Network Working Group Request for Comments: 2626 Category: Informational P. Nesser II Nesser & Nesser Consulting June 1999

The Internet and the Millennium Problem (Year 2000)

#### Status of this Memo

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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.

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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

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adopted.

It should also be noted that the research was performd 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 00XXXXXXX 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 as 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.

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### 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 he 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 Serivces"

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,

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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 intrepreted 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 whichdemanded scrutiny.

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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.

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# 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.

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## 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.

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# 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.

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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.

Servers should rewrite these dates into RFC1123 format if necessary.

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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 it 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.

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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.
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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 catagory, 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 if 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 discuesses 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.

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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.

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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 midnght UT.

RFC 781 was defines the same option which is codified in RFC 791 as a packet type 68.

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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, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 1860, 
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                                 1705, 1698, 1693, 1688, 1687, 1686, 1683, 1682, 1681,
  1707,
                                                                                                                                                                                                                                                                                                                                       1680,
                                 1678, 1677, 1676, 1674, 1673, 1672, 1671, 1670, 1669, 1662, 1638, 1634, 1631, 1629, 1624, 1622, 1621, 1620, 1613, 1605, 1604, 1598, 1590, 1577, 1570, 1561, 1560,
  1679,
                                                                                                                                                                                                                                                                                                                                        1667,
                                                                                                                                                                                                                                                                                                                                       1553,
  1552,
                                 1551, 1549, 1548, 1547, 1538, 1526,
                                                                                                                                                                                                                                     1518, 1498, 1490,
                                                                                                                                                                                                                                                                                                                                       1483,
  1475,
                                 1466, 1454, 1435, 1434, 1433, 1393,
                                                                                                                                                                                                                                                                                                                                        1378,
                                                                                                                                                                                                                                      1390, 1385, 1379,
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.
                                  1376, 1375,
                                                                                                   1374, 1365, 1363, 1362,
                                                                                                                                                                                                                                      1356, 1347,
                                                                                                                                                                                                                                                                                                                                        1335,
                                                                                                                                                                                                                                                                                                       1337,
  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.

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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.

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# 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.

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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.

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# 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.

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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.

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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 he 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)

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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 he 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, MinRoueAdvertisementInterval 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.

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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 timers 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.

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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.
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### 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.

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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 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.

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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 bye 1421, 1422, 1423, & 1424.

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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 are 32 bit unsigned integer timestamp in Section 4.

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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.
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```
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.

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# 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 filed 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

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

### A.2 Directory Services

2120::	E ::	Managing the X.500 Root Naming Context
2079::	<b>PS::</b>	Definition of X.500 Attribute Types and an Object Class
		to Hold Uniform Resource Identifiers (URIs)
1943::	I::	
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::	$\mathtt{I}::$	Whois and Network Information Lookup Service Whois++
1781::	PS::	Using the OSI Directory to Achieve User Friendly Naming
1714::	$\mathtt{I}::$	Referral Whois Protocol (RWhois)
1684::		Introduction to White Pages services based on X.500
1637::	E::	DNS NSAP Resource Records
1632::		A Revised Catalog of Available X.500 Implementations

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```
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
             WHITE PAGES MEETING REPORT
1588::
        I::
1562::
        I::
             Naming Guidelines for the AARNet X.500 Directory Service
             A Survey of Advanced Usages of X.500
1491::
        I::
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
             Using the OSI Directory to achieve User Friendly Naming
1484::
        E::
1430::
        I::
             A Strategic Plan for Deploying an Internet X.500
             Directory Service
             Transition and Modernization of the Internet Registration
1400::
        I::
             Service
             Naming Guidelines for Directory Pilots
1384::
        I::
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 Technical Overview of Directory Services Using the
1309::
        I::
             X.500 Protocol
        I::
             Executive Introduction to Directory Services Using the
1308::
             X.500 Protocol
1292::
        I::
             A Catalog of Available X.500 Implementations
             X.500 and Domains
1279::
         ::
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
             The COSINE and Internet X.500 Schema
1274:: PS::
             A Naming Scheme for c=US
A Naming Scheme for c=US
1255::
        I::
1218::
             Directory Assistance Service
Plan for Internet directory services
        I::
1202::
1107::
         ::
             NICNAME/WHOIS
954:: DS::
953::
        H::
             Hostname Server
812::
             NICNAME/WHOIS
         ::
756::
         ::
             NIC name server - a datagram-based information utility
             Universal host table
752::
         ::
Disk Sharing
1813::
             NFS Version 3 Protocol Specification
        I::
1094::
             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
             Uniform Resource Locators for Z39.50
2056:: PS::
             WebNFS Server Specification WebNFS Client Specification
2055::
        I::
2054::
        I::
2044::
             UTF-8, a transformation format of Unicode and ISO 10646
        I::
             Uniform Resource Agents (URAs)
2016::
        E::
             Experiments with a Simple File Transfer Protocol for
1986:: E::
             Radio Links using Enhanced Trivial File Transfer
             Protocol (ETFTP)
             A Proposed Extension to HTML: Client-Side Image Maps
1980::
      {\tt I}::
1960:: PS::
             A String Representation of LDAP Search Filters
1959:: PS::
             An LDAP URL Format
             Hypertext Transfer Protocol -- HTTP/1.0
1945::
        I::
             HTML Tables
1942::
        E::
       E::
1874::
             SGML Media Types
             Form-based File Upload in HTML
1867::
       E::
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
             ASCII Printable Characters-Based Chinese Character
1842::
        I::
             Encoding for Internet Messages
             The LDAP Application Program Interface
        I::
1823::
1815::
             Character Sets ISO-10646 and ISO-10646-J-1
        I::
             Relative Uniform Resource Locators
1808:: PS::
             A Format for Bibliographic Records
1807::
        I::
1798:: PS::
             Connection-less Lightweight Directory Access Protocol
             ICMP Domain Name Messages
1788::
       E::
             TFTP Option Negotiation Analysis
1785::
        I::
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
             The String Representation of Standard Attribute Syntaxes Lightweight Directory Access Protocol
1778:: DS::
1777:: DS::
1766:: PS::
             Tags for the Identification of Languages
1738:: PS::
             Uniform Resource Locators (URL)
             Functional Requirements for Uniform Resource Names
1737::
       I::
             Functional Requirements for Internet Resource Locators
       I::
1736::
             Using the Z39.50 Information Retrieval Protocol in the
1729::
        I::
             Internet Environment
```

```
Resource Transponders
1728::
         I::
1727::
         I::
              A Vision of an Integrated Internet Information Service
1639::
         E::
              FTP Operation Over Big Address Records (FOOBAR)
1633::
              Integrated Services in the Internet Architecture
         I::
              Universal Resource Identifiers in WWW
1630::
         I::
              WAIS over Z39.50-1988
1625::
         I::
              A String Representation of LDAP Search Filters ISO-2022-JP-2: Multilingual Extension of ISO-2022-JP
1558::
         I::
1554::
         I::
              FTP Operation Over Big Address Records (FOOBAR) Principles of Operation for the TPC.INT Subdomain:
1545::
         E::
1530::
         I::
              General Principles and Policy
1529::
         I::
              Principles of Operation for the TPC.INT Subdomain:
              Remote Printing -- Administrative Policies
              Principles of Operation for the TPC.INT Subdomain:
         E::
1528::
              Remote Printing -- Technical Procedures
Registration of a Cyrillic Character Set
1489::
         I::
1486::
         E::
              An Experiment in Remote Printing
              SIFT/UFT: Sender-Initiated/Unsolicited File Transfer
1440::
         E::
1436::
         I::
              The Internet Gopher Protocol (a distributed document
               search and retrieval protocol)
              FTP-FTAM Gateway Specification
1415:: PS::
              Identification Protocol
1413:: PS::
1350::
         S::
              THE TFTP PROTOCOL (REVISION 2)
1345::
         I::
              Character Mnemonics & Character Sets
1312::
         E::
              Message Send Protocol
1302::
              Building a Network Information Services Infrastructure
         I::
              The Finger User Information Protocol
1288:: DS::
1278::
              A String Encoding of Presentation Address
         I::
        E::
1241::
              A Scheme for an Internet Encapsulation Protocol: Version 1
1235::
         E::
              The Coherent File Distribution Protocol
              The Finger User Information Protocol The Finger User Information Protocol
1196:: DS::
1194:: DS::
1179::
              Line Printer Daemon Protocol
         I::
              Requirements for Internet hosts - application and support Background File Transfer Program BFTP
1123::
         S::
1068::
1037::
              NFILE - a file access protocol
         H::
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
          ::
              NETBLÍ: A bulk data transfer protocol
 969::
         ::
              Format for a graphical communication protocol
 965::
          ::
 959::
              File Transfer Protocol
         S::
 949::
         ::
              FTP unique-named store command
 916::
         H::
              Reliable Asynchronous Transfer Protocol RATP
              Simple File Transfer Protocol
 913::
         H::
 887::
         E::
              Resource Location Protocol
 866::
         S::
              Active users
```

```
S::
865::
             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
            Directory oriented FTP commands
File Transfer Protocol specification
775::
765::
        ::
            Survey of FTP mail and MLFL
751::
        ::
743::
            FTP extension: XRSQ/XRCP
        ::
742:: PS::
            NAME/FINGER Protocol
740:: H::
            NETRJS Protocol
737::
            FTP extension: XSEN
        ::
            RJE protocol for a resource sharing network
725::
        ::
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
        ::
            One more try on the FTP FTPSRV - Tenex extension for paged files
691::
        ::
683::
        ::
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
        ::
            Comments on the File Transfer Protocol Scheduling IMP/TIP down time
624::
        ::
622::
        ::
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
        ::
            Telnet and FTP implementation schedule change
593::
        ::
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
        ::
             Experimental input mapping between NVT ASCII and UCSB
570::
        ::
             On Line System
553::
             Draft design for a text/graphics protocol
        ::
             [Letter from Feinroth re: NYU, ANL, and LBL entering
551::
        ::
             the net, and FTP protocol]
549::
             Minutes of Network Graphics Group meeting, 15-17
        ::
              July 1973
543::
             Network journal submission and delivery
        ::
            File Transfer Protocol
542::
        ::
```

