found at line 1709:

1707: Both UTCTime and the [RFC 822](#) 822.date-time syntax contain: Year,

1708: Month, Day of Month, hour, minute, second (optional), and Timezone

1709: (technically a time differential in UTCTime). 822.date-time also

1710: contains an optional day of the week, but this is redundant. With

1711: the exception of Year, a symmetrical mapping can be made between

UTCTime found at line 1717:

1715: In practice, a gateway will need to parse various illegal variants

1716: on 822.date-time. In cases where 822.date-time cannot be parsed,

1717: it is recommended that the derived UTCTime is set to the value at

1718: the time of translation. Such errors may be noted in an [RFC 822](#)

1719: comment, to aid detection and correction.

UTCTime found at line 1721:

1719: comment, to aid detection and correction.

1720:

1721: When mapping to X.400, the UTCTime format which specifies the

1722: timezone offset shall be used.

1723:

UTCTime found at line 1745:

1743: [RFC 822](#), as modified by [RFC 1123](#), requires use of a four digit year.

1744: Note that the original [RFC 822](#) uses a two digit date, which is no

1745: longer legal. UTCTime uses a two digit date. To map a year from RFC

1746: 822 to X.400, simply use the last two digits. To map a year from

1747: X.400 to [RFC 822](#), assume that the two digit year refers to a year in

+=+=+=+=+= File [rfc2162.txt](#) +=+=+=+=+=

'yy' on a line without 'yyyy' found at line 797:

795: maps into

796:  
797: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
798: DD.Mail-11=route::node::localpart;  
799:

'yy' on a line without 'yyyy' found at line 806:

804: maps into  
805:  
806: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
807: DD.Mail-11=node-clns::localpart;  
808:

'yy' on a line without 'yyyy' found at line 812:

810:  
811: xx = country code of the gateway performing the conversion  
812: yyy = Admd of the gateway performing the conversion  
813: zzz = Prmd of the gateway performing the conversion  
814: ooo = Organisation of the gateway performing the conversion

'yy' on a line without 'yyyy' found at line 915:

913: it is connected to. In this case the mapping is trivial:  
914:  
915: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
916: DD.Mail-11=route::node::localpart;  
917:

'yy' on a line without 'yyyy' found at line 918:

916: DD.Mail-11=route::node::localpart;  
917:  
918: (see sect. 5.2 for explication of 'xx','yyy','zzz','ooo','uuu','net')  
919:  
920: maps into

'yy' on a line without 'yyyy' found at line 926:

924: and for DECnet/OSI addresses  
925:  
926: C=xx; ADMD=yyy; PRMD=zzz; O=ooo; OU=uuu; DD.Dnet=net;  
927: DD.Mail-11=node-clns::localpart;  
928:

'yy' on a line without 'yyyy' found at line 937:

935: described into [section 5.4](#) apply:  
936:  
937: C=xx; ADMD=yyy; PRMD=www; DD.Dnet=net;  
938: DD.Mail-11=route::node::localpart;  
939:

'yy' on a line without 'yyyy' found at line 942:

940: maps into  
941:  
942: gwnode::gw%"C=xx;ADMD=yyy;PRMD=www;DD.Dnet=net;

943: DD.Mail-11=route::node::localpart;"  
944:

'yy' on a line without 'yyyy' found at line 961:

959: Again for DECnet/OSI addresses:

960:

961: C=xx; ADMD=yyy; PRMD=www; DD.Dnet=net;

962: DD.Mail-11=node-clns::localpart;

963:

'yy' on a line without 'yyyy' found at line 966:

964: maps into

965:

966: gwnode::gw%"C=xx;ADMD=yyy;PRMD=www;DD.Dnet=net;

967: DD.Mail-11=node-clns::localpart;"

968:

'yy' on a line without 'yyyy' found at line 1095:

1093: maps into

1094:

1095: C=xx; ADMD=yyy; DD.Dnet=net;

1096: DD.Mail-11=route::gwnode::gw(p)(q)x400-text-address(q);

1097:

'yy' on a line without 'yyyy' found at line 1104:

1102: maps into

1103:

1104: C=xx; ADMD=yyy; DD.Dnet=net;

1105: DD.Mail-11=gwnode::gw(p)(q)x400-text-address(q);

1106:

+=+=+=+= File [rfc2167.txt](#) +=+=+=+=

2digit found at line 1026:

1024:

1025: year = 4digit

1026: month = 2digit

1027: day = 2digit

1028: hour = 2digit

2digit found at line 1027:

1025: year = 4digit

1026: month = 2digit

1027: day = 2digit

1028: hour = 2digit

1029: minute = 2digit

2digit found at line 1028:

1026: month = 2digit

1027: day = 2digit

1028: hour = 2digit

1029: minute = 2digit  
1030: second = 2digit

2digit found at line 1029:

1027: day = 2digit  
1028: hour = 2digit  
1029: minute = 2digit  
1030: second = 2digit  
1031: milli-second = 3digit

2digit found at line 1030:

1028: hour = 2digit  
1029: minute = 2digit  
1030: second = 2digit  
1031: milli-second = 3digit  
1032: host-name = dns-char \*(dns-char / ".")

2digit found at line 3186:

3184:  
3185: year = 4digit  
3186: month = 2digit  
3187: day = 2digit  
3188: hour = 2digit

2digit found at line 3187:

3185: year = 4digit  
3186: month = 2digit  
3187: day = 2digit  
3188: hour = 2digit  
3189: minute = 2digit

2digit found at line 3188:

3186: month = 2digit  
3187: day = 2digit  
3188: hour = 2digit  
3189: minute = 2digit  
3190: second = 2digit

2digit found at line 3189:

3187: day = 2digit  
3188: hour = 2digit  
3189: minute = 2digit  
3190: second = 2digit  
3191:

2digit found at line 3190:

3188: hour = 2digit  
3189: minute = 2digit  
3190: second = 2digit  
3191:  
3192:

[2000](#) found at line 1229:

```
1227:      C -class rwhois.net domain host
1228:      S %class domain:description:Domain information
1229:      S %class domain:version:19970103101232000
1230:      S %class
1231:
```

[2000](#) found at line 3626:

```
3624:      soa          000800h
3625:      status        001000h
3626:      xfer          002000h
3627:      X             004000h
3628:
```

+=+=+=+= File [rfc2170](#).txt +=+=+=+=

[2000](#) found at line 427:

```
425:                                     Server: MyAgent/1.0
426:                                     ATM-Service: CBR
427:                                     ATM-QoS-PCR: 2000
428:                                     Content-type: video/mpeg
429:
```

[2000](#) found at line 464:

```
462:                                     Server: MyAgent/1.0 ATM.address
463:                                     ATM-Service: CBR
464:                                     ATM-QoS-PCR: 2000
465:                                     Content-type: video/mpeg
466:
```

+=+=+=+= File [rfc2179](#).txt +=+=+=+=

[2000](#) found at line 292:

```
290:      a setuid file anywhere in the system, including those on NFS
291:      mounted partitions.
292:      * "find / -group kmem -perm -2000 -print" will do the same for kmem
293:      group permissions.
294:
```

+=+=+=+= File [rfc2182](#).txt +=+=+=+=

[2000](#) found at line 495:

```
493:
494:      Instead, for this example, set the primary's serial number to
495:      2000000000, and wait for the secondary servers to update to that
496:      zone. The value 2000000000 is chosen as a value a lot bigger than
497:      the current value, but less than 2^31 bigger (2^31 is 2147483648).
```

[2000](#) found at line 496:

```
494:      Instead, for this example, set the primary's serial number to
```

495: 2000000000, and wait for the secondary servers to update to that  
496: zone. The value 2000000000 is chosen as a value a lot bigger than  
497: the current value, but less than  $2^{31}$  bigger ( $2^{31}$  is 2147483648).  
498: This is then an increment of the serial number [[RFC1982](#)].

[2000](#) found at line 502:

500: Next, after all servers needing updating have the zone with that  
501: serial number, the serial number can be set to 4000000000.  
502: 4000000000 is 2000000000 more than 2000000000 (fairly clearly), and  
503:  
504:

+=+=+=+= File [rfc2183](#).txt +=+=+=+=  
century found at line 8:

6:	
7: Network Working Group	R. Troost
8: Request for Comments: 2183	New Century Systems
9: Updates: 1806	S. Dorner
10: Category: Standards Track	QUALCOMM Incorporated

century found at line 587:

585:  
586: Rens Troost  
587: New Century Systems  
588: 324 East 41st Street #804  
589: New York, NY, 10017 USA

century found at line 593:

591: Phone: +1 (212) 557-2050  
592: Fax: +1 (212) 557-2049  
593: EMail: [rens@century.com](mailto:rens@century.com)  
594:  
595:

+=+=+=+= File [rfc2195](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 131:

129: C: A0001 AUTHENTICATE CRAM-MD5  
130: S: + PDE40TYuNjk3MTcwOTUyQHBvc3RvZmZpY2UucmVzdG9uLm1jaS5uZXQ+  
131: C: dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWl0ZTZlNzMzNGQzODkw  
132: S: A0001 OK CRAM authentication successful  
133:

'yy' on a line without 'yyyy' found at line 161:

159: AUTHENTICATE command (or the similar POP3 AUTH command), yielding  
160:  
161: dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWl0ZTZlNzMzNGQzODkw  
162:  
163:



==== File [rfc2200.txt](#) =====

'yy' on a line without 'yyyy' found at line 2118:

2116: The text version is sent.  
2117:  
2118: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.  
2119: and 'yyy' is 'txt' or 'ps'.  
2120:

'yy' on a line without 'yyyy' found at line 2119:

2117:  
2118: file /ftp/rfc/rfcnnnn.yyy where 'nnnn' is the RFC number.  
2119: and 'yyy' is 'txt' or 'ps'.  
2120:  
2121: help to get information on how to use

[2000](#) found at line 9:

7: Network Working Group Internet Architecture Board  
8: Request for Comments: 2200 J. Postel, Editor  
9: Obsoletes: 2000, 1920, 1880, 1800, 1780, June 1997  
10: 1720, 1610, 1600, 1540, 1500, 1410, 1360,  
11: 1280, 1250, 1200, 1140, 1130, 1100, 1083