```
Comments on File Access Protocol
535::
             UCSD-CC Server-FTP facility
532::
         ::
525::
             MIT-MATHLAB meets UCSB-OLS -an example of resource sharing Memo to FTP group: Proposal for File Access Protocol
         ::
520::
514::
             Network make-work
         ::
             FTP command naming problem
Two solutions to a file transfer access problem
506::
         ::
505::
             Distributed resources workshop announcement Un-muddling "free file transfer"
504::
501::
         ::
             Harvard's network RJE
499::
         ::
             E.W., Jr Graphics Protocol
493::
         ::
             Surrogate RJS for UCLA-CCN
490::
        ::
487::
             Free file transfer
        ::
             Data transfer revisited MIX and MIXAL at UCSB
486::
        ::
485::
         ::
480::
        ::
             Host-dependent FTP parameters
             Use of FTP by the NIC Journal
479::
             FTP server-server interaction - II
478::
        ::
477::
             Remote Job Service at UCSB
       ::
             Illinois' reply to Maxwell's request for graphics information NIC 14925
472::
        ::
468:: ::
             FTP data compression
             Proposed change to Host-Host Protocol:Resynchronization
467::
        ::
             of connection status
463::
        ::
             FTP comments and response to RFC 430
454::
             File Transfer Protocol - meeting announcement and a new
        ::
             proposed document
             Tentative proposal for a Unified User Level Protocol
451::
        ::
448::
         ::
             Print files in FTP
446::
             Proposal to consider a network program resource notebook
         ::
438::
             FTP server-server interaction
             Data Reconfiguration Service at UCSB
437::
         ::
436::
             Announcement of RJS at UCSB
         ::
430::
             Comments on File Transfer Protocol
         ::
429::
             Character generator process
Server file transfer under TSS/360 at NASA Ames
         ::
418::
         ::
             File Transfer Protocol FTP status and further comments
414::
         ::
412::
             User FTP documentation
         ::
411::
             New MULTICS network software features
         ::
             Removal of the 30-second delay when hosts come up
410::
        ::
             Tenex interface to UCSB's Simple-Minded File System
409::
        ::
407:: H::
             Remote Job Entry Protocol
             Scheduled IMP software releases
406::
        ::
396::
             Network Graphics Working Group meeting - second iteration
         ::
387::
             Some experiences in implementing Network Graphics
         ::
             Protocol Level 0
             Comments on the File Transfer Protocol
385::
        ::
             Mathematical software on the ARPA Network
382::
```

::

```
374::
             IMP system announcement
373::
        ::
            Arbitrary character sets
368::
        ::
            Comments on "Proposed Remote Job Entry Protocol"
367::
            Network host status
        ::
366::
            Network host status
        ::
            Deamon processes on host 106
Proposed Remote Job Entry Protocol
361::
        ::
360::
        ::
            File Transfer Protocol
354::
        ::
            Graphics information form for the ARPANET graphics
351::
       ::
            resources notebook
342::
            Network host status
       ::
338::
            EBCDIC/ASCII mapping for network RJE
       ::
            Level O Graphic Input Protocol
New interface - IMP/360
336::
        ::
335::
       ::
332::
       ::
            Network host status
325::
       ::
            Network Remote Job Entry program - NETRJS
324::
            RJE Protocol meeting
        ::
            Network Graphics Working Group meeting
Another look at Data and File Transfer Protocols
314::
       ::
310::
       ::
            Data and File Transfer workshop announcement Using network Remote Job Entry
309::
        ::
307::
        ::
306::
       ::
            Network host status
299::
       ::
            Information management system
            Network host status
298::
       ::
            On the use of "set data type" transaction in
294::
       ::
            File Transfer Protocol
293::
            Network host status
       ::
            E.W., Jr Graphics Protocol: Level 0 only
292::
       ::
288::
       ::
            Network host status
287::
            Status of network hosts
        ::
            Network library information system
286::
            Network graphics
285::
        ::
283::
            NETRJT: Remote Job Service Protocol for TIPS
        ::
            Suggested addition to File Transfer Protocol
281::
        ::
            Graphics facilities information
268::
        ::
            Network host status
267::
       ::
266::
            Network host status
        ::
            File Transfer Protocol
265::
        ::
            Data Transfer Protocol
264::
        ::
255::
        ::
            Status of network hosts
252::
            Network host status
        ::
250::
       ::
            Some thoughts on file transfer
            Comments on DTP and FTP proposals
238::
       ::
             Specifications changes for OLS, RJE/RJOR, and SMFS
217::
        ::
             Suggestions for a network data-tablet graphics protocol
199::
        ::
192::
            Some factors which a Network Graphics Protocol must
        ::
             consider
            Graphics implementation and conceptualization at
191:: ::
```

```
Augmentation Research Center
              Interim NETRJS specifications
 189::
          ::
 184::
              Proposed graphic display modes
              EBCDIC codes and their mapping to ASCII
 183::
 181::
              Modifications to RFC 177
          ::
              UCLA - computer science graphics overview
File Transfer Protocol
Data transfer protocols
Comments on RFC 114: A File Transfer Protocol
 174::
          ::
 172::
          ::
 163::
          ::
 141::
          ::
 134::
              Network Graphics meeting
 133::
              File transfer and recovery
         ::
 125::
              Response to RFC 86: Proposal for network standard format
         ::
              for a graphics data stream
              File Transfer Protocol
 114::
         ::
              Network specifications for Remote Job Entry and Remote
 105::
          ::
              Job Output Retrieval at UCSB
              Logger Protocol proposal
  98::
  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
             Language-machine for data reconfiguration
  83:: ::
 ___________
Internet & Network Laver
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)
              Microsoft Point-To-Point Compression (MPPC) Protocol
Data Link Switching Client Access Protocol
IP Router Alert Option
2118::
        I::
2114::
        I::
2113:: PS::
2107::
              Ascend Tunnel Management Protocol - ATMP
        I::
        I::
2106::
              Data Link Switching Remote Access Protocol
2105::
              Cisco Systems' Tag Switching Architecture Overview
        I::
              Toshiba's Router Architecture Extensions for ATM: Overview The PPP NetBIOS Frames Control Protocol (NBFCP)
        I::
2098::
2097:: PS::
2075::
        I::
              IP Echo Host Service
              IP over HIPPI
2067:: DS::
              The PPP SNA Control Protocol (SNACP)
2043:: PS::
2023:: PS::
              IP Version 6 over PPP
2019:: PS::
              Transmission of IPv6 Packets Over FDDI
              TCP Selective Acknowledgment Options GPS-Based Addressing and Routing
2018:: PS::
       E::
2009::
2005:: PS::
              Applicability Statement for IP Mobility Support
2004:: PS::
              Minimal Encapsulation within IP
              IP Encapsulation within IP
2003:: PS::
              IP Mobility Support
2002:: PS::
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)
             PPP Link Quality Monitoring
1989:: DS::
1981:: PS::
             Path MTU Discovery for IP version 6
        I::
             PPP Deflate Protocol
1979::
1978::
        I::
             PPP Predictor Compression Protocol
             PPP BSD Compression Protocol
1977::
        I::
             PPP for Data Compression in Data Circuit-Terminating
1976::
        I::
             Equipment (DCE)
1975::
        I::
             PPP Magnalink Variable Resource Compression
1974::
        I::
             PPP Stac LZS Compression Protocol
1973:: PS::
             PPP in Frame Relay
             A Method for the Transmission of IPv6 Packets over Ethernet Networks
1972:: PS::
1967::
        I::
             PPP LZS-DCP Compression Protocol (LZS-DCP)
             PPP Serial Data Transport Protocol (SDTP)
1963::
        I::
1962:: PS::
             The PPP Compression Control Protocol (CCP)
        I::
1954::
             Transmission of Flow Labelled IPv4 on ATM Data Links
             Ipsilon Version 1.0
             Native ATM Support for ST2+
1946::
        I::
             Local/Remote Forwarding Decision in Switched Data
1937::
        I::
             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
             IP over ATM: A Framework Document
1932::
        I::
             Dynamic RARP Extensions and Administrative Support for
1931::
        I::
             Automatic Network Address Allocation
1926::
        I::
             An Experimental Encapsulation of IP Datagrams on
             Top of ATM
1924::
        I::
             A Compact Representation of IPv6 Addresses
             Classical versus Transparent IP Proxies
1919::
        I::
1918:: BC::
             Address Allocation for Private Internets
             An Appeal to the Internet Community to Return Unused
1917:: BC::
             IP Networks (Prefixes) to the IANA
             Enterprise Renumbering
1916::
        I::
1915:: BC::
             Variance for The PPP Connection Control Protocol and
             The PPP Encryption Control Protocol
        E::
             IPv6 Testing Address Allocation
1897::
        E::
             OSI NSAPs and IPv6
1888::
1887::
        I::
             An Architecture for IPv6 Unicast Address Allocation
             Internet Control Message Protocol (ICMPv6) for the Internet
1885:: PS::
             Protocol Version 6 (IPv6)
1884:: PS::
             IP Version 6 Addressing Architecture
1883:: PS::
             Internet Protocol, Version 6 (IPv6) Specification
             IPv6 Address Allocation Management
1881::
        I::
             Variable Length Subnet Table For IPv4
1878::
        I::
```

```
PPP Internet Protocol Control Protocol Extensions for
1877::
         I::
               Name Server Addresses
         E::
1868::
               ARP Extension - UNARP
               Variable Length Subnet Table For IPv4
1860::
         I::
               ISO Transport Class 2 Non-use of Explicit Flow Control
1859::
         I::
               over TCP RFC1006 extension
               IP in IP Tunneling
1853::
         I::
               PPP Network Control Protocol for LAN Extension
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         ::
             Network meeting
             Specifications for network use of the UCSB On-Line System
 74::
         ::
             Response to NWG/RFC 67
 73::
        ::
 72::
             Proposed moratorium on changes to network protocol
        ::
```

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```
Reallocation in case of input error
71::
       ::
            Distribution list change for MIT
69::
           Comments on memory allocation control commands NIC - third level ideas and other noise
68::
       ::
66::
64::
            Getting rid of marking
            Belated network meeting report
63::
       ::
            Note on interprocess communication in a resource
61::
        ::
            sharing computer network
57::
            Thoughts and reflections on NWG/RFC 54
        ::
            Updated distribution list
52::
        ::
51::
            Proposal for a Network Interchange Language
        ::
            Comments on the Meyer proposal Conversations with S. Crocker UCLA
50::
        ::
49::
       ::
            Possible protocol plateau BBN's comments on NWG/RFC #33
48::
       ::
47::
        ::
            ARPA Network protocol notes
New protocol is coming
46::
        ::
45::
            Comments on NWG/RFC 33 and 36
44::
        ::
43::
            Proposed meeting [LIL]
        ::
            More comments on the forthcoming protocol
Comments on protocol re
Network meeting epilogue, etc
40::
        ::
39::
        ::
37::
        ::
36::
        ::
            Protocol notes
35::
            Network meeting
       ::
34::
       ::
            Some brief preliminary notes on the Augmentation
            Research Center clock
            Binary message forms in computer
31::
       ::
            Documentation conventions
30::
       ::
27::
        ::
            Documentation conventions
25::
            No high link numbers
        ::
            Documentation conventions
24::
        ::
21::
        ::
            Network meeting
16::
        ::
            M.I.T
            Network subsystem for time sharing hosts [Referring to NWG/RFC 11]
15::
        ::
13::
        ::
11::
            Implementation of the Host-Host software procedures
       ::
            in GORDO
            Documentation conventions
10::
       ::
9::
            Host software
       ::
            Functional specifications for the ARPA Network
 8::
       ::
            Host-IMP interface
 7::
       ::
 6::
      ::
            Conversation with Bob Kahn
            Decode Encode Language
 5::
      ::
 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 1.1a. Slight modification by Philip J. Nesser
       (phil@nesser.com) to split lines from old RFC's that are
#
       too wide to conform with current RFC standards.
# 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);
$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.
```

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```
@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(/yyy/i, $All[$i]));
    &PrintFive($i, "'yy' on a line without 'yyyy'");</pre>
}
# 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($0utStuff) > 0) {
                     $OutStuff = "+=+=+=+= File $InName +=+=+=+= \n$OutStuff\n
                    print OUT $0utStuff; close(OUT);
          } else {  # Nothing to put in the .out
                    close(OUT);
                     unlink($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) { $Start = 0 }</pre>
     if($Where > $LastLine - 2) { $End = $LastLine }
     for($j = $Start; $j <= $End; $j += 1) {
   if (length($All[$j-1]) > 64) {
        $FirstHalf = substr($All[$j-1], 0, 64) . "\n";
               $LastHalf = "$j(continued):\t\t\t" . substr($Ali[$j-1], 64);
```

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```
$0utStuff .= "$j: " . $FirstHalf . $LastHalf;
        else {
        $OutStuff .= "$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
          10900 Euclid Avenue
143:
+=+=+=+= File rfc0090.txt +=+=+=+=
2000 found at line 71:
69:
                              consoles);
70:
                           j) Six data communication ports (3 dial @
71:
                       2000 baud,
71(continued):
                              1 dedicated @ 4800 baud, and 2 dedicate
72:
72(continued):
                        d @ 50,000
73:
                              baud) for remote batch entry terminals;
73(continued):
+=+=+=+= File rfc0230.txt +=+=+=+=
2000 found at line 92:
90:
    as for conventional synchronous block communication, since start
90(continued):
                         and
     stop bits for each character would need to be transmitted. This
91:
91(continued):
                        loss
    is not substantial and does occur now for 2000 bps TIP-terminal
92:
93:
     communication.
94:
2000 found at line 134:
132: 92 transmitting sites in the U.S. and Canada were used with stan
132(continued):
                        dard
     Bell System Dataphone datasets used at both ends. At both 1200
133:
133(continued):
                       and
     2000 bps, approximately 82% of the calls had error rates of 1 er
134:
134(continued):
                       ror in
```

```
135:
      10<sup>5</sup> bits or better, assuming an equal number of short, medium,
135(continued):
                         and
136:
     long hauls.
+=+=+=+= File rfc0241.txt +=+=+=+=
2000 found at line 32:
30:
        justifiable on the basis that the IMP and Host computers were
30(continued):
        expected to be either in the same room (up to 30 feet of cabl
31:
31(continued):
                         e) or,
        via the Distant Host option, within 2000 feet on well- contro
32:
32(continued):
                         lled,
        shielded cables. A connection through common carrier facilit
33:
33(continued):
                         ies is
34:
        not comparably free of errors. Usage of common-carrier line
34(continued):
                         s for
+=+=+=+= File rfc0263.txt +=+=+=+=
2000 found at line 22:
     of the occasional desire to interface a Host to some IMP via a
20:
     long-distance connection (where long-distance, in this context, is any cable run longer than 2000 feet but may typically be tens
21:
22:
22(continued):
     of miles) via either a hard-wire or telephone circuit. We belie
23(continued):
24: that any good solution to the general problem of interfacing Hos
24(continued):
+=+=+=+= File rfc0662.txt +=+=+=+=
2000 found at line 143:
      by a rather short cable (approximately 100 feet long.) The CISL
141(continued):
                         Multics is
      connected to the IMP number 6 (port 0) by an approximately 1500
142:
                         feet long cable.
142(continued):
      8oth IMPs are in close physical proximity (approximately 2000 fe
143:
143(continued):
                         et,) and are
      connected to each other by a 50 kilobits per second line. The re
144(continued):
                         sults given
145: above show considerable improvement in the performance with the
                        new IMP DIM.
145(continued):
+=+=+=+= File rfc0713.txt +=+=+=+=
2000 found at line 830:
      succeeding bytes in the stream used to encode the object.
828:
829:
830:
      A data object requiring 20000 (47040 octal) bytes would
831:
      appear in the stream as follows.
```

```
832:
2000 found at line 837:
      10000010 -- specifying that the next 2 bytes
835:
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
      the stream can be performed by a module which knows the
846:
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-mo</pre>
                                  ::=
1045(continued):
                                 nth>
                                                           "/" <2-digit-ye
1046:
1046(continued):
                                 ar>
1047:
                 <numeric-month>
                                   ::=
                                          <one or two decimal digits>
1048:
                 <dav-of-month>
                                    ::=
                                          <one or two decimal digits>
2-digit found at line 1062:
                                          "December" | "Dec"
<four decimal digits>
1060:
1061:
                 <4-digit-year>
                                    ::=
1062:
                 <2-digit-year>
                                          <two decimal digits>
                                    ::=
                                          <24-hour-time> "-" <time-zone>
1063:
                 <time>
                                    ::=
1064:
                 <24-hour-time>
                                    ::=
                                          <hour> <minute>
2-digit found at line 1675:
                ALPHABETICAL LISTING OF SYNTAX RULES
1673:
            Α.
1674:
1675:
            <2-digit-year>
                                      <two decimal digits>
                               ::=
                                      <four decimal digits>
1676:
            <4-digit-year>
                               ::=
            <24-hour-time>
                                      <hour> <minute>
1677:
                               ::=
2-digit found at line 1829:
1827:
                                     <numeric-month> "/" <date-of-month>
1828:
            <slash-date>
                               ::=
1828(continued):
                                                       "/" <2-digit-year>
1829:
1830:
                                     <TELNET ASCII space (decimal 32)>
            <space>
                               ::=
1831:
```

```
+=+=+=+= File rfc0731.txt +=+=+=+=
2000 found at line 1571:
1569:
                  RFC 728, 1977.
1570:
1571:
                Hazeltine 2000 Desk Top Display Operating Instructions.
1571(continued):
                  Hazeltine IB-1866A, 1870.
1572:
1573:
+=+=+=+= File rfc0732.txt +=+=+=+=
2000 found at line 1681:
              1977.
1679:
1680:
              Hazeltine 2000 Desk Top Display Operating Instructions. H
1681:
1681(continued):
                                azeltine
              IB-1866A, 1870.
1682:
1683:
+=+=+=+= File rfc0733.txt +=+=+=+=
2-digit found at line 333:
331:
332:
      "<n>(element)" is equivalent to "<n>*<n>(element)"; that is
332(continued):
      exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digi
333(continued):
      number, and 3ALPHA is a string of three alphabetic characters.
334:
335:
2digit found at line 333:
331:
      "<n>(element)" is equivalent to "<n>*<n>(element)"; that is
332:
332(continued):
      exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digi
333:
333(continued):
      number, and 3ALPHA is a string of three alphabetic characters.
334:
335:
2digit found at line 947:
                     "Sunday"
                                / "Sun"
945:
946:
                                                ; day month year
                     1*2DIGIT ["-"] month
947:
      date
                     ["-"] (2DIGIT /4DIGIT)
7
948:
                                                  ; e.g. 20 Aug [19]7
948(continued):
949:
2digit found at line 948:
946:
                  = 1*2DIGIT ["-"] month
947:
      date
                                                  ; day month year
```

NORMALLY OFF.

2000,,0

uparrow

**ASCII** 

be displayed

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characters 001-037 should

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using the Stanford/ITS extended

graphics character set instead of

RFC 2626 The Internet and the Millennium Problem (Year 2000) June 1999

= 2DIGIT [":"] 2DIGIT [ [":"] 2DIGIT ]

948:

949:

950:

965:

966:

967:

968:

969:

262:

263:

264:

265:

266:

Nesser

948(continued):

month

965(continued):

hour

968(continued):

2digit found at line 967:

2digit found at line 1718:

2000 found at line 264:

2000 found at line 354:

%TOSA1

264(continued):

265(continued):

266(continued):

)

]

["-"] (2DIGIT /4DIGIT) ; e.g. 20 Aug [19]7

(seconds optional

; 0000[00] - 2359[59

"January" / "Jan" / "February" / "Feb"

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Reserved, must be zero.

This character has the [TOP] key depressed.

352:

353: 354:

355:

%TXTOP

%TXSFL

4000

2000

+=+=+=+= File rfc0745.txt +=+=+=+=

+=+=+=+= File rfc0746.txt +=+=+=+=

'yy' on a line without 'yyyy' found at line 341: 339: \*TDGRF :Enter gra

2000 found at line 562:

561(continued):

564(continued):

20006.