[2000](#) found at line 921:

919: level of standard.  
920:  
921: 2099 - Request for Comments Summary - RFC Numbers 2000-2099  
922:  
923: This is an information document and does not specify any

==== File [rfc2203.txt](#) =====

[2000](#) found at line 1096:

1094: GSS\_S\_GAP\_TOKEN 0x00000010  
1095: GSS\_S\_BAD\_MECH 0x00010000  
1096: GSS\_S\_BAD\_NAME 0x00020000  
1097: GSS\_S\_BAD\_NAME\_TYPE 0x00030000  
1098: GSS\_S\_BAD\_BINDINGS 0x00040000

[2000](#) found at line 1113:

1111: GSS\_S\_UNAVAILABLE 0x00100000  
1112: GSS\_S\_DUPLICATE\_ELEMENT 0x00110000  
1113: GSS\_S\_NAME\_NOT\_MN 0x00120000  
1114: GSS\_S\_CALL\_INACCESSIBLE\_READ 0x01000000  
1115: GSS\_S\_CALL\_INACCESSIBLE\_WRITE 0x02000000

[2000](#) found at line 1115:

1113: GSS\_S\_NAME\_NOT\_MN 0x00120000  
1114: GSS\_S\_CALL\_INACCESSIBLE\_READ 0x01000000  
1115: GSS\_S\_CALL\_INACCESSIBLE\_WRITE 0x02000000  
1116: GSS\_S\_CALL\_BAD\_STRUCTURE 0x03000000





2digit found at line 3559:  
3557:       time-hour               = 2DIGIT ;; 00-23  
3558:  
3559:       time-minute            = 2DIGIT ;; 00-59  
3560:  
3561:       time-month             = 2DIGIT ;; 01-12

2digit found at line 3561:  
3559:       time-minute            = 2DIGIT ;; 00-59  
3560:  
3561:       time-month             = 2DIGIT ;; 01-12  
3562:  
3563:       time-second            = 2DIGIT ;; 00-60

2digit found at line 3563:  
3561:       time-month             = 2DIGIT ;; 01-12  
3562:  
3563:       time-second            = 2DIGIT ;; 00-60  
3564:  
3565:       time-subsecond         = \*DIGIT

[2000](#) found at line 2217:  
2215:       criteria):  
2216:            AND COMPARE "modtime" "+i;octet" "19951206103400"  
2217:            COMPARE "modtime" "-i;octet" "19960112000000"  
2218:       refers to all entries modified between 10:34 December 6 1995 and  
2219:       midnight January 12, 1996 UTC.

+=+=+=+= File [rfc2252](#).txt +=+=+=+=  
UTCTime found at line 1300:  
1298:  
1299:       Values in this syntax are encoded as if they were printable strings  
1300:       with the strings containing a UTCTime value. This is historical; new  
1301:       attribute definitions SHOULD use GeneralizedTime instead.  
1302:

+=+=+=+= File [rfc2261](#).txt +=+=+=+=  
[2000](#) found at line 1923:  
1921:  
1922:       snmpFrameworkMIB MODULE-IDENTITY  
1923:           LAST-UPDATED "9711200000Z"                   -- 20 November 1997  
1924:           ORGANIZATION "SNMPv3 Working Group"  
1925:           CONTACT-INFO "WG-email:   snmpv3@tis.com

+=+=+=+= File [rfc2262](#).txt +=+=+=+=  
[2000](#) found at line 818:  
816:

817: snmpMPDMIB MODULE-IDENTITY  
818: LAST-UPDATED "9711200000Z" -- 20 November 1997  
819: ORGANIZATION "SNMPv3 Working Group"  
820: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2264](#).txt ++++++=

[2000](#) found at line 1715:

1713:  
1714: snmpUsmMIB MODULE-IDENTITY  
1715: LAST-UPDATED "9711200000Z" -- 20 Nov 1997, midnight  
1716: ORGANIZATION "SNMPv3 Working Group"  
1717: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2265](#).txt ++++++=

[2000](#) found at line 554:

552:  
553: snmpVacmMIB MODULE-IDENTITY  
554: LAST-UPDATED "9711200000Z" -- 20 Nov 1997, midnight  
555: ORGANIZATION "SNMPv3 Working Group"  
556: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2271](#).txt ++++++=

[2000](#) found at line 1923:

1921:  
1922: snmpFrameworkMIB MODULE-IDENTITY  
1923: LAST-UPDATED "9711200000Z" -- 20 November 1997  
1924: ORGANIZATION "SNMPv3 Working Group"  
1925: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2272](#).txt ++++++=

[2000](#) found at line 818:

816:  
817: snmpMPDMIB MODULE-IDENTITY  
818: LAST-UPDATED "9711200000Z" -- 20 November 1997  
819: ORGANIZATION "SNMPv3 Working Group"  
820: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2274](#).txt ++++++=

[2000](#) found at line 1715:

1713:  
1714: snmpUsmMIB MODULE-IDENTITY  
1715: LAST-UPDATED "9711200000Z" -- 20 Nov 1997, midnight  
1716: ORGANIZATION "SNMPv3 Working Group"  
1717: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2275](#).txt ++++++=

[2000](#) found at line 554:

552:

553: snmpVacmMIB MODULE-IDENTITY

554: LAST-UPDATED "9711200000Z" -- 20 Nov 1997, midnight

555: ORGANIZATION "SNMPv3 Working Group"

556: CONTACT-INFO "WG-email: snmpv3@tis.com"

+++++= File [rfc2280](#).txt ++++++=

[2000](#) found at line 2119:

2117: missing, they default to:

2118:

2119: flap\_damp(1000, 2000, 750, 900, 900, 20000)

2120:

2121: That is, a penalty of 1000 is assigned at each route flap, the route

[2000](#) found at line 2122:

2120:

2121: That is, a penalty of 1000 is assigned at each route flap, the route

2122: is suppressed when penalty reaches 2000. The penalty is reduced in

2123: half after 15 minutes (900 seconds) of stability regardless of

2124: whether the route is up or down. A suppressed route is reused when

+++++= File [rfc2281](#).txt ++++++=

[1900](#) found at line 854:

852: Santa Clara, CA 95054

853:

854: Phone: (408) 327-1900

855: EMail: tli@juniper.net

856:

[1900](#) found at line 863:

861: Santa Clara, CA 95054

862:

863: Phone: (408) 327-1900

864: EMail: cole@juniper.net

865:

+++++= File [rfc2287](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 1439:

1437: DESCRIPTION

1438: "The full path and filename of the process.

1439: For example, '/opt/MYYpkg/bin/myyproc' would

1440: be returned for process 'myyproc' whose execution

1441: path is '/opt/MYYpkg/bin/myyproc'."

'yy' on a line without 'yyyy' found at line 1440:

1438: "The full path and filename of the process.

1439:           For example, '/opt/MYYpkg/bin/myyproc' would  
1440:           be returned for process 'myyproc' whose execution  
1441:           path is '/opt/MYYpkg/bin/myyproc'."  
1442:         ::= { sysApplElmtRunEntry 7 }

'yy' on a line without 'yyyy' found at line 1441:

1439:           For example, '/opt/MYYpkg/bin/myyproc' would  
1440:           be returned for process 'myyproc' whose execution  
1441:           path is '/opt/MYYpkg/bin/myyproc'."  
1442:         ::= { sysApplElmtRunEntry 7 }  
1443:

'yy' on a line without 'yyyy' found at line 1706:

1704:         DESCRIPTION  
1705:           "The full path and filename of the process.  
1706:           For example, '/opt/MYYpkg/bin/myyproc' would  
1707:           be returned for process 'myyproc' whose execution  
1708:           path was '/opt/MYYpkg/bin/myyproc'."

'yy' on a line without 'yyyy' found at line 1707:

1705:           "The full path and filename of the process.  
1706:           For example, '/opt/MYYpkg/bin/myyproc' would  
1707:           be returned for process 'myyproc' whose execution  
1708:           path was '/opt/MYYpkg/bin/myyproc'."  
1709:         ::= { sysApplElmtPastRunEntry 6 }

'yy' on a line without 'yyyy' found at line 1708:

1706:           For example, '/opt/MYYpkg/bin/myyproc' would  
1707:           be returned for process 'myyproc' whose execution  
1708:           path was '/opt/MYYpkg/bin/myyproc'."  
1709:         ::= { sysApplElmtPastRunEntry 6 }  
1710:

[2000](#) found at line 402:

400:  
401:         sysApplMIB MODULE-IDENTITY  
402:           LAST-UPDATED "9710200000Z"  
403:           ORGANIZATION "IETF Applications MIB Working Group"  
404:           CONTACT-INFO

+=+=+=+=+= File [rfc2292](#).txt +=+=+=+=+=

[2000](#) found at line 547:

545:         #define ND\_NA\_FLAG\_ROUTER               0x80000000  
546:         #define ND\_NA\_FLAG\_SOLICITED             0x40000000  
547:         #define ND\_NA\_FLAG\_OVERRIDE             0x20000000  
548:         #else   /\* BYTE\_ORDER == LITTLE\_ENDIAN \*/  
549:         #define ND\_NA\_FLAG\_ROUTER               0x00000080

+=+=+=+=+= File [rfc2298](#).txt +=+=+=+=+=

[2000](#) found at line 1310:

1308: Date: Wed, 20 Sep 1995 00:19:00 (EDT) -0400  
1309: From: Joe Recipient <Joe\_Recipient@mega.edu>  
1310: Message-Id: <199509200019.12345@mega.edu>  
1311: Subject: Disposition notification  
1312: To: Jane Sender <Jane\_Sender@huge.com>

+=+=+=+= File [rfc2300](#).txt +=+=+=+=

[2000](#) found at line 9:

7: Network Working Group Internet Architecture Board  
8: Request for Comments: 2300 J. Postel, Editor  
9: Obsoletes: 2200, 2000, 1920, 1880, 1800, May 1998  
10: 1780, 1720, 1610, 1600, 1540, 1500, 1410,  
11: 1360, 1280, 1250, 1200, 1140, 1130, 1100, 1083

+=+=+=+= File [rfc2308](#).txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 873:

871: NS2.XX.EXAMPLE. 600 IN NXT XX.EXAMPLE. NXT A NXT SIG  
872: NS2.XX.EXAMPLE. 600 IN SIG NXT ... XX.EXAMPLE. ...  
873: EXAMPLE. 65799 IN NS NS1.YY.EXAMPLE.  
874: EXAMPLE. 65799 IN NS NS2.YY.EXAMPLE.  
875: EXAMPLE. 65799 IN SIG NS ... XX.EXAMPLE. ...