561:

562:

563:

564:

Circuits, EIA standard RS-422," April 1975; Engineering Dept., Electronic Industries Assn., 2001 Eye St., N.W., Washington, D.C.

REA bulletin 345-67, Rural Electrification Admin., U.S. Dept. of

;Enter graphics.

```
340:
                %GOCLR
                                          ;Clear the screen.
341:
                %GOMVA xx yy
                                          ;Set cursor.
                %GODLA xx yy ;Draw line from there << repeat last two commands for each line >>
342:
                                          Draw line from there.
343:
'yy' on a line without 'yyyy' found at line 342:
                                          ;Clear the screen.
340:
                %GOCLR
                                          ;Set cursor.
                %GOMVA xx yy
341:
                %GODLA xx yy ;Draw line from there << repeat last two commands for each line >>
342:
                                          Draw line from there.
343:
                %TDNOP
                                          ;Exit graphics.
344:
2000 found at line 859:
      %TRGIN 0,,400000 terminal can provide graphics input.
857:
858:
859:
      %TRGHC 0,,200000 terminal has a hard-copy device to which outp
                           ut can
859(continued):
                           be diverted.
860:
861:
+=+=+=+= File rfc0752.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 218:
                        The name of the site in SIXBIT.
216:
     word 4
217:
                        The user name who compiled the file, usually in
      word 5
217(continued):
                          SIXBIT.
                        Date of compilation as SIXBIT YYMMDD.
218: word 6
                        Time of compilation as SIXBIT HHMMSS.
219:
      word 7
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 whi
75(continued):
                          ch is
     specified "outside" the message. The destination host ("YYY") i
76:
76(continued):
     specified to the sending (or user) FTP as the argument of the "o
77:
77(continued):
                          pen
78: connection" command, and the destination user ("XXX") is specifi
                          ed to
78(continued):
'yy' on a line without 'yyyy' found at line 81:
79: the receiving (or server) FTP as the argument of the "MAIL" (or
                          "MLFL")
79(continued):
     command. In Tenex, when mail is queued this outside information
80:
80(continued):
                            is
     saved in the file name ("[---].XXX@YYY").
81:
82:
```

83:

709:

```
The proposed solutions are briefly characterized.
'yy'
237:
     on a line without 'yyyy' found at line 239:
238:
         "[---].XXX@YYY", not anything from the header. Only the stri
239:
                        na "XXX"
239(continued):
         is passed to the FTP server.
240:
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
           ued): , dd is the two-digit hour in 24 hour time,
1414(continued):
1415(continued):
                                  mm is
           the two-digit minute, ss is the two-digit second, and fff is
1416:
1416(continued):
                                  the
two-digit found at line 1415:
1413:
           Where yyyy is the four-digit year, mm is the two-digit month
1414:
1414(continued):
                                  dd is
           the two-digit day, hh is the two-digit hour in 24 hour time,
1415:
1415(continued):
                                  mm is
           the two-digit minute, ss is the two-digit second, and fff is
1416:
1416(continued):
                                  the
           decimal fraction of the second. To this basic date and time
1417:
1417(continued):
two-digit found at line 1416:
           Where yyyy is the four-digit year, mm is the two-digit month
1414:
           ued): '''' , dd'is '
the two-digit day, hh is the two-digit hour in 24 hour time,
1414(continued):
1415:
1415(continued):
                                  mm is
           the two-digit minute, ss is the two-digit second, and fff is
1416(continued):
                                  the
           decimal fraction of the second. To this basic date and time
1417:
1417(continued):
                                  is
           appended the offset from Greenwich as plus or minus hh hours
1418:
1418(continued):
                                  and mm
+=+=+=+= File rfc0767.txt +=+=+=+=
two-digit found at line 710:
708:
            yyyy-mm-dd-hh:mm:ss,fff+hh:mm
```

```
Where yyyy is the four-digit year, mm is the two-digit month
710:
710(continued):
                          dd is
          the two-digit day, hh is the two-digit hour in 24 hour time,
711:
711(continued):
                          mm is
712:
          the two-digit minute, ss is the two-digit second, and fff is
712(continued):
two-digit found at line 711:
709:
          Where yyyy is the four-digit year, mm is the two-digit month
710:
710(continued):
                          dd is
          the two-digit day, hh is the two-digit hour in 24 hour time,
                          mm is
711(continued):
          the two-digit minute, ss is the two-digit second, and fff is
712:
712(continued):
                          the
713:
          decimal fraction of the second. To this basic date and time
713(continued):
two-digit found at line 712:
          Where yyyy is the four-digit year, mm is the two-digit month
710:
710(continued):
                          dd is
          the two-digit day, hh is the two-digit hour in 24 hour time,
711:
711(continued):
                          mm is
          the two-digit minute, ss is the two-digit second, and fff is
712(continued):
                          the
          decimal fraction of the second. To this basic date and time
713(continued):
          appended the offset from Greenwich as plus or minus hh hours
714:
714(continued):
                          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 forma
70(continued):
              "dd-mmm-yy hh:mm:ss" (24 hour time).
71:
72:
73:
           The files will named "arbitrary.NIMAIL.-1", where "arbitra
73(continued):
                         ry" will
+=+=+=+= File rfc0788.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1592: 1590: <daytime> ::= "at" <SP> <date> <SP> <time>
1591:
                   <date> ::= <dd> "-" <mon> "-" <yy>
1592:
1593:
                   <time> ::= <hh> ":" <mm> ":" <ss> "-" <zone>
1594:
```

```
'yy' on a line without 'yyyy' found at line 1602:
                              "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "D
                                 EC"
1600(continued):
1601:
1602:
                    <yy> ::= the two decimal integer year of the century
1602(continued):
                                   in the
1603:
                              range 01 to 99.
1604:
century found at line 1602:
                              "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "D
EC"
1600(continued):
1601:
1602:
                    <yy> ::= the two decimal integer year of the century
1602(continued):
                                   in the
                              range 01 to 99.
1603:
1604:
+=+=+=+= File rfc0809.txt +=+=+=+=
2000 found at line 3349:
3347:
             #define WID
3348:
                              0000000
                                         /* Write Image Data */
             #define WGD
                              0020000
                                         /* Write Graphic Data */
3349:
             #define WAC
                              0022000
3350:
                                         /* Write AlphanumCh */
3351:
2000 found at line 3350:
3348:
             #define WID
                              0000000
                                         /* Write Image Data */
3349:
             #define WGD
                              0020000
                                         /* Write Graphic Data */
             #define WAC
                              0022000
                                         /* Write AlphanumCh */
3350:
3351:
             #define LWM
3352:
                              0024000
                                         /* Load Write Mode */
2000 found at line 3379:
3377:
             #define ERS
                              0030000
3378:
                                         /* Erase */
                              0032000
                                         /* Erase Line */
3379:
             #define ERL
3380:
             #define SLU
                              0034000
                                         /* Special Location Update */
             #define
                        SCRL ZAP 0100
3381:
                                         /* unlimited scroll speed */
2000 found at line 3392:
3390:
             #define LLB
                              0070000
                                         /* Load Lb */
3391:
             #define LLC
                              0074000
                                         /* Load Lc */
3392:
             #define
                                02000
                                         /* perform write */
                        LGW
3393:
             #define NOP
                              0110000
                                         /* No-Operation */
3394:
2000 found at line 3396:
```

```
#define NOP
3394:
                              0110000
                                        /* No-Operation */
3395:
3396:
             #define SPD
                              0120000
                                        /* Select Special Device */
                                        /* Load Peripheral Address */
             #define LPA
                              0130000
3397:
3398:
             #define LPR
                              0140000
                                        /* Load Peripheral Register */
2000 found at line 3405:
3403:
                       ALPHA
             #define
                                06000
                                        /* LPR - Alphanumeric data */
                                        /* LPR - Graphic data */
3404:
             #define
                        GRAPH
                                04000
                                        /* LPR - Image data */
3405:
             #define
                        IMAGE
                                02000
                                        /* take lo byte then hi byte */
3406:
             #define
                        LTHENH
                                01000
3407:
             #define
                        DROPBYTE 0400
                                        /* drop last byte */
2000 found at line 3408:
                        LTHENH
3406:
             #define
                                01000
                                        /* take lo byte then hi byte */
3407:
             #define
                        DROPBYTE 0400
                                        /* drop last byte */
             #define INTERR
                                        /* SPD - Interrupt Enable */
                                02000
3408:
                                        /* SPD - Diagnostic Test */
3409:
             #define TEST
                                04000
3410:
+=+=+=+= File rfc0810.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 146:
144:
                             is used as a data element delimiter
         , (comma)
145:
146:
         XXX/YYY
                             indicates protocol information of the type
146(continued):
                             TRANSPORT/SERVICE.
147:
148:
+=+=+=+= File rfc0820.txt +=+=+=+=
2000 found at line 674:
672:
            014.000.000.001
                               311031700035 00
                                                    PURDUE-TN
                            [CXK]
672(continued):
            014.000.000.002
                               311060800027 00
                                                    UWISC-TN
673:
673(continued):
                            [CXK]
                               311030200024 00
                                                    UDEL-TN
674:
            014.000.000.003
                            [CXK]
674(continued):
            014.000.000.004
                               234219200149 23
                                                    UCL-VTEST
                             [PK]
675(continued):
                                                    UCL-TG
            014.000.000.005
                               234219200300 23
676:
676(continued):
                             ГРК Т
+=+=+=+= File rfc0821.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1944:
                   <daytime> ::= <SP> <date> <SP> <time>
1942:
1943:
1944:
                   <date> ::= <dd> <SP> <mon> <SP> <yy>
1945:
```

```
<time> ::= <hh> ":" <mm> ":" <ss> <SP> <zone>
1946:
'yy' on a line without 'yyyy' found at line 1954:
                              "JUL" | "AUG" | "SEP" | "OCT" | "NOV" | "D
1952:
1952(continued):
1953:
1954:
                    <yy> ::= the two decimal integer year of the century
1954(continued):
                                  in the
1955:
                              range 00 to 99.
1956:
century found at line 1954:
                              "JUL"_|
                                      "AUG" | "SEP" | "OCT" | "NOV" | "D
1952:
                                 EC"
1952(continued):
1953:
1954:
                    <yy> ::= the two decimal integer year of the century
1954(continued):
                                  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
1636(continued):
1637:
'yy' on a line without 'yyyy' found at line 2701:
                                                           ; Original
2699:
            dates
                            orig-date
                         [ resent-date ]
= [ day "," ] date time
                                                           ; Forwarded
2700:
2701:
            date-time
                                                            dd mm yy
                                                              hh:mm:ss zzz
2702:
2702(continued):
                         = "Mon" / "Tue" / "Wed"
                                                      / "Thu"
2703:
            day
2-digit found at line 344:
342:
                "<n>(element)" is equivalent to "<n>*<n>(element)"; th
343:
343(continued):
                        at is,
           exactly <n> occurrences of (element). Thus 2DIGIT is a 2
344(continued):
                        -digit
           number, and 3ALPHA is a string of three alphabetic characte
345:
345(continued):
                         rs.
346:
```