'yy' on a line without 'yyyy' found at line 874:

872: NS2.XX.EXAMPLE. 600 IN SIG NXT ... XX.EXAMPLE. ...  
873: EXAMPLE. 65799 IN NS NS1.YY.EXAMPLE.  
874: EXAMPLE. 65799 IN NS NS2.YY.EXAMPLE.  
875: EXAMPLE. 65799 IN SIG NS ... XX.EXAMPLE. ...  
876: Additional

'yy' on a line without 'yyyy' found at line 879:

877: XX.EXAMPLE. 65800 IN KEY 0x4100 1 1 ...  
878: XX.EXAMPLE. 65800 IN SIG KEY ... EXAMPLE. ...  
879: NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1  
880: NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...  
881: NS2.YY.EXAMPLE. 65799 IN A 10.100.0.2

'yy' on a line without 'yyyy' found at line 880:

878: XX.EXAMPLE. 65800 IN SIG KEY ... EXAMPLE. ...  
879: NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1  
880: NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...  
881: NS2.YY.EXAMPLE. 65799 IN A 10.100.0.2  
882: NS3.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...

'yy' on a line without 'yyyy' found at line 881:

879: NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1  
880: NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...  
881: NS2.YY.EXAMPLE. 65799 IN A 10.100.0.2  
882: NS3.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...





270: follows: if YY is greater than or equal to 50, the year is

[1900](#) found at line 1972:

1970: Mountain View, CA 94043  
1971:  
1972: Phone: (415) 254-1900  
1973: EMail: repka@netscape.com  
1974:

+=+=+=+= File [rfc2312](#).txt +=+=+=+=

[1900](#) found at line 1049:

1047: Mountain View, CA 94043  
1048:  
1049: Phone: (415) 254-1900  
1050: EMail: jsw@netscape.com  
1051:

+=+=+=+= File [rfc2326](#).txt +=+=+=+=

2digit found at line 906:

904: smpte-type = "smpte" | "smpte-30-drop" | "smpte-25"  
905: ; other timecodes may be added  
906: smpte-time = 1\*2DIGIT ":" 1\*2DIGIT ":" 1\*2DIGIT [ ":" 1\*2DIGIT ]  
907: [ "." 1\*2DIGIT ]  
908:

2digit found at line 907:

905: ; other timecodes may be added  
906: smpte-time = 1\*2DIGIT ":" 1\*2DIGIT ":" 1\*2DIGIT [ ":" 1\*2DIGIT ]  
907: [ "." 1\*2DIGIT ]  
908:  
909: Examples:

2digit found at line 940:

938: npt-hhmmss = npt-hh ":" npt-mm ":" npt-ss [ "." \*DIGIT ]  
939: npt-hh = 1\*DIGIT ; any positive number  
940: npt-mm = 1\*2DIGIT ; 0-59  
941: npt-ss = 1\*2DIGIT ; 0-59  
942:

2digit found at line 941:

939: npt-hh = 1\*DIGIT ; any positive number  
940: npt-mm = 1\*2DIGIT ; 0-59  
941: npt-ss = 1\*2DIGIT ; 0-59  
942:  
943: Examples:

+=+=+=+= File [rfc2332](#).txt +=+=+=+=

[1900](#) found at line 2839:

2837:	1620 Tuckerstown Road	3260 Jay St.
2838:	Dresher, PA 19025 USA	Santa Clara, CA 95054
2839:	Phone: +1 215 830 0692	Phone: +1 408 327 1900
2840:	EMail: dave@corecom.com	EMail: bcole@jnx.com
2841:		

```

+++++= File rfc2353.txt ++++++=

```

2000 found at line 211:

209: native IP DLC, this field is not used to convey a port number for  
210: replies; moreover, the zero setting is not used. IANA has registered  
211: port numbers 12000 through 12004 for use in these two fields by the  
212: native IP DLC; use of these port numbers allows prioritization in the  
213: IP network. For more details of the use of these fields, see 2.6.1,

2000 found at line 1694:

```
1692:
1693:   At an intermediate HPR node, link activation failure can be reported
1694:   with sense data X'08010000' or X'80020000'. At a node with route-
1695:   selection responsibility, such failure can be reported with sense
1696:   data X'80140001'.
```

2000 found at line 1841:

```

1839: | the same connection network. |
1840: +-----+-----+
1841: | Link failure | X'80020000' |
1842: +-----+-----+
1843: | Route selection services has determined that no path | X'80140001' |

```

2000 found at line 1868:

```
1866: will be able to exploit routers that provide priority function.
1867:
1868: The 5 UDP port numbers, 12000-12004 (decimal), have been assigned by
1869: the Internet Assigned Number Authority (IANA). Four of these port
1870: numbers are used for ANR-routed network layer packets (NLPs) and
```

2000 found at line 1872:

1870: numbers are used for ANR-routed network layer packets (NLPs) and  
1871: correspond to the APPN transmission priorities (network, 12001; high,  
1872: 12002; medium, 12003; and low, 12004), and one port number (12000) is  
1873: used for a set of LLC commands (i.e., XID, TEST, DISC, and DM) and  
1874: function-routed NLPs (i.e., XID DONE RO and XID DONE RSP). These

2000 found at line 2417:

2415: the source port number is not relevant. That is, the firewall should  
2416: accept traffic with the IP addresses of the HPR/IP nodes and with  
2417: destination port numbers in the range 12000 to 12004. Second, the  
2418: possibility exists for an attack using forged UDP datagrams; such  
2419: attacks could cause the RTP connection to fail or even introduce

+++++= File [rfc2355.txt](#) +=+=+=+=

[2000](#) found at line 1488:

1486:	0x00	Command Reject	0x10030000
1487:			
1488:	0x01	Intervention Required	0x08020000
1489:			
1490:	0x02	Operation Check	0x10050000

+++++= File [rfc2361.txt](#) +=+=+=+=

'yy' on a line without 'yyyy' found at line 30:

28: \* video/vnd.avi; codec=XXX identifies a specific video codec (i.e.,  
29: XXX) within the AVI Registry.  
30: \* audio/vnd.wave; codec=YYY identifies a specific audio codec  
31: (i.e., YYY) within the WAVE Registry.  
32:

'yy' on a line without 'yyyy' found at line 31:

29: XXX) within the AVI Registry.  
30: \* audio/vnd.wave; codec=YYY identifies a specific audio codec  
31: (i.e., YYY) within the WAVE Registry.  
32:  
33: [Appendix A](#) and [Appendix B](#) provides an authoritative reference for the

[2000](#) found at line 354:

352: Compaq Computer Corporation  
353: 20555 SH 249  
354: Houston, TX 77269-2000 USA  
355:  
356: A.6 IBM CVSD

[2000](#) found at line 1474:

1472: PO Box 582  
1473: Stellenbosch Stellenbosch South Africa  
1474: 27 21 888 2000  
1475:  
1476: A.75 DF GSM610

[2000](#) found at line 1487:

1485: PO Box 582  
1486: Stellenbosch 7600 South Africa  
1487: 27 21 888 2000  
1488:  
1489: A.76 ISIAudio

[2000](#) found at line 1545:

1543: 4900 Old Ironsides Drive  
1544: Santa Clara, California 95054 USA  
1545: (408) 492-2000  
1546:  
1547: A.79 Dolby AC3 SPDIF

[2000](#) found at line 1993:

1991: A.104 DVM  
1992:  
1993: WAVE form Registration Number (hex): 0x2000  
1994: Codec ID in the IANA Namespace: audio/vnd.wave;codec=2000  
1995: WAVE form wFormatTag ID: WAVE\_FORMAT\_DVM

[2000](#) found at line 1994:

1992:  
1993: WAVE form Registration Number (hex): 0x2000  
1994: Codec ID in the IANA Namespace: audio/vnd.wave;codec=2000  
1995: WAVE form wFormatTag ID: WAVE\_FORMAT\_DVM  
1996: Contact:

[2000](#) found at line 3180:

3178: 707 California Street  
3179: Mountain View, California 94041 USA  
3180: 650-526-2000  
3181:  
3182:

[2000](#) found at line 3211:

3209: 707 California Street  
3210: Mountain View, California 94041 USA  
3211: 650-526-2000  
3212:  
3213: B.83 TrueMotion 2.0

[2000](#) found at line 3239:

3237: 707 California Street  
3238: Mountain View, California 94041 USA  
3239: 650-526-2000  
3240:  
3241:

+=+=+=+= File [rfc2368](#).txt +=+=+=+=

two-digit found at line 240:

238: scheme is not a problem: those characters may appear in mailto URLs,  
239: they just may not appear in unencoded form. The standard URL encoding  
240: mechanisms ("% " followed by a two-digit hex number) must be used in  
241: certain cases.  
242:

+=+=+=+= File [rfc2373](#).txt +=+=+=+=

2digit found at line 1192:

1190: IPv4address = 1\*3DIGIT "." 1\*3DIGIT "." 1\*3DIGIT "." 1\*3DIGIT  
1191:  
1192: IPv6prefix = hexpart "/" 1\*2DIGIT

```
1193:
1194:     hexpart = hexseq | hexseq ":" [ hexseq ] | ":" [ hexseq ]
```

```

+++=+++= File rfc2378.txt +=+=+++=
2digit found at line 1078:
1076:      response = code [index] [field] text CRLF
1077:
1078:      code      = [-] LDIG 2DIGIT ":"
1079:      index      = number ":"
1080:      field       = 1*SPACE attribute ":" 1*SPACE

```

```

131:
132:         error-response = error-code SP *TCHAR CRLF
133:         error-code      = ("4" / "5") 2DIGIT
134:
135:     Note that in ABNF, strings literals are case insensitive.  That

```

```

+=+=+=+= File rfc2397.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 107:
105:      a/TPg7JpJHxyendzWTBfX0cx0nKPjgBzi4diinWGdkF8kjdfnycQZXZeYGejmJl
106:      ZeGl9i2icVqaNVailT6F5iJ90m6mvuTS40K05M0vDk0Q4XUtwvK0zrcd3iq9uis
107:      F81M10IcR7lEewwcLp7tuNNkM3uNna3F2JQFo97Vriy/Xl4/f1cf5VWzXyym7PH
108:      hhx4dbgYKAAA7"
109:      ALT="Larry">

```

```

===== File rfc2400.txt =====
2000 found at line 9:
7:  Network Working Group                                Internet Architecture Board
8:  Request for Comments: 2400                            J. Postel
9:  Obsoletes: 2300, 2200, 2000, 1920, 1880,              J. Reynolds
10:  1800, 1780, 1720, 1610, 1600, 1540, 1500, 1410,      Editors
11:  1360, 1280, 1250, 1200, 1140, 1130, 1100, 1083        September 1998

```

```

+=+=+=+= File rfc2407.txt +=+=+=+=
2000 found at line 832:
830:
831:     Attribute #2:
832:         0x00020004    (AF = 0, type = SA Duration, length = 4 bytes)
833:         0x00015180    (value = 0x15180 = 86400 seconds = 24 hours)
834:

```

```
2000 found at line 848:
846:
847:     Attribute #4:
```

848: 0x00020004 (AF = 0, type = SA Duration, length = 4 bytes)  
849: 0x000186A0 (value = 0x186A0 = 100000KB = 100MB)  
850:

==== File [rfc2409](#).txt =====

[2000](#) found at line 1257:

1255: Field Size: 185  
1256: Group Prime/Irreducible Polynomial:  
1257: 0x02000000000000000000000000000000200000000000000001  
1258: Group Generator One: 0x18  
1259: Group Curve A: 0x0

==== File [rfc2412](#).txt =====

[2000](#) found at line 1689:

1687: As of early 1996, it appears that for 90 bits of cryptographic  
1688: strength, one should use a modular exponentiation group modulus of  
1689: 2000 bits. For 128 bits of strength, a 3000 bit modulus is required.  
1690:  
1691: 3. Specifying and Deriving Security Associations

[2000](#) found at line 2761:

2759: Length (32 bit words): 6  
2760: Data (hex):  
2761: 02000000 00000000 00000000 00000020 00000000 00000001  
2762: Generator:  
2763: X coordinate: 22 (decimal)

[2000](#) found at line 2976:

2974:  
2975: [Stinson] Stinson, Douglas, Cryptography Theory and Practice. CRC  
2976: Press, Inc., 2000, Corporate Blvd., Boca Raton, FL,  
2977: 33431-9868, ISBN 0-8493-8521-0, 1995  
2978:

==== File [rfc2425](#).txt =====

'yy' on a line without 'yyyy' found at line 1106:

1104: 9ucyBDb3JwLjEYMBYGA1UEAxMPVGltb3RoeSBBIEhvd2VzMSEwHwYJKoZIhvcNAQkBF  
1105: hJob3dlc0BuZXRzY2FwZS5jb20xFTATBgoJkiaJk/IsZAEBEwVob3dlczBcMA0GCSqG  
1106: SIb3DQEBAQUAA0sAMEgCQQC0JZf6wkg8pLMXHHCUvMfL5H6zjSk4vTTXZpYyrdN2dXc  
1107: oX49LKioMgeJSzoifKHtLOIboyludF90CgqcxtwKnAgMBAAGjNjA0MBEGCWGSAGG+E  
1108: IBAQQEAwIAoDAfBgNVHSMEGDAWgBT84FToB/GV3jr3mcau+hUMbsQukjANBgkqhkiG9

==== File [rfc2426](#).txt =====

'yy' on a line without 'yyyy' found at line 1479:

1477: MPVGltb3RoeSBBIEhvd2VzMSEwHwYJKoZIhvcNAQkBFhJob3dlc0BuZXRz  
1478: Y2FwZS5jb20xFTATBgoJkiaJk/IsZAEBEwVob3dlczBcMA0GCSqGSiB3DQ  
1479: EBAQUAA0sAMEgCQQC0JZf6wkg8pLMXHHCUvMfL5H6zjSk4vTTXZpYyrdN2

1480: dXcoX49LKioMgeJSzoiFKHtLOIboyludF90CgqcxtwKnAgMBAAGjNjA0MB  
1481: EGCWCGSAGG+EIBAQQEAwIAoDAfBgNVHSMEGDAWgBT84FToB/GV3jr3mcau

2-digit found at line 372:

370: and minutes (e.g., +hh:mm). The time is specified as a 24-hour clock.  
371: Hour values are from 00 to 23, and minute values are from 00 to 59.  
372: Hour and minutes are 2-digits with high order zeroes required to  
373: maintain digit count. The extended format for ISO 8601 UTC offsets  
374: MUST be used. The extended format makes use of a colon character as a

2digit found at line 379:

377: The value is defined by the following notation:  
378:  
379: time-hour = 2DIGIT ;00-23  
380: time-minute = 2DIGIT ;00-59  
381: utc-offset = ("+" / "-") time-hour ":" time-minute

2digit found at line 380:

378:  
379: time-hour = 2DIGIT ;00-23  
380: time-minute = 2DIGIT ;00-59  
381: utc-offset = ("+" / "-") time-hour ":" time-minute  
382:

2digit found at line 2051:

2049:  
2050: utc-offset-value = ("+" / "-") time-hour ":" time-minute  
2051: time-hour = 2DIGIT ;00-23  
2052: time-minute = 2DIGIT ;00-59  
2053:

2digit found at line 2052:

2050: utc-offset-value = ("+" / "-") time-hour ":" time-minute  
2051: time-hour = 2DIGIT ;00-23  
2052: time-minute = 2DIGIT ;00-59  
2053:  
2054: 5. Differences From vCard v2.1

+++++= File [rfc2440](#).txt ++++++=

[2000](#) found at line 3227:

3225: Encryption Standard. This algorithm will work with (at least) 128,  
3226: 192, and 256-bit keys. We expect that this algorithm will be selected  
3227: from the candidate algorithms in the year 2000.  
3228:  
3229: 12.8. OpenPGP CFB mode

+++++= File [rfc2445](#).txt ++++++=

'yy' on a line without 'yyyy' found at line 2234:

2232: ( ";" "BYDAY" "=" byweekdaylist ) /



```

2233:          ( ";" "BYMONTHDAY" "=" bymodaylist )      /
2234:          ( ";" "BYYEARDAY" "=" byyrdaylist )        /
2235:          ( ";" "BYWEEKNO" "=" bywknolist )           /
2236:          ( ";" "BYMONTH" "=" bymolist )              /

```

'yy' on a line without 'yyyy' found at line 2288:

```

2286:      ordmoday   = 1DIGIT / 2DIGIT           ;1 to 31
2287:
2288:      byyrdaylist = yeardaynum / ( yeardaynum *("," yeardaynum) )
2289:
2290:      yeardaynum = ([plus] ordyrday) / (minus ordyrday)

```

'yy' on a line without 'yyyy' found at line 2388:

```

2386:      the month.
2387:
2388:      The BYYEARDAY rule part specifies a COMMA character (US-ASCII decimal
2389:      44) separated list of days of the year. Valid values are 1 to 366 or
2390:      -366 to -1. For example, -1 represents the last day of the year

```

'yy' on a line without 'yyyy' found at line 2461:

```

2459:      specified FREQ and INTERVAL rule parts, the BYxxx rule parts are
2460:      applied to the current set of evaluated occurrences in the following
2461:      order: BYMONTH, BYWEEKNO, BYYEARDAY, BYMONTHDAY, BYDAY, BYHOUR,
2462:      BYMINUTE, BYSECOND and BYSETPOS; then COUNT and UNTIL are evaluated.
2463:

```

'yy' on a line without 'yyyy' found at line 6804:

```

6802:      (2000 9:00 AM EDT)June 10;July 10
6803:      (2001 9:00 AM EDT)June 10;July 10
6804:      Note: Since none of the BYDAY, BYMONTHDAY or BYYEARDAY components
6805:      are specified, the day is gotten from DTSTART
6806:

```

'yy' on a line without 'yyyy' found at line 6820:

```

6818:
6819:      DTSTART;TZID=US-Eastern:19970101T090000
6820:      RRULE:FREQ=YEARLY;INTERVAL=3;COUNT=10;BYYEARDAY=1,100,200
6821:
6822:      ==> (1997 9:00 AM EST)January 1

```

two-digit found at line 1919:

```

1917:      of values. The format for the value type is expressed as the [ISO
1918:      8601] complete representation, basic format for a calendar date. The
1919:      textual format specifies a four-digit year, two-digit month, and
1920:      two-digit day of the month. There are no separator characters between
1921:      the year, month and day component text.