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2digit found at line 344:

```
342:
343:
                "<n>(element)" is equivalent to "<n>*<n>(element)"; th
343(continued):
                        at is,
                         occurrences of (element). Thus 2DIGIT is a 2
           exactly
                    <n>
344(continued):
                        -digit
345:
           number, and 3ALPHA is a string of three alphabetic characte
345(continued):
346:
2digit found at line 1641:
                            "Fri" / "Sat" / "Sun"
1639:
1640:
                            1*2DIGIT month 2DIGIT
1641:
                                                          ; day month yea
            date
1641(continued):
1642:
                                                            e.g. 20 Jun
1642(continued):
                                 82
1643:
2digit found at line 1650:
            time
                                                          ; ANSI and Mili
1648:
                           hour zone
1648(continued):
                                 tary
1649:
1650:
                           2DIGIT ":" 2DIGIT [":" 2DIGIT]
            hour
                                                          ; 00:00:00 - 23
1651:
1651(continued):
                                 :59:59
1652:
2digit found at line 2697:
                                                              0-37,
2695:
            CTL
                           <any ASCII control</pre>
                                                          ; (
                                                                       0.
2695(continued):
                                 - 31.)
                                                          ; (
                             character and DEL>
                                                                 177,
2696:
2696(continued):
                                  127.)
2697:
                            1*2DIGIT month 2DIGIT
                                                          ; day month yea
            date
2697(continued):
2698:
                                                             e.g. 20 Jun
2698(continued):
                                 82
                                                          ; Original
2699:
            dates
                            orig-date
2digit found at line 2747:
                            1*<any CHAR, excluding CTLs, SPACE, and ":">
2745:
            field-name =
2745(continued):
                            phrase ":" [#mailbox] ":"
2746:
            group
                            2747:
            hour
                                                          ; 00:00:00 - 23
2748:
                                 :59:59
2748(continued):
                            <ASCII HT, horizontal-tab>
                                                                  11,
2749:
            HTAB
                                                          ; (
                                    9.)
2749(continued):
```

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```
+=+=+=+= 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:
      Several examples of valid dates
229:
                                         appear in the
+=+=+=+= File rfc0867.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 67:
           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:
     This protocol provides a site-independent, machine readable date
17:
17(continued):
                         and
            The Time service sends back to the originating source the
18:
     time.
                         time in
18(continued):
    seconds since midnight on January first 1900.
19:
20:
21:
     One motivation arises from the fact that not all systems have a
1900 found at line 83:
     The Time
81:
82:
     The time is the number of seconds since 00:00 (midnight) 1 Janua
83:
                        ry 1900
83(continued):
84:
     GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT;
84(continued):
                        this
     base will serve until the year 2036.
1900 found at line 84:
82:
     The time is the number of seconds since 00:00 (midnight) 1 Janua
83:
                        ry 1900
83(continued):
84: GMT, such that the time 1 is 12:00:01 am on 1 January 1900 GMT;
                        this
84(continued):
85:
    base will serve until the year 2036.
86:
+=+=+=+= File rfc0869.txt +=+=+=+=
2000 found at line 1639:
                         400
                                  HDH
1637:
1638:
                        1000
                                  Cassette Writer
```

```
1639:
                         2000
                                   Propagation Delay Measurement
1640:
                         4000
                                   X25
                        10000
1641:
                                   Profile Measurements
2000 found at line 1642:
1640:
                         4000
                                   X25
1641:
                                   Profile Measurements
                        10000
1642:
                                   Self Authenticating Password
                        20000
                                   Host traffic Matrix
1643:
                        40000
1644:
                       100000
                                   Experimental/Special
2000 found at line 1669:
                      200
                               Trace ON
1667:
1668:
                     1000
                               Statistics ON
1669:
                     2000
                               Message Generator ON
1670:
                     4000
                               Packet Trace ON
                    10000
                               Host Data Checksum is BAD
1671:
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
            HAZELTINE-2000
236:
237:
            HP-2621
            HP-2640A
238:
+=+=+=+= File rfc0899.txt +=+=+=+=
1900 found at line 337:
335:
         provides a site-independent, machine readable date and time.
335(continued):
                          The
         Time service sends back to the originating source the time in
336:
336(continued):
                          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
          HAZELTINE-2000
1595:
```

HP-2621

HP-2621A

1596: 1597:

```
+=+=+=+= File rfc0909.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 859: responses from the target. A session begins when a host op
857(continued):
                         ens a
           transport connection to a target listening on a well known
858:
858(continued):
                          port.
           LDP uses RDP port number zzz or TCP port number yyy.
859(continued):
                         n the
                       has been established, the host sends a HELLO co
860:
           connection
                         mmand,
860(continued):
           and the target replies with a HELLO REPLY.
861:
                                                               The HELLO
861(continued):
                         REPLY
+=+=+=+= File rfc0923.txt +=+=+=+=
2000 found at line 1769:
1767:
          HAZELTINE-1510
          HAZELTINE-1520
1768:
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:
          HAZELTINE-1510
1827:
          HAZELTINE-1520
1828:
1829:
          HAZELTINE-2000
1830:
          HP-2621
          HP-2621A
1831:
+=+=+=+= File rfc0952.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 159:
157:
                          is used as a data element delimiter
         ,(comma)
158:
159:
         XXX/YYY
                          indicates protocol information of the type
                          TRANSPORT/SERVICE.
160:
161:
```

```
+=+=+=+= File rfc0956.txt +=+=+=+=
1900 found at line 748:
746:
                The data format should be based on the UDP Time format
747:
            3.
747(continued):
                         which
748:
                specifies 32-bit time in seconds since 1 January 1900,
748(continued):
                         but
                extended additional bits for the fractional part of a
749:
749(continued):
                        second.
750:
1900 found at line 826:
         experiment the results indicated by UDP and ICMP are compared
824:
824(continued):
                           Ιn
825:
         the UDP Time protocol time is indicated as a 32-bit field in
825(continued):
                        seconds
         past 0000 UT on 1 January 1900, while in the ICMP Timestamp m
826:
826(continued):
                        essage
         time is indicated as a 32-bit field in milliseconds past 0000
827:
827(continued):
                         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
                                         -7
1393:
                DCN9.ARPA
                                                         -6610
                TRANTOR.ARPA
1394:
                                         10
                                                         10232
+=+=+=+= File rfc0958.txt +=+=+=+=
century found at line 41:
39:
        NTP provides the protocol mechanisms to synchronize time in p
39(continued):
                        rinciple
        to precisions in the order of nanoseconds while preserving a
40:
        non-ambiguous date, at least for this century. The protocol
41:
                        includes
41(continued):
        provisions to specify the precision and estimated error of th
42:
42(continued):
                        e local
        clock and the characteristics of the reference clock to which
43:
43(continued):
                         it may
1900 found at line 143:
141:
142:
         NTP timestamps are represented as a 64-bit fixed-point number
                         , in
142(continued):
         seconds relative to 0000 UT on 1 January 1900. The integer p
143:
143(continued):
                        art is
         in the first 32 bits and the fraction part in the last 32 bit
144:
```

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```
144(continued):
                         s, as
         shown in the following diagram.
+=+=+=+= File rfc0960.txt +=+=+=+=
2000 found at line 1659:
1657:
             014.000.000.018
                                2624-522-80900 52
                                                     DFVLR5-X25
1657(continued):
                                    [HDC1]
             014.000.000.019
1658:
                                2041-170-10000 00
                                                     SHAPE-X25
1658(continued):
                                     [JFW]
             014.000.000.020
1659:
                                5052-737-20000 50
                                                     UQNET
1659(continued):
                                     014.000.000.021
                                3020-801-00057 50
                                                     DMC-CRC1
1660:
                                   [JR17]
1660(continued):
             014.000.000.022-014.255.255.254
1661:
                                                     Unassigned
                                     [JBP]
1661(continued):
2000 found at line 1984:
1982:
          AEGIS
          APOLLO
1983:
1984:
          BS-2000
          CEDAR
1985:
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:
             99.128.IN-ADDR.ARPA. 2000 NS
377:
                                             Q.ISI.EDU.
378:
                                    2000 NS
                                             XX.MIT.EDU.
             O.ISI.EDU.
                                   2000 A
379:
                                             <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.
                                             <address of Q.ISI.EDU.>
379:
             Q.ISI.EDU.
                                   2000 A
                                             <address of XX.MIT.EDU.>
             XX.MIT.EDU.
                                   2000 A
380:
2000 found at line 379:
377:
             99.128.IN-ADDR.ARPA.
                                   2000 NS
                                             Q.ISI.EDU.
378:
                                   2000 NS
                                             XX.MIT.EDU.
```

```
<address of Q.ISI.EDU.> <address of XX.MIT.EDU.>
379:
              Q.ISI.EDU.
                                     2000 A
380:
              XX.MIT.EDU.
                                     2000 A
381:
2000 found at line 380:
378:
                                     2000 NS
                                               XX.MIT.EDU.
                                               <address of Q.ISI.EDU.>
379:
              O.ISI.EDU.
                                     2000 A
                                               <address of XX.MIT.EDU.>
              XX.MIT.EDU.
380:
                                     2000 A
381:
             and the following to the child zone:
382:
2000 found at line 384:
             and the following to the child zone:
382:
383:
384:
              99.128.IN-ADDR.ARPA. 2000 NS
                                               Q.ISI.EDU.
385:
                                     2000 NS
                                               XX.MIT.EDU.
                                     5000 SOA <SOA information>
386:
2000 found at line 385:
383:
384:
              99.128.IN-ADDR.ARPA. 2000 NS
                                               Q.ISI.EDU.
                                     2000 NS
                                               XX.MIT.EDU.
385:
386:
                                     5000 SOA <SOA information>
              O.ISI.EDU.
387:
                                     2000 A
                                               <address of O.ISI.EDU.>
2000 found at line 387:
                                               XX.MIT.EDU.
385:
                                     2000 NS
                                     5000 SOA <SOA information>
386:
387:
              Q.ISI.EDU.
                                     2000 A
                                               <address of Q.ISI.EDU.>
              XX.MIT.EDU.
                                     2000 A
                                               <address of XX.MIT.EDU.>
388:
389:
2000 found at line 388:
                                     5000 SOA <SOA information>
2000 A <address of Q.ISI
386:
                                               <address of Q.ISI.EDU.> <address of XX.MIT.EDU.>
387:
              O.ISI.EDU.
              XX.MIT.EDU.
                                     2000 A
388:
389:
         SOA serials
390:
+=+=+=+= File rfc0977.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 814:
         the same format as the LIST command.
812:
813:
814:
         The date is sent as 6 digits in the format YYMMDD, where YY i
814(continued):
                          s the
         last two digits of the year, MM is the two digits of the mont
815:
815(continued):
                         h (with
         leading zero, if appropriate), and DD is the day of the month
816:
```

```
816(continued):
                          (with
century found at line 817:
         last two digits of the year, MM is the two digits of the mont
815:
815(continued):
                         h (with
         leading zero, if appropriate), and DD is the day of the month
816:
         nued): (with leading zero, if appropriate). The closest century is assume
816(continued):
817:
817(continued):
                         d as
818:
         part of the year (i.e., 86 specifies 1986, 30 specifies 2030,
818(continued):
                          99 is
         1999, 00 is 2000).
819:
2000 found at line 819:
         leading zero, if appropriate). The closest century is assume
817:
817(continued):
                        d as
818:
         part of the year (i.e., 86 specifies 1986, 30 specifies 2030,
818(continued):
                          99 is
819:
         1999, 00 is 2000).
820:
         Time must also be specified. It must be as 6 digits HHMMSS w
821:
821(continued):
                         ith HH
2000 found at line 1190:
1188:
          (client asks for new newsgroups since April 3, 1985)
1189:
                  NEWGROUPS 850403 020000
1190:
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
                  net.fluff
1277:
          S:
2000 found at line 1282:
1280:
          (client asks for new news articles since 2 am, May 15, 1985)
1281:
                  NEWNEWS * 850515 020000
1282:
          C:
1283:
          S:
                  230 New news since 850515 020000 follows
          S:
1284:
                  <1772@foo.UUCP>
2000 found at line 1283:
          (client asks for new news articles since 2 am, May 15, 1985)
1281:
1282:
          C:
                  NEWNEWS * 850515 020000
1283:
          S:
                  230 New news since 850515 020000 follows
```