```

two-digit found at line 1920:

```

1918:      8601] complete representation, basic format for a calendar date. The
1919:      textual format specifies a four-digit year, two-digit month, and
1920:      two-digit day of the month. There are no separator characters between

```

1921: the year, month and day component text.  
1922:

two-digit found at line 2610:

2608: of day. The format is based on the [ISO 8601] complete  
2609: representation, basic format for a time of day. The text format  
2610: consists of a two-digit 24-hour of the day (i.e., values 0-23), two-  
2611: digit minute in the hour (i.e., values 0-59), and two-digit seconds  
2612: in the minute (i.e., values 0-60). The seconds value of 60 MUST only

two-digit found at line 2611:

2609: representation, basic format for a time of day. The text format  
2610: consists of a two-digit 24-hour of the day (i.e., values 0-23), two-  
2611: digit minute in the hour (i.e., values 0-59), and two-digit seconds  
2612: in the minute (i.e., values 0-60). The seconds value of 60 MUST only  
2613: to be used to account for "leap" seconds. Fractions of a second are

two-digit found at line 4583:

4581: Values for latitude and longitude shall be expressed as decimal  
4582: fractions of degrees. Whole degrees of latitude shall be represented  
4583: by a two-digit decimal number ranging from 0 through 90. Whole  
4584: degrees of longitude shall be represented by a decimal number ranging  
4585: from 0 through 180. When a decimal fraction of a degree is specified,

2digit found at line 1911:

1909:  
1910:  
1911: date-month = 2DIGIT ;01-12  
1912: date-mday = 2DIGIT ;01-28, 01-29, 01-30, 01-31  
1913: ;based on month/year

2digit found at line 1912:

1910:  
1911: date-month = 2DIGIT ;01-12  
1912: date-mday = 2DIGIT ;01-28, 01-29, 01-30, 01-31  
1913: ;based on month/year  
1914:

2digit found at line 2258:

2256: byseclist = seconds / ( seconds \*(", " seconds) )  
2257:  
2258: seconds = 1DIGIT / 2DIGIT ;0 to 59  
2259:  
2260: byminlist = minutes / ( minutes \*(", " minutes) )

2digit found at line 2262:

2260: byminlist = minutes / ( minutes \*(", " minutes) )  
2261:  
2262: minutes = 1DIGIT / 2DIGIT ;0 to 59  
2263:  
2264: byhrlist = hour / ( hour \*(", " hour) )

2digit found at line 2266:

```
2264:      byhrlist    = hour / ( hour *(", " hour) )
2265:
2266:      hour          = 1DIGIT / 2DIGIT          ;0 to 23
2267:
2268:      bywdaylist    = weekdaynum / ( weekdaynum *(", " weekdaynum) )
```

2digit found at line 2276:

```
2274:      minus        = "-"
2275:
2276:      ordwk          = 1DIGIT / 2DIGIT          ;1 to 53
2277:
2278:      weekday        = "SU" / "MO" / "TU" / "WE" / "TH" / "FR" / "SA"
```

2digit found at line 2286:

```
2284:      monthdaynum = ([plus] ordmoday) / (minus ordmoday)
2285:
2286:      ordmoday       = 1DIGIT / 2DIGIT          ;1 to 31
2287:
2288:      byyrdaylist    = yeardaynum / ( yeardaynum *(", " yeardaynum) )
```

2digit found at line 2292:

```
2290:      yeardaynum = ([plus] ordyrday) / (minus ordyrday)
2291:
2292:      ordyrday      = 1DIGIT / 2DIGIT / 3DIGIT      ;1 to 366
2293:
2294:      bywknolist     = weeknum / ( weeknum *(", " weeknum) )
```

2digit found at line 2307:

```
2305:      bymolist      = monthnum / ( monthnum *(", " monthnum) )
2306:
2307:      monthnum       = 1DIGIT / 2DIGIT          ;1 to 12
2308:
2309:      bysplist       = setposday / ( setposday *(", " setposday) )
```

2digit found at line 2595:

```
2593:      time              = time-hour time-minute time-second [time-utc]
2594:
2595:      time-hour          = 2DIGIT          ;00-23
2596:      time-minute        = 2DIGIT          ;00-59
2597:      time-second        = 2DIGIT          ;00-60
```

2digit found at line 2596:

```
2594:
2595:      time-hour          = 2DIGIT          ;00-23
2596:      time-minute        = 2DIGIT          ;00-59
2597:      time-second        = 2DIGIT          ;00-60
2598:      ;The "60" value is used to account for "leap" seconds.
```

2digit found at line 2597:

2595:       time-hour               = 2DIGIT               ;00-23  
2596:       time-minute           = 2DIGIT               ;00-59  
2597:       time-second           = 2DIGIT               ;00-60  
2598:       ;The "60" value is used to account for "leap" seconds.  
2599:

[1900](#) found at line 2988:

2986:       DTSTAMP:19970901T1300Z  
2987:       DTSTART:19970903T163000Z  
2988:       DTEND:19970903T190000Z  
2989:       SUMMARY:Annual Employee Review  
2990:       CLASS:PRIVATE

[2000](#) found at line 1716:

1714:       The following are examples of this property parameter:  
1715:  
1716:       DTSTART;TZID=US-Eastern:19980119T020000  
1717:  
1718:       DTEND;TZID=US-Eastern:19980119T030000

[2000](#) found at line 2029:

2027:       New York on Janurary 19, 1998:  
2028:  
2029:       DTSTART;TZID=US-Eastern:19980119T020000  
2030:  
2031:       Example: The following represents July 14, 1997, at 1:30 PM in New

[2000](#) found at line 2822:

2820:       Property names, parameter names and enumerated parameter values are  
2821:       case insensitive. For example, the property name "DUE" is the same as  
2822:       "due" and "Due", DTSTART;TZID=US-Eastern:19980714T120000 is the same  
2823:       as DtStart;TzID=US-Eastern:19980714T120000.  
2824:

[2000](#) found at line 2823:

2821:       case insensitive. For example, the property name "DUE" is the same as  
2822:       "due" and "Due", DTSTART;TZID=US-Eastern:19980714T120000 is the same  
2823:       as DtStart;TzID=US-Eastern:19980714T120000.  
2824:  
2825:       4.6 Calendar Components

[2000](#) found at line 3566:

3564:       Time took effect in Fall 1967 for New York City:  
3565:  
3566:       DTSTART:19671029T020000  
3567:  
3568:       TZOFFSETFROM:-0400

[2000](#) found at line 3631:

3629:       LAST-MODIFIED:19870101T000000Z  
3630:       BEGIN:STANDARD

3631: DTSTART:19971026T020000  
3632: RDATE:19971026T020000  
3633: TZOFFSETFROM:-0400

[2000](#) found at line 3632:

3630: BEGIN:STANDARD  
3631: DTSTART:19971026T020000  
3632: RDATE:19971026T020000  
3633: TZOFFSETFROM:-0400  
3634: TZOFFSETTO:-0500

[2000](#) found at line 3638:

3636: END:STANDARD  
3637: BEGIN:DAYLIGHT  
3638: DTSTART:19971026T020000  
3639:  
3640:

[2000](#) found at line 3647:

3645:  
3646:  
3647: RDATE:19970406T020000  
3648: TZOFFSETFROM:-0500  
3649: TZOFFSETTO:-0400

[2000](#) found at line 3665:

3663: TZURL:http://zones.stds\_r\_us.net/tz/US-Eastern  
3664: BEGIN:STANDARD  
3665: DTSTART:19671029T020000  
3666: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10  
3667: TZOFFSETFROM:-0400

[2000](#) found at line 3672:

3670: END:STANDARD  
3671: BEGIN:DAYLIGHT  
3672: DTSTART:19870405T020000  
3673: RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=4  
3674: TZOFFSETFROM:-0500

[2000](#) found at line 3688:

3686: LAST-MODIFIED:19870101T000000Z  
3687: BEGIN:STANDARD  
3688: DTSTART:19671029T020000  
3689: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10  
3690: TZOFFSETFROM:-0400

[2000](#) found at line 3704:

3702:  
3703: BEGIN:DAYLIGHT  
3704: DTSTART:19870405T020000  
3705: RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=4;UNTIL=19980404T070000Z

3706: TZOFFSETFROM:-0500

[2000](#) found at line 3721:

3719: LAST-MODIFIED:19870101T000000Z  
3720: BEGIN:STANDARD  
3721: DTSTART:19671029T020000  
3722: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10  
3723: TZOFFSETFROM:-0400

[2000](#) found at line 3728:

3726: END:STANDARD  
3727: BEGIN:DAYLIGHT  
3728: DTSTART:19870405T020000  
3729: RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=4;UNTIL=19980404T070000Z  
3730: TZOFFSETFROM:-0500

[2000](#) found at line 3735:

3733: END:DAYLIGHT  
3734: BEGIN:DAYLIGHT  
3735: DTSTART:19990424T020000  
3736: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=4  
3737: TZOFFSETFROM:-0500

[2000](#) found at line 5352:

5350: FREEBUSY;FBTYPE=BUSY-UNAVAILABLE:19970308T160000Z/PT8H30M  
5351:  
5352: FREEBUSY;FBTYPE=FREE:19970308T160000Z/PT3H,19970308T200000Z/PT1H  
5353:  
5354: FREEBUSY;FBTYPE=FREE:19970308T160000Z/PT3H,19970308T200000Z/PT1H,

[2000](#) found at line 5354:

5352: FREEBUSY;FBTYPE=FREE:19970308T160000Z/PT3H,19970308T200000Z/PT1H  
5353:  
5354: FREEBUSY;FBTYPE=FREE:19970308T160000Z/PT3H,19970308T200000Z/PT1H,  
5355: 19970308T230000Z/19970309T000000Z  
5356:

[2000](#) found at line 6069:

6067: RECURRENCE-ID;VALUE=DATE:19960401  
6068:  
6069: RECURRENCE-ID;RANGE=THISANDFUTURE:19960120T120000Z  
6070:  
6071: 4.8.4.5 Related To

[2000](#) found at line 6507:

6505: RDATE;TZID=US-EASTERN:19970714T083000  
6506:  
6507: RDATE;VALUE=PERIOD:19960403T020000Z/19960403T040000Z,  
6508: 19960404T010000Z/PT3H  
6509:

[2000](#) found at line 6623:

```
6621:
6622:      DTSTART;TZID=US-Eastern:19980101T090000
6623:      RRULE:FREQ=YEARLY;UNTIL=20000131T090000Z;
6624:      BYMONTH=1;BYDAY=SU,MO,TU,WE,TH,FR,SA
6625:      or
```

[2000](#) found at line 6626:

```
6624:      BYMONTH=1;BYDAY=SU,MO,TU,WE,TH,FR,SA
6625:      or
6626:      RRULE:FREQ=DAILY;UNTIL=20000131T090000Z;BYMONTH=1
6627:
6628:      ==> (1998 9:00 AM EDT)January 1-31
```