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1108: 1109:

3393:

UTCTime found at line 3395:

be used, in line with CEN/CENELEC recommendations.

```
3394:
             The extended syntax of zone defined in the JNT Mail Protoc
3394(continued):
                                 οl
             should be used in the mapping of UTCTime defined in chapte
3395:
3395(continued):
                                  r 3.
3396:
3397:
          5.
              Lack of separate 822-P1 originator specification
UTCTime found at line 3910:
               In practice, a gateway will need to parse various illega
3908:
          <5>
3908(continued):
               variants on 822.date-time.
                                             In cases where 822.date-time
3909:
3909(continued):
                                   cannot
               be parsed, it is recommended that the derived UTCTime is
3910:
3910(continued):
                                   set to
3911:
               the value at the time of translation.
3912:
2digit found at line 2785:
                                     last-trace ":"
2783:
                                     "ext" 1*DIGIŤ
2784:
                                     "flags" 2DIGIT
2785:
                                       "intended" mailbox ] ";"
2786:
2787:
                                       "info" printablestring']
+=+=+=+= File rfc0990.txt +=+=+=+=
2000 found at line 2265:
               014.000.000.018
                                   2624-522-80900 52
2263:
                                                        DFVLR5-X25
2263(continued):
                                     [GB7]
2264:
                014.000.000.019
                                   2041-170-10000 00
                                                        SHAPE-X25
                                     [JFW]
2264(continued):
                014.000.000.020
                                   5052-737-20000 50
                                                        UQNET
2265:
2265(continued):
                                     [AXH]
               014.000.000.021
                                   3020-801-00057 50
2266:
                                                        DMC-CRC1
2266(continued):
                                    [JR17]
                014.000.000.022
                                   2624-522-80902 77
                                                        DFVLRVAX-X25
2267:
2267(continued):
                                     ΓGB7]
2000 found at line 2584:
2582:
          AEGIS
2583:
          APOLLO
2584:
          BS-2000
2585:
          CEDAR
2586:
          CGW
2000 found at line 2945:
          HAZELTINE-1510
2943:
2944:
          HAZELTINE-1520
          HAZELTINE-2000
2945:
```

```
2946:
          HP-2621
          HP-2621A
2947:
+=+=+=+= File rfc0996.txt +=+=+=+=
2000 found at line 76:
74:
             Process type: 000027 options: 040000
Subnet: DMV status: 376 hello: 15 timeout: 2000
75:
76:
             Foreign address: [192.5.39.87] max size: 576
77:
78:
             Input packets
                                 3645
                                          Output packets
+=+=+=+= File rfc1000.txt +=+=+=+=
1900 found at line 3105:
             protocol provides a site-independent, machine readable dat
3103:
3103(continued):
                                 e and
             time.
                     The Time service sends back to the originating sour
3104:
                                 ce the
3104(continued):
             time in seconds since midnight on January first 1900.
3105:
3106:
3107:
          867
                   Postel
                                             Daytime Protocol
                                May 83
+=+=+=+= File rfc1009.txt +=+=+=+=
2000 found at line 1412:
             method is used when the host and IMP (the Defense Communic
1410:
1410(continued):
                                 ation
             Agency calls it a Packet Switch Node or PSN) are separated
1411:
1411(continued):
                                   by not
             more than about 2000 feet of cable, while the HDLC Distant
1412:
1412(continued):
                                  Host
             (HDH) is used for greater distances where a modem is requi
1413:
1413(continued):
                                  red.
1414:
             Under HDH, retransmission, resequencing and flow control a
1414(continued):
                                 re
+=+=+=+= File rfc1010.txt +=+=+=+=
2000 found at line 969:
                                2624-522-80900 52
                                                      DFVLR5-X25
967:
             014.000.000.018
                            [GB7]
967(continued):
             014.000.000.019
                                2041-170-10000 00
                                                      SHAPE-X25
968:
                            [JFW]
968(continued):
             014.000.000.020
969:
                                5052-737-20000 50
                                                     UQNET
                            [AXH]
969(continued):
             014.000.000.021
                                3020-801-00057 50
970:
                                                     DMC-CRC1
                           [JR17]
970(continued):
             014.000.000.022
                                2624-522-80902 77
                                                     DFVLRVAX-X25
971:
971(continued):
                            [GB7]
2000 found at line 1353:
```

```
195:
196: Wdy, DD Mon YY HH:MM:SS TIMEZONE
197:
198: Several examples of valid dates appear in the sample message
198(continued): above.

+=+=+=+= File rfc1037.txt +=+=+=+=
1900 found at line 541:
```

539:

Date

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A numeric data token. The date is expre

```
539(continued):
                        ssed in
                              Universal Time format, which measures a
540:
540(continued):
                        time as
                              the number of seconds since January 1, 1
541:
541(continued):
                        900, at
542:
                              midnight GMT.
543:
1900 found at line 2544:
          The creation date of the file. The date is expressed in Univ
2542(continued):
                                ersal
          Time format, which measures a time as the number of seconds s
2543:
2543(continued):
                                ince
          January 1, 1900, at midnight GMT. Creation date does not nec
2544:
2544(continued):
                                essarily
2545:
          mean the time the file system created the directory entry or
2545(continued):
                                records
          of the file. For systems that support modification or append
2546:
2546(continued):
                                ing to
+=+=+=+= File rfc1038.txt +=+=+=+=
2000 found at line 317:
315:
         The values of this field are assigned by DCA Code R130. Washi
316:
316(continued):
                        naton.
         D.C. 20305-2000. Each value corresponds to a requestor who,
317:
317(continued):
                         once
         assigned, becomes the authority for the remainder of the opti
318:
318(continued):
         definition for that value.
319:
+=+=+=+= File rfc1050.txt +=+=+=+=
2000 found at line 323:
     7.3 Program Number Assignment
321:
322:
323:
         Program numbers are given out in groups of hexadecimal 200000
323(continued):
         (decimal 536870912) according to the following chart:
324:
325:
2000 found at line 327:
325:
326:
                       0 - 1fffffff
                                       defined by Sun
327:
                20000000 - 3fffffff
                                       defined by user
                40000000 - 5fffffff
328:
                                       transient
                60000000 - 7fffffff
329:
                                       reserved
+=+=+=+= File rfc1057.txt +=+=+=+=
```

```
2000 found at line 339:
      7.3 Program Number Assignment
337:
338:
         Program numbers are given out in groups of hexadecimal 200000
339:
339(continued):
340:
         (decimal 536870912) according to the following chart:
341:
2000 found at line 343:
341:
                        0 - 1fffffff
                                        defined by Sun
342:
343:
                 20000000 - 3fffffff
                                        defined by user
                 40000000 - 5fffffff
344:
                                        transient
                 60000000 - 7fffffff
345:
                                        reserved
+=+=+=+= File rfc1059.txt +=+=+=+=
century found at line 142:
         mechanisms to synchronize time in principle to precisions in
140(continued):
                         the
141:
         order of nanoseconds while preserving a non-ambiguous date we
141(continued):
                         ll into
142:
         the next century.
                              The protocol includes provisions to specif
142(continued):
                         y the
         characteristics and estimate the error of the local clock and
143:
143(continued):
                          the
         time server to which it may be synchronized. It also include
144(continued):
1900 found at line 574:
572:
         frequency to the TA time scale. At 0000 hours on 1 January 1
572(continued):
                         972 the
         NTP time scale was set to 2,272,060,800, representing the num
573:
573(continued):
                         ber of
         TA seconds since 0000 hours on 1 January 1900. The insertion
574:
574(continued):
                           of leap
         seconds in UTC does not affect the oscillator itself, only th
575:
575(continued):
         translation between TA and UTC, or conventional civil time.
576(continued):
                         However,
1900 found at line 649:
         main product of the protocol, a special timestamp format has
647:
647(continued):
                         been
         established.
                        NTP timestamps are represented as a 64-bit unsi
648:
648(continued):
                         aned
         fixed-point number, in seconds relative to 0000 UT on 1 Janua
nued): ry 1900.
The integer part is in the first 32 bits and the fraction par
649:
649(continued):
650:
```

```
650(continued):
                         t in the
         last 32 bits, as shown in the following diagram.
651:
1900 found at line 690:
         the Integer Part) has been set and that the 64-bit field will
688:
688(continued):
         overflow some time in 2036. Should NTP be in use in 2036, so
689:
689(continued):
                         me
         external means will be necessary to qualify time relative to
690:
690(continued):
                         1900 and
         time relative to 2036 (and other multiples of 136 years).
691:
692:
         Timestamped data requiring such qualification will be so prec
692(continued):
                         ious
+=+=+=+= 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
2322(continued):
                                  (LAT) - old
                                    ????
          AB-00-04-00-xx-xx
                                            Reserved DEC customer private
2323:
2323(continued):
                                   use
          AB-00-04-01-xx-yy
                                            DEC Local Area VAX Cluster gr
2324:
                                    6007
2324(continued):
                                   oups
2325:
                                            System Communication Architec
                                 ture (SCA)
2325(continued):
2326:
          CF-00-00-00-00-00
                                    9000
                                            Ethernet Configuration Test
2326(continued):
                                  protocol (Loopback)
2000 found at line 2729:
2727:
              014.000.000.018
                                 2624-522-80900 52
                                                       FGAN-SIEMENS-X25
                                     [GB7]
2727(continued):
                                                       SHAPE-X25
2728:
              014.000.000.019
                                 2041-170-10000 00
2728(continued):
                                     「JFWl
2729:
              014.000.000.020
                                 5052-737-20000 50
                                                       UQNET
2729(continued):
                                     [HXA]
                                                       DMC-CRC1
2730:
              014.000.000.021
                                 3020-801-00057 50
                                     [VXT]
2730(continued):
              014.000.000.022
                                 2624-522-80329 02
                                                       FGAN-FGANFFMVAX-X25
2731:
2731(continued):
                                     ГGB7 Т
2000 found at line 3155:
3153:
          AEGIS
                                     MACOS
                                                                 TP3010
3154:
          APOLLO
                                      MINOS
                                                                 TRSDOS
3155:
          BS-2000
                                     MOS
                                                                 ULTRIX
3156:
          CEDAR
                                     MPE<sub>5</sub>
                                                                 UNIX
                                     MSDOS
3157:
          CGW
                                                                 UNIX-BSD
2000 found at line 3508:
                                                  IBM-3278-5-E
3506:
          HAZELTINE-1520
```

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```
3507:
          HAZELTINE-1552
                                                 IBM-3279-2-E
          HAZELTINE-2000
                                                 IBM-3279-3-E
3508:
3509:
          HAZELTINE-ESPRIT
                                                 IMLAC
                                                 INFOTON-100
3510:
          HP-2392
+=+=+=+= File rfc1064.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1321:
1319:
                               "NO" SP text_line / "BAD" SP text_line)
1320:
                           ::= string in form "dd-mmm-yy hh:mm:ss-zzz"
1321:
          date
1322:
                           ::= "(" env_date SP env_subject SP env_from S
1323:
          envelope
1323(continued):
+=+=+=+= File rfc1085.txt +=+=+=+=
UTCTime found at line 1501:
1499:
1500:
                      commonReference
1501:
                           UTCTime,
1502:
                      additionalReferenceInformation[0]
1503:
+=+=+=+= File rfc1094.txt +=+=+=+=
2000 found at line 878:
876:
            0040000 This is a directory; "type" field should be NFDIR.
877:
877(continued):
            0020000 This is a character special file; "type" field sho
878:
878(continued):
                         uld
879:
                    be NFCHR.
            0060000 This is a block special file; "type" field should
880:
                        be
880(continued):
2000 found at line 883:
                    NFBLK.
881:
882:
            0100000 This is a regular file; "type" field should be NFR
882(continued):
                         EG.
                                                    "type" field should
            0120000 This is a symbolic link file;
883(continued):
                         be
                    NFLNK.
884:
            0140000 This is a named socket; "type" field should be NFN
885:
885(continued):
                         ON.
2000 found at line 887:
            0140000 This is a named socket; "type" field should be NFN
885:
885(continued):
                         ON.
            0004000 Set user id on execution.
886:
```

```
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:
         throughout DoD common user data networks, users of these netw
185:
185(continued):
                         orks
         should submit requirements for additional Protection Authorit
186:
186(continued):
                        y Flags
         to DISA DISDB, Washington, D.C. 20305-2000, for review and a
187(continued):
                        pproval.
         Such review and approval should be sought prior to design,
188:
         development or deployment of any system which would make use
189:
189(continued):
                         of
2000 found at line 774:
         data networks, and to maximize interoperability, each activit
772:
772(continued):
                         y should
         submit its plans for the definition and use of an Additional
773:
                         Security
773(continued):
774:
         Info Format Code to DISA DISDB, Washington, D.C. 20305-2000
774(continued):
                         for
         review and approval. DISA DISDB will forward plans to the In
775:
775(continued):
                         ternet
         Activities Board for architectural review and, if required, a
776:
776(continued):
                         cleared
+=+=+=+= File rfc1114.txt +=+=+=+=
UTCTime found at line 922:
920:
                    issuer
                                     Name.
921:
                                     SEQUENCE RCLEntry,
                    list
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:
            RCLEntry
925:
                                     SEQUENCE {
                             ::=
926:
                    subject
                                     CertificateSerialNumber,
```

```
927:
                    revocationDate UTCTime}
928:
      3.4 Certificate Definition and Usage
929:
UTCTime found at line 1296:
1294:
1295:
                Validity ::=
                               SEQUENCE{
                                         ÙTCTime,
                        notBefore
1296:
1297:
                        notAfter
                                         UTCTime }
1298:
UTCTime found at line 1297:
1295:
                Validity ::=
                                SEQUENCE{
1296:
                                         UTCTime,
                        notBefore
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
                                        a02jwn1%niu.bitnet@CUNYVM.CUNY.E
4964:
       [JWN10] Norris, James W
                                 DU
4964(continued):
       [JY24]
4965:
               Yu, Jessica
                                        ivv@MERIT.EDU
4966:
       [JY33]
               Yoshida, Jun
                                        ---none---
       ΓΚΑ4 1
               Auerbach, Karl
4967:
                                        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
3252(continued):
                                  ease
                the transition to the next century.
3253:
3254:
3255:
                There is a strong trend towards the use of numeric time
3255(continued):
                                 zone
+=+=+=+= File rfc1133.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 493:
```

```
491:
         Telephone:
                          313 936-2655
492:
                          313 747-3745
         Fax:
493:
         EMail:
                         jyy@merit.edu
494:
495:
         Hans-Werner Braun
+=+=+=+= File rfc1138.txt +=+=+=+=
UTCTime found at line 1471:
          the full BNF easier to parse.
1469:
1470:
       3.3.5.
               UTCTime
1471:
1472:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1473:
1473(continued):
UTCTime found at line 1473:
      3.3.5. UTCTime
1471:
1472:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1473:
1473(continued):
                                 ear
          (lowest two digits), Month, Day of Month, hour, minute, secon
1474:
1474(continued):
          (optional), and Timezone. 822.date-time also contains an opt
1475:
1475(continued):
                                 ional
UTCTime found at line 1482:
               In practice, a gateway will need to parse various illega
1480:
1480(continued):
1481:
               variants on 822.date-time.
                                            In cases where 822.date-time
1481(continued):
               cannot be parsed, it is recommended that the derived UTC
1482:
                                 Time
1482(continued):
               is set to the value at the time of translation.
1483:
1484:
UTCTime found at line 1485:
               is set to the value at the time of translation.
1483:
1484:
          The UTCTime format which specifies the timezone offset should
1485(continued):
                                  be
          used.
1486:
1487:
UTCTime found at line 4469:
4467:
          The extended syntax of zone defined in the JNT Mail Protocol
4468:
4468(continued):
                                 should
          be used in the mapping of UTCTime defined in Chapter 3.
4469:
```

```
4470:
           Lack of 822-MTS originator specification
4471:
       6.
+=+=+=+= File rfc1147.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 9715:
9713:
                 cerns to security and management personnel at DDN faci
9713(continued):
                 ties.
9714:
                         It is available online, via kermit or anonymous
                                  FTP,
9714(continued):
                 from nic.ddn.mil, in SCC:DDN-SECURITY-yy-nn.TXT (where
9715:
9715(continued):
                 is the year and "nn" is the bulletin number).
9716:
9716(continued):
                                  pro-
                 vides immediate assistance with DDN-related host secur
9717:
9717(continued):
                                 ity
century found at line 1096:
                  "NETMON." These tools were independently developed, ar
1094:
1094(continued):
                 functionally different, run in different environments,
1095:
1095(continued):
                                  and
1096:
                 are no more related than Richard Burton the 19th centu
1096(continued):
                 explorer and Richard Burton the 20th century actor.
1097:
1097(continued):
                                 YU's
                 tool "NETMON" is listed as "NETMON (I)," MITRE's as "N
1098:
1098(continued):
                                 ETMON
century found at line 1097:
                 functionally different, run in different environments,
1095:
1095(continued):
                 are no more related than Richard Burton the 19th centu
1096:
1096(continued):
                 explorer and Richard Burton the 20th century actor.
1097:
1097(continued):
                                 YU's
                 tool "NETMON" is listed as "NETMON (I)," MITRE's as "N
1098:
1098(continued):
                                 ETMON
                 (II)," and the tool from SNMP Research as "NETMON (III
1099:
1099(continued):
                                 )."
2000 found at line 4134:
4132:
                       libraries), but this has not been done.
4132(continued):
                                 s very
4133:
                       slow and cpu intensive on VMS, but the tool has b
4133(continued):
                                 een
```