[2000](#) found at line 6630:

```
6628:      ==> (1998 9:00 AM EDT)January 1-31
6629:      (1999 9:00 AM EDT)January 1-31
6630:      (2000 9:00 AM EDT)January 1-31
6631:
6632:      Weekly for 10 occurrences
```

[2000](#) found at line 6802:

```
6800:      (1998 9:00 AM EDT)June 10;July 10
6801:      (1999 9:00 AM EDT)June 10;July 10
6802:      (2000 9:00 AM EDT)June 10;July 10
6803:      (2001 9:00 AM EDT)June 10;July 10
6804:      Note: Since none of the BYDAY, BYMONTHDAY or BYYEARDAY components
```

[2000](#) found at line 6824:

```
6822:      ==> (1997 9:00 AM EST)January 1
6823:      (1997 9:00 AM EDT)April 10;July 19
6824:      (2000 9:00 AM EST)January 1
6825:      (2000 9:00 AM EDT)April 9;July 18
6826:      (2003 9:00 AM EST)January 1
```

[2000](#) found at line 6825:

```
6823:      (1997 9:00 AM EDT)April 10;July 19
6824:      (2000 9:00 AM EST)January 1
6825:      (2000 9:00 AM EDT)April 9;July 18
6826:      (2003 9:00 AM EST)January 1
6827:      (2003 9:00 AM EDT)April 10;July 19
```

[2000](#) found at line 6897:

```
6895:      ==> (1998 9:00 AM EST)February 13;March 13;November 13
6896:      (1999 9:00 AM EDT)August 13
6897:      (2000 9:00 AM EDT)October 13
6898:      ...
6899:
```

[2000](#) found at line 6920:

```
6918:
```

6919: ==> (1996 9:00 AM EST)November 5  
6920: (2000 9:00 AM EST)November 7  
6921: (2004 9:00 AM EST)November 2  
6922: ...

[2000](#) found at line 7612:

7610:  
7611: BEGIN:VCALENDAR PRODID:-//xyz Corp//NONSGML PDA Calendar Verson  
7612: 1.0//EN VERSION:2.0 BEGIN:VEVENT DTSTAMP:19960704T120000Z  
7613: UID:uid1@host.com ORGANIZER:MAILTO:jsmith@host.com  
7614: DTSTART:19960918T143000Z DTEND:19960920T220000Z STATUS:CONFIRMED

[2000](#) found at line 7614:

7612: 1.0//EN VERSION:2.0 BEGIN:VEVENT DTSTAMP:19960704T120000Z  
7613: UID:uid1@host.com ORGANIZER:MAILTO:jsmith@host.com  
7614: DTSTART:19960918T143000Z DTEND:19960920T220000Z STATUS:CONFIRMED  
7615:  
7616:

[2000](#) found at line 7640:

7638: TZID:US-Eastern  
7639: BEGIN:STANDARD  
7640: DTSTART:19981025T020000  
7641: RDATE:19981025T020000  
7642: TZOFFSETFROM:-0400

[2000](#) found at line 7641:

7639: BEGIN:STANDARD  
7640: DTSTART:19981025T020000  
7641: RDATE:19981025T020000  
7642: TZOFFSETFROM:-0400  
7643: TZOFFSETTO:-0500

[2000](#) found at line 7647:

7645: END:STANDARD  
7646: BEGIN:DAYLIGHT  
7647: DTSTART:19990404T020000  
7648: RDATE:19990404T020000  
7649: TZOFFSETFROM:-0500

[2000](#) found at line 7648:

7646: BEGIN:DAYLIGHT  
7647: DTSTART:19990404T020000  
7648: RDATE:19990404T020000  
7649: TZOFFSETFROM:-0500  
7650: TZOFFSETTO:-0400

[2000](#) found at line 7740:

7738: BEGIN:VALARM  
7739: ACTION:AUDIO  
7740: TRIGGER:19980403T120000



7741: ATTACH;FMTTYPE=audio/basic:http://host.com/pub/audio-  
7742: files/ssbanner.aud

[2000](#) found at line 7755:

7753: PROID:-//ABC Corporation//NONSGML My Product//EN  
7754: BEGIN:VJOURNAL  
7755: DTSTAMP:19970324T120000Z  
7756: UID:uid5@host1.com  
7757: ORGANIZER:MAILTO:jsmith@host.com

+++++= File [rfc2446](#).txt ++++++=

[1900](#) found at line 3347:

3345: ORGANIZER:mailto:a@example.com  
3346: DTSTART:19970701T200000Z  
3347: DTSTAMP:19970611T190000Z  
3348: SUMMARY:ST. PAUL SAINTS -VS- DULUTH-SUPERIOR DUKES  
3349: UID:0981234-1234234-23@example.com

[1900](#) found at line 3373:

3371: BEGIN:VEVENT  
3372: ORGANIZER:mailto:a@example.com  
3373: DTSTAMP:19970612T190000Z  
3374: DTSTART:19970701T210000Z  
3375: DTEND:19970701T230000Z

[1900](#) found at line 3410:

3408: SEQUENCE:2  
3409: UID:0981234-1234234-23@example.com  
3410: DTSTAMP:19970613T190000Z  
3411: END:VEVENT  
3412: END:VCALENDAR

[1900](#) found at line 3461:

3459: DTEND;TZID=America-Chicago:19970701T180000  
3460: DTSTART;TZID=America-Chicago:19970702T160000  
3461: DTSTAMP:19970614T190000Z  
3462: STATUS:CONFIRMED  
3463: LOCATION;VALUE=URI:http://www.midwaystadium.com/

[1900](#) found at line 3505:

3503: BEGIN:VEVENT  
3504: ORGANIZER:mailto:a@example.com  
3505: DTSTAMP:19970614T190000Z  
3506: UID:0981234-1234234-23@example.com  
3507: DTSTART;VALUE=DATE:19970714

[1900](#) found at line 3594:

3592: ATTENDEE;RSVP=FALSE;TYPE=ROOM:conf\_Big@example.com  
3593: ATTENDEE;ROLE=NON-PARTICIPANT;RSVP=FALSE:Mailto:E@example.com  
3594: DTSTAMP:19970611T190000Z

3595: DTSTART:19970701T200000Z  
3596: DTEND:19970701T200000Z

[1900](#) found at line 3618:

3616: SEQUENCE:0  
3617: REQUEST-STATUS:2.0;Success  
3618: DTSTAMP:19970612T190000Z  
3619: END:VEVENT  
3620: END:VCALENDAR

[1900](#) found at line 3655:

3653: ATTENDEE;ROLE=NON-PARTICIPANT;RSVP=FALSE:Mailto:E@example.com  
3654: DTSTART:19970701T180000Z  
3655: DTEND:19970701T190000Z  
3656: SUMMARY:Phone Conference  
3657: UID:calsrv.example.com-873970198738777@example.com

[1900](#) found at line 3659:

3657: UID:calsrv.example.com-873970198738777@example.com  
3658: SEQUENCE:1  
3659: DTSTAMP:19970613T190000Z  
3660: STATUS:CONFIRMED  
3661: END:VEVENT

[1900](#) found at line 3680:

3678: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:B@example.com  
3679: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:C@example.com  
3680: DTSTART:19970701T190000Z  
3681: DTEND:19970701T200000Z  
3682: SUMMARY:Discuss the Merits of the election results

[1900](#) found at line 3686:

3684: UID:calsrv.example.com-873970198738777a@example.com  
3685: SEQUENCE:0  
3686: DTSTAMP:19970611T190000Z  
3687: STATUS:CONFIRMED  
3688: END:VEVENT

[1900](#) found at line 3713:

3711: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:C@example.com  
3712: DTSTART:19970701T160000Z  
3713: DTEND:19970701T190000Z  
3714: DTSTAMP:19970612T190000Z  
3715: SUMMARY:Discuss the Merits of the election results

[1900](#) found at line 3714:

3712: DTSTART:19970701T160000Z  
3713: DTEND:19970701T190000Z  
3714: DTSTAMP:19970612T190000Z  
3715: SUMMARY:Discuss the Merits of the election results  
3716: LOCATION:Green Conference Room

[1900](#) found at line 3721:

3719: UID:calsrv.example.com-873970198738777a@example.com  
3720: SEQUENCE:0  
3721: DTSTAMP:19970611T190000Z  
3722: END:VEVENT  
3723: END:VCALENDAR

[1900](#) found at line 3738:

3736: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:B@example.com  
3737: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:C@example.com  
3738: DTSTAMP:19970613T190000Z  
3739: DTSTART:19970701T160000Z  
3740: DTEND:19970701T190000Z

[1900](#) found at line 3740:

3738: DTSTAMP:19970613T190000Z  
3739: DTSTART:19970701T160000Z  
3740: DTEND:19970701T190000Z  
3741: SUMMARY:Discuss the Merits of the election results - changed to  
3742: meet B's schedule

[1900](#) found at line 3769:

3767: UID:calsrv.example.com-873970198738777@example.com  
3768: SEQUENCE:0  
3769: DTSTAMP:19970614T190000Z  
3770: END:VEVENT  
3771: END:VCALENDAR

[1900](#) found at line 3884:

3882: SEQUENCE:0  
3883: REQUEST-STATUS:2.0;Success  
3884: DTSTAMP:19970611T190000Z  
3885: END:VEVENT  
3886: END:VCALENDAR

[1900](#) found at line 3906:

3904: SEQUENCE:0  
3905: STATUS:CONFIRMED  
3906: DTSTAMP:19970611T190000Z  
3907: END:VEVENT  
3908: END:VCALENDAR

[1900](#) found at line 3936:

3934: SEQUENCE:0  
3935: REQUEST-STATUS:2.0;Success  
3936: DTSTAMP:19970614T190000Z  
3937: END:VEVENT  
3938: END:VCALENDAR

[1900](#) found at line 3967:

3965: SEQUENCE:0  
3966: REQUEST-STATUS:2.0;Success  
3967: DTSTAMP:19970614T190000Z  
3968: END:VEVENT  
3969: END:VCALENDAR

[1900](#) found at line 4072:

4070: SEQUENCE:1  
4071: STATUS:CANCELLED  
4072: DTSTAMP:19970613T190000Z  
4073: END:VEVENT  
4074: END:VCALENDAR

[1900](#) found at line 4157:

4155: ATTENDEE;ROLE=NON-PARTICIPANT;  
4156: RSVP=FALSE:Mailto:E@example.com  
4157: DTSTAMP:19970611T190000Z  
4158: DTSTART:19970701T200000Z  
4159: DTEND:19970701T203000Z

[1900](#) found at line 4193:

4191: ATTENDEE;TYPE=INDIVIDUAL:Mailto:C@example.com  
4192: ATTENDEE;TYPE=INDIVIDUAL:Mailto:D@example.com  
4193: DTSTAMP:19970611T190000Z  
4194: DTSTART:19970701T200000Z  
4195: DTEND:19970701T203000Z

[1900](#) found at line 4232:

4230: DTSTART:19980101T124200Z  
4231: DTEND:19980107T124200Z  
4232: FREEBUSY:19980101T180000Z/19980101T190000Z  
4233: FREEBUSY:19980103T020000Z/19980103T050000Z  
4234: FREEBUSY:19980107T020000Z/19980107T050000Z

[1900](#) found at line 4236:

4234: FREEBUSY:19980107T020000Z/19980107T050000Z  
4235: FREEBUSY:19980113T000000Z/19980113T010000Z  
4236: FREEBUSY:19980115T190000Z/19980115T200000Z  
4237: FREEBUSY:19980115T220000Z/19980115T230000Z  
4238: FREEBUSY:19980116T013000Z/19980116T043000Z

[1900](#) found at line 4288:

4286: ATTENDEE:Mailto:B@example.com  
4287: ATTENDEE:Mailto:C@example.com  
4288: DTSTAMP:19970613T190000Z  
4289: DTSTART:19970701T080000Z  
4290: DTEND:19970701T200000Z

[1900](#) found at line 4319:

4317:  
4318:

4319: DTSTAMP:19970613T190030Z  
4320: END:VFREEBUSY  
4321: END:VCALENDAR

[1900](#) found at line 4359:

4357: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:B@example.fr  
4358: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:c@example.jp  
4359: DTSTAMP:19970613T190030Z  
4360: DTSTART;TZID=America-SanJose:19970701T140000  
4361: DTEND;TZID=America-SanJose:19970701T150000

[1900](#) found at line 5193:

5191: to each of the start of each recurring instance. Hence, if the  
5192: initial "VTOD0" calendar component specifies a "DTSTART" property  
5193: value of "19970701T190000Z" and a "DUE" property value of  
5194: "19970801T190000Z" the interval of one day which is applied to each  
5195: recurring instance of the "VTOD0" calendar component to determine the

[1900](#) found at line 5194:

5192: initial "VTOD0" calendar component specifies a "DTSTART" property  
5193: value of "19970701T190000Z" and a "DUE" property value of  
5194: "19970801T190000Z" the interval of one day which is applied to each  
5195: recurring instance of the "VTOD0" calendar component to determine the  
5196: "DUE" date of the instance.

[2000](#) found at line 3346:

3344: BEGIN:VEVENT  
3345: ORGANIZER:mailto:a@example.com  
3346: DTSTART:19970701T200000Z  
3347: DTSTAMP:19970611T190000Z  
3348: SUMMARY:ST. PAUL SAINTS -VS- DULUTH-SUPERIOR DUKES

[2000](#) found at line 3437:

3435: TZURL:http://zones.stds\_r\_us.net/tz/America-Chicago  
3436: BEGIN:STANDARD  
3437: DTSTART:19671029T020000  
3438: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10  
3439: TZOFFSETFROM:-0500

[2000](#) found at line 3444:

3442: END:STANDARD  
3443: BEGIN:DAYLIGHT  
3444: DTSTART:19870405T020000  
3445: RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=4  
3446: TZOFFSETFROM:-0600

[2000](#) found at line 3595:

3593: ATTENDEE;ROLE=NON-PARTICIPANT;RSVP=FALSE:Mailto:E@example.com  
3594: DTSTAMP:19970611T190000Z  
3595: DTSTART:19970701T200000Z  
3596: DTEND:19970701T200000Z

3597: SUMMARY:Conference

[2000](#) found at line 3596:

3594: DTSTAMP:19970611T190000Z

3595: DTSTART:19970701T200000Z

3596: DTEND:19970701T200000Z

3597: SUMMARY:Conference

3598: UID:calsrv.example.com-873970198738777@example.com

[2000](#) found at line 3681:

3679: ATTENDEE;RSVP=TRUE;TYPE=INDIVIDUAL:Mailto:C@example.com

3680: DTSTART:19970701T190000Z

3681: DTEND:19970701T200000Z

3682: SUMMARY:Discuss the Merits of the election results

3683: LOCATION:Green Conference Room

[2000](#) found at line 3901:

3899: DELEGATED-FROM="Mailto:C@example.com":Mailto:E@example.com

3900: DTSTART:19970701T180000Z

3901: DTEND:19970701T200000Z

3902: SUMMARY:Phone Conference

3903: UID:calsrv.example.com-873970198738777@example.com

[2000](#) found at line 3996:

3994: SUMMARY:Phone Conference

3995: DTSTART:19970701T180000Z

3996: DTEND:19970701T200000Z

3997: DTSTAMP:19970614T200000Z

3998: COMMENT:DELEGATE (ATTENDEE Mailto:E@example.com) DECLINED YOUR

[2000](#) found at line 3997:

3995: DTSTART:19970701T180000Z

3996: DTEND:19970701T200000Z

3997: DTSTAMP:19970614T200000Z

3998: COMMENT:DELEGATE (ATTENDEE Mailto:E@example.com) DECLINED YOUR

3999: INVITATION

[2000](#) found at line 4158:

4156: RSVP=FALSE:Mailto:E@example.com

4157: DTSTAMP:19970611T190000Z

4158: DTSTART:19970701T200000Z

4159: DTEND:19970701T203000Z

4160: SUMMARY:Phone Conference

[2000](#) found at line 4194:

4192: ATTENDEE;TYPE=INDIVIDUAL:Mailto:D@example.com

4193: DTSTAMP:19970611T190000Z

4194: DTSTART:19970701T200000Z

4195: DTEND:19970701T203000Z

4196: RRULE:FREQ=WEEKLY

[2000](#) found at line 4233:

4231: DTEND:19980107T124200Z  
4232: FREEBUSY:19980101T180000Z/19980101T190000Z  
4233: FREEBUSY:19980103T020000Z/19980103T050000Z  
4234: FREEBUSY:19980107T020000Z/19980107T050000Z  
4235: FREEBUSY:19980113T000000Z/19980113T010000Z

[2000](#) found at line 4234:

4232: FREEBUSY:19980101T180000Z/19980101T190000Z  
4233: FREEBUSY:19980103T020000Z/19980103T050000Z  
4234: FREEBUSY:19980107T020000Z/19980107T050000Z  
4235: FREEBUSY:19980113T000000Z/19980113T010000Z  
4236: FREEBUSY:19980115T190000Z/19980115T200000Z

[2000](#) found at line 4236:

4234: FREEBUSY:19980107T020000Z/19980107T050000Z  
4235: FREEBUSY:19980113T000000Z/19980113T010000Z  
4236: FREEBUSY:19980115T190000Z/19980115T200000Z  
4237: FREEBUSY:19980115T220000Z/19980115T230000Z  
4238: FREEBUSY:19980116T013000Z/19980116T043000Z

[2000](#) found at line 4237:

4235: FREEBUSY:19980113T000000Z/19980113T010000Z  
4236: FREEBUSY:19980115T190000Z/19980115T200000Z  
4237: FREEBUSY:19980115T220000Z/19980115T230000Z  
4238: FREEBUSY:19980116T013000Z/19980116T043000Z  
4239: END:VFREEBUSY

[2000](#) found at line 4290:

4288: DTSTAMP:19970613T190000Z  
4289: DTSTART:19970701T080000Z  
4290: DTEND:19970701T200000  
4291: UID:calsrv.example.com-873970198738777@example.com  
4292: END:VFREEBUSY

[2000](#) found at line 4308:

4306: ATTENDEE:Mailto:B@example.com  
4307: DTSTART:19970701T080000Z  
4308: DTEND:19970701T200000Z  
4309: UID:calsrv.example.com-873970198738777@example.com  
4310: FREEBUSY:19970701T090000Z/PT1H,19970701T140000Z/PT30M

[2000](#) found at line 4340:

4338: TZURL:http://zones.stds\_r\_us.net/tz/America-SanJose  
4339: BEGIN:STANDARD  
4340: DTSTART:19671029T020000  
4341: RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10  
4342: TZOFFSETFROM:-0700

[2000](#) found at line 4347:

4345: END:STANDARD

4346: BEGIN:DAYLIGHT  
4347: DTSTART:19870405T020000  
4348: RRULE:FREQ=YEARLY;BYDAY=1SU;BYMONTH=4  
4349: TZOFFSETFROM:-0800

[2000](#) found at line 4446:

4444: SUMMARY:IETF Calendaring Working Group Meeting  
4445: DTSTART:19970601T210000Z  
4446: DTEND:19970601T220000Z  
4447: LOCATION:Conference Call  
4448: DTSTAMP:19970526T083000Z

[2000](#) found at line 4473:

4471: SUMMARY:IETF Calendaring Working Group Meeting  
4472: DTSTART:19970703T210000Z  
4473: DTEND:19970703T220000Z  
4474: LOCATION:Conference Call  
4475: DTSTAMP:19970626T093000Z

[2000](#) found at line 4565:

4563: SUMMARY:IETF Calendaring Working Group Meeting  
4564: DTSTART:19970901T210000Z  
4565: DTEND:19970901T220000Z  
4566: LOCATION:Building 32, Microsoft, Seattle, WA  
4567: DTSTAMP:19970526T083000Z

[2000](#) found at line 4601:

4599: SUMMARY:IETF Calendaring Working Group Meeting  
4600: DTSTART:19970715T210000Z  
4601: DTEND:19970715T220000Z  
4602: LOCATION:Conference Call  
4603: DTSTAMP:19970629T093000Z

[2000](#) found at line 4631:

4629: SUMMARY:Review Accounts  
4630: DTSTART:19980303T210000Z  
4631: DTEND:19980303T220000Z  
4632: LOCATION:The White Room  
4633: DTSTAMP:19980301T093000Z

[2000](#) found at line 4664:

4662: SUMMARY:Review Accounts  
4663: DTSTART:19980303T210000Z  
4664: DTEND:19980303T220000Z  
4665: DTSTAMP:19980303T193000Z  
4666: LOCATION:The Usual conference room

[2000](#) found at line 4690:

4688: SUMMARY:Review Accounts  
4689: DTSTART:19980303T210000Z  
4690: DTEND:19980303T220000Z



4691: DTSTAMP:19980303T193000Z  
4692: LOCATION:The White Room

[2000](#) found at line 4730:

4728: SUMMARY:Review Accounts  
4729: DTSTART:19980304T180000Z  
4730: DTEND:19980304T200000Z  
4731: DTSTAMP:19980303T193000Z  
4732: LOCATION:Conference Room A

[2000](#) found at line 4781:

4779: SUMMARY:Review Accounts  
4780: DTSTART:19980315T180000Z  
4781: DTEND:19980315T200000Z  
4782: DTSTAMP:19980307T193000Z  
4783: LOCATION:Conference Room A

[2000](#) found at line 4811:

4809: SUMMARY:Review Accounts  
4810: DTSTART:19980304T180000Z  
4811: DTEND:19980304T200000Z  
4812: DTSTAMP:19980303T193000Z  
4813: LOCATION:Conference Room A

[2000](#) found at line 4863:

4861: CLASS:PUBLIC  
4862: SUMMARY:IETF Calendaring Working Group Meeting  
4863: DTSTART:19970715T220000Z  
4864: DTEND:19970715T230000Z  
4865: LOCATION:Conference Call

[2000](#) found at line 4903:

4901: SUMMARY:IETF Calendaring Working Group Meeting  
4902: DTSTART:19970601T210000Z  
4903: DTEND:19970601T220000Z  
4904: DTSTAMP:19970602T094000Z  
4905: LOCATION:Conference Call

[2000](#) found at line 5018:

5016: UID:calsrv.example.com-873970198738777-00@example.com  
5017: SEQUENCE:0  
5018: DTSTAMP:19970717T200000Z  
5019: STATUS:Needs Action  
5020: END:VTODO

[2000](#) found at line 5179:

5177: UID:calsrv.example.com-873970198738777-00@example.com  
5178: SEQUENCE:0  
5179: DTSTAMP:19970717T200000Z  
5180: STATUS:NEEDS ACTION  
5181: PRIORITY:1

[2000](#) found at line 5236:

5234:     VERSION:2.0  
5235:     BEGIN:VJOURNAL  
5236:     DTSTART:19971002T200000Z  
5237:     ORGANIZER:MAILTO:A@Example.com  
5238:     SUMMARY:Phone conference minutes

[2000](#) found at line 5358:

5356:     SEQUENCE:3  
5357:     RRULE:FREQ=WEEKLY  
5358:     RDATE;VALUE=PERIOD:19970819T210000Z/199700819T220000Z  
5359:     ORGANIZER:Mailto:A@example.com  
5360:     ATTENDEE;ROLE=CHAIR;PARTSTAT=ACCEPTED:Mailto:A@example.com

[2000](#) found at line 5365:

5363:     SUMMARY:IETF Calendaring Working Group Meeting  
5364:     DTSTART:19970801T210000Z  
5365:     DTEND:19970801T220000Z  
5366:     RECURRENCE-ID:19970809T210000Z  
5367:     DTSTAMP:19970726T083000

+=+=+=+=+= File [rfc2447](#).txt +=+=+=+=+=

[1900](#) found at line 421:

419:     ATTENDEE;ROLE=CHAIR;ATTSTAT=ACCEPTED:mailto:sman@netscape.com  
420:     ATTENDEE;RSVP=YES:mailto:stevesil@microsoft.com  
421:     DTSTAMP:19970611T190000Z  
422:     DTSTART:19970701T210000Z  
423:     DTEND:19970701T230000Z

[1900](#) found at line 475:

473:     ATTENDEE;ROLE=CHAIR;ATTSTAT=ACCEPTED:mailto:foo1@example.com  
474:     ATTENDEE;RSVP=YES;TYPE=INDIVIDUAL:mailto:foo2@example.com  
475:     DTSTAMP:19970611T190000Z  
476:     DTSTART:19970701T170000Z  
477:     DTEND:19970701T173000Z

[1900](#) found at line 523:

521:     ATTENDEE;ROLE=CHAIR;ATTSTAT=ACCEPTED:mailto:foo1@example.com  
522:     ATTENDEE;RSVP=YES;TYPE=INDIVIDUAL:mailto:foo2@example.com  
523:     DTSTAMP:19970611T190000Z  
524:     DTSTART:19970701T180000Z  
525:     DTEND:19970701T183000Z

[1900](#) found at line 584:

582:     BEGIN:VEVENT  
583:     ORGANIZER:MAILTO:FOO1@EXAMPLE.COM  
584:     DTSTAMP:19970611T190000Z  
585:     DTSTART:19970715T150000Z  
586:     DTEND:19970715T230000Z

[1900](#) found at line 631:

```
629:    ATTENDEE;ROLE=CHAIR;ATTSTAT=ACCEPTED:mailto:foo1@example.com
630:    ATTENDEE;RSVP=YES;TYPE=INDIVIDUAL:mailto:foo2@example.com
631:    DTSTAMP:19970611T190000Z
632:    DTSTART:19970701T210000Z
633:    DTEND:19970701T230000Z
```

[1900](#) found at line 722:

```
720:    ATTENDEE;RSVP=YES;TYPE=INDIVIDUAL:mailto:foo2@example.com
721:    ATTENDEE;RSVP=YES;TYPE=INDIVIDUAL:mailto:foo3@example.com
722:    DTSTAMP:19970611T190000Z
723:    DTSTART:19970621T170000Z
724:    DTEND:19970621T173000Z
```

+=+=+=+= File [rfc2455](#).txt +=+=+=+=

2-digit found at line 7166:

```
7164:
7165:    Since this object incorporates the Year 2000-unfriendly
7166:    2-digit year specified in SMI for the LAST-UPDATED field, and
7167:
7168:
```

[2000](#) found at line 7165:

```
7163:    determining the level of the MIB supported by an agent.
7164:
7165:    Since this object incorporates the Year 2000-unfriendly
7166:    2-digit year specified in SMI for the LAST-UPDATED field, and
7167:
```

+=+=+=+= File [rfc2461](#).txt +=+=+=+=

[2000](#) found at line 2347:

```
2345:    consecutive advertisements.
2346:
2347:    Default: 2592000 seconds (30 days), fixed
2348:    (i.e., stays the same in consecutive
2349:    advertisements).
```

+=+=+=+= File [rfc2470](#).txt +=+=+=+=

[2000](#) found at line 65:

```
63:    rely on manual configuration or router advertisements [DISC] to
64:    determine actual MTU sizes. Common default values include
65:    approximately 2000, 4000, and 8000 octets.
66:
67:    In the absence of any other information, an implementation should use
```

## Appendix D: Discussion of HTTP 1.0 Issues

### HTTP:

The main IETF standards-track document on the HTTP protocol is [RFC2068](#) on HTTP 1.1. It notes that historically three different date formats have been used, and that one of them uses a two-digit year field. In [section 3.3.1](#) it requires HTTP 1.1 implementations to generate this [RFC1123](#) format:

Sun, 06 Nov 1994 08:49:37 GMT ; [RFC 822](#), updated by [RFC 1123](#)

instead of this [RFC850](#) format:

Sunday, 06-Nov-94 08:49:37 GMT ; [RFC 850](#), obsoleted by [RFC 1036](#)

Unfortunately, many existing servers, serving on the order of one fifth of the current HTTP traffic, send dates in the ambiguous [RFC850](#) format.

[Section 19.3](#) of the [RFC2068](#) says this:

- o HTTP/1.1 clients and caches should assume that an [RFC-850](#) date which appears to be more than 50 years in the future is in fact in the past (this helps solve the "year 2000" problem).

This avoids a "stale cache" problem, which would cause the user to see out-of-date data.

But to avoid unnecessary delays and bandwidth indicated in Scenario 2 below, this should be extended to say that a date which appears to be more than 50 years in the past may be assumed to be in the future, if a future date is legal for that field.

Scenario 3 indicates that servers may also want to follow these rules.

Here is some more background and justification for these arguments.

The following headers use full dates:

### HTTP/1.0:

Date:	
Expires:	# can be in the future
If-Modified-Since:	# required to be in the past
Last-Modified:	# required to be in the past
Retry-After:	# can be in the future, also takes # relative time - number of seconds

HTTP/1.1:

If-Range:

If-Unmodified-Since: # required to be in the past

Note that clock skew between hosts can lead to confusion here - see the RFC for details.

Here are some scenarios of the implications of [RFC850](#) dates, which include stale caches, unnecessary requests for things, which are validly cached, delays for the user, extra bandwidth, and presenting incorrect information to the user.

Some cases involve comparisons with the current time, and others may involve comparisons between dates from different sources. The abbreviation "/99" is used to imply an [RFC850](#) date with the value "99" for the year.

[RFC850](#) date from server

Scenario 1:

If a client gets an Expires /99 date after the year 2000, it should interpret it as 1999, to avoid ending up with a stale cache entry.

This is as already specified in [RFC2068](#).

Scenario 2:

If a client gets an Expires /00 date before the year 2000, and subsequently is faced with a choice to either retrieve the document from its cache or look for an updated copy, it may interpret it as the year 2000, to avoid the unnecessary delay and bandwidth of an extra request.

[RFC850](#) date from client

Scenario 3:

If a server gets an If-Modified-Since /99 date from a client after the year 2000, it should interpret it as 1999 when comparing with the local modification date, in order to possibly avoid sending a full GET response rather than a HEAD response.

Note that an If-Modified-Since header must never be in the future.