```
run in a window on a VAXstation 2000.
4134:
                                                              Just don't
4134(continued):
                                  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:
       3.3.5.
               UTCTime
1475:
1476:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1477:
1477(continued):
                                 ear
UTCTime found at line 1477:
      3.3.5. UTCTime
1475:
1476:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1477:
1477(continued):
                                 ear
          (lowest two digits), Month, Day of Month, hour, minute, secon
1478:
1478(continued):
1479:
          (optional), and Timezone. 822.date-time also contains an opt
1479(continued):
                                 ional
UTCTime found at line 1486:
               In practice, a gateway will need to parse various illega
1484:
1484(continued):
               variants on 822.date-time. In cases where 822.date-time
1485:
1485(continued):
               cannot be parsed, it is recommended that the derived UTC
1486:
                                 Time
1486(continued):
1487:
               is set to the value at the time of translation.
1488:
UTCTime found at line 1489:
               is set to the value at the time of translation.
1487:
1488:
          The UTCTime format which specifies the timezone offset should
1489:
1489(continued):
                                  be
          used.
1490:
1491:
```

```
UTCTime found at line 4566:
4564:
4565:
          The extended syntax of zone defined in the JNT Mail Protocol
4565(continued):
                                 should
          be used in the mapping of UTCTime defined in Chapter 3.
4566:
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:
         Finally, Yechiam Yemeni (YY, Columbia University) discussed h
937:
937(continued):
                        is work
        on a protocol silicon compiler. In order to exploit the pote
938:
938(continued):
                        ntial
         parallelism, he is planning to use one processor per connecti
939:
939(continued):
+=+=+=+= 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 : Iss
125(continued):
                        ue nn
126:
127: Today's Topics:
'yy' on a line without 'yyyy' found at line 137:
135:
135(continued):
136:
```

```
Date: ddd, dd mmm yy hh:mm:ss zzz
From: Joe User <username@fqhn>
137:
138:
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
      From: Jane User <username@fqhn>
148:
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:
         on the protocol-ID
320:
321:
322:
                                        03019000
323:
324:
     5. Acknowledgements
2000 found at line 210:
         (1) <nsap> is a hex string defining the nsap, e.g.,
208:
209:
                           "snmp"/NS+4900590800200038bafe00
210:
211:
212:
         Similarly, SNMP traps are, by convention, sent to a manager l
212(continued):
                        istening
2000 found at line 291:
      (1) <nsap> is a hex string defining the nsap, e.g.,
289:
290:
291:
                           "snmp"/NS+4900590800200038bafe00
292:
         Similarly, SNMP traps are, by convention, sent to a manager l
293:
293(continued):
                        istening
+=+=+=+= File rfc1164.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1267: 1265: Phone: (313) 936-3000
```

```
1266:
          Email: JYY@MERIT.EDU
1267:
1268:
1269:
+=+=+=+= File rfc1166.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 8270:
8268:
          [JWN10]
                          Norris, James W.
                          a02jwn1%niu.bitnet@CUNYVM.CUNY.EDU
8269:
8270:
          [JY24]
                          Yu, Jessica
                                                   jyy@MERIT.EDU
          [JY33]
8271:
                          Yoshida, Jun
                                                    ---none---
          [JY35]
8272:
                          Young, Jeff
                                                    ---none---
+=+=+=+= File rfc1167.txt +=+=+=+=
2000 found at line 89:
        are also likely play a role along with Switched Multi-megabit
87:
87(continued):
                         Data
        Service (SMDS) provided by telecommunications carriers.
88:
88(continued):
                        lso
        would be fair to ask what role FTS-2000 might play in the sys
89:
                        tem, at
89(continued):
        least in support of government access to the NREN, and possib
90:
90(continued):
                        ly in
        support of national agency network facilities.
+=+=+=+= File rfc1173.txt +=+=+=+=
century found at line 72:
        only choice; I don't see any prospect of either the governmen
70:
70(continued):
                        t or
        private enterprise building a monolithic, centralized, ubiqui
71:
71(continued):
                        tous "Ma
        Datagram" network provider in this century.
72:
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:
                          ::= string in form "dd-mmm-yy hh:mm:ss-zzz"
1435:
          date
1436:
          envelope
                          ::= "(" env_date SP env_subject SP env_from S
1437:
1437(continued):
+=+=+=+= File rfc1185.txt +=+=+=+=
2000 found at line 208:
            1.1MBps, no matter how high the theoretical transfer rate
206:
206(continued):
                        of the
```

```
207:
            path.
                   This corresponds to cycling the sequence number spa
207(continued):
                        ce in
208:
            Twrap= 2000 secs, which is safe in today's Internet.
209:
210:
            Based on this reasoning, an earlier RFC [McKenzie89] has c
210(continued):
                        autioned
+=+=+=+= File rfc1190.txt +=+=+=+=
2000 found at line 7630:
                                             link failure
7628:
7629:
7630:
               2000 DefaultRecoveryTimeout Interval between successive
7630(continued):
                                             HELLOs to/from active neigh
7631:
7631(continued):
                                 bors
7632:
+=+=+=+= File rfc1191.txt +=+=+=+=
2000 found at line 925:
923:
                                                           RFC 1044
                    65535 Hyperchannel
924:
         65535
925:
         32000
                            Just in case
                    17914 16Mb IBM Token Ring
                                                          ref. [6]
926:
         17914
927:
+=+=+=+= File rfc1203.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2102:
2100: "NO" SP text_line / "BAD" SP text_line)
2101:
2102:
                       ::= string in form "dd-mmm-yy hh:mm:ss-zzz"
       date
2103:
                    ::= "(" env date SP env subject SP env from SP
2104: envelope
2000 found at line 2614:
2612:
               question. For example:
2613:
                 tag42 FETCH 197 BODY 2000:3999
2614:
2615:
               would fetch the second two thousand bytes of the body of
2616:
2616(continued):
                                  message
+=+=+=+= File rfc1207.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 136:
134:
                        Information includes packet counts by NSS and
            directory.
134(continued):
                        byte
            counts for type of use (ftp, smtp, telnet, etc.). Filenam
135:
                        es are
135(continued):
            of the form 'NSFyy-mm.type'.
136:
```

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RFC 2626 The Internet and the Millennium Problem (Year 2000) June 1999

```
2000 found at line 2363:
             Office Automation Division
2361:
2362:
             Code H610
             Washington, DC 20305-2000
2363:
2364:
2365:
             Hostname: DCA-EMS.DCA.MIL
+=+=+=+= File rfc1218.txt +=+=+=+=
2000 found at line 1249:
1247:
          Rapport Communication, Inc.
          3055 Q Street NW
1248:
          Washington, DC 20007
1249:
1250:
          Tel: +1 202-342-2727
1251:
+=+=+=+= File rfc1224.txt +=+=+=+=
2000 found at line 983:
            and placed in an ethernet packet). 120 request packets ar
981:
981(continued):
                        e sent
            each cycle (3 for each of 40 nodes), and 120 response pack
982:
982(continued):
                        ets are
            expected.
983:
                       72000 bytes (240 packets at 300 bytes each) mus
983(continued):
                        t be
            transferred during each poll cycle, merely to determine th
984:
984(continued):
                        at the
            network is fine.
985:
+=+=+=+= File rfc1244.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2481:
2479:
                   and concerns to security and management personnel at
2479(continued):
                                  DDN
2480:
                   facilities.
                                 It is available online, via kermit or a
2480(continued):
                                 nonymous
                   FTP, from the host NIC.DDN.MIL, in SCC:DDN-SECURITY-
2481:
2481(continued):
                   nn.TXT (where "yy" is the year and "nn" is the bulle
2482:
2482(continued):
2483:
                   number).
                             The SCC provides immediate assistance with
2483(continued):
                                  DDN-
'yy' on a line without 'yyyy' found at line 2482:
2480:
                   facilities.
                                 It is available online, via kermit or a
2480(continued):
                                 nonymous
                   FTP, from the host NIC.DDN.MIL, in SCC:DDN-SECURITY-
2481:
2481(continued):
                   nn.TXT (where "yy" is the year and "nn" is the bulle tin
2482:
2482(continued):
2483:
                   number).
                             The SCC provides immediate assistance with
```

```
2483(continued):
                                 DDN-
                   related host security problems; call (800) 235-3155
2484:
2484(continued):
+=+=+=+= File rfc1251.txt +=+=+=+=
2000 found at line 316:
314:
                 where growing above 100 network numbers seemed excess
314(continued):
                        ive.
                 Todays number of networks in the global infrastructur
315:
315(continued):
                 exceeds 2000 connected networks, and many more if iso
316:
316(continued):
                        lated
317:
                 network islands get included.
318:
+=+=+=+= File rfc1254.txt +=+=+=+=
2000 found at line 592:
         number of packet arrivals, over which packets are dropped wit
590:
590(continued):
                        h
         For instance, in a sample implementation
591:
591(continued):
         this interval spanned 2000 packet arrivals, and a suitable
592:
593:
         probability of drop was 0.001, then two random variables woul
                        d be
593(continued):
594:
         drawn in a uniform distribution in the range of 1 to 2,000.
594(continued):
                        The
2000 found at line 859:
         indicates that to get good, consistent performance, we may ne
857:
                        ed to
857(continued):
         have up to 5 to 10 times the number of active source-destinat
858:
                        ion
858(continued):
859:
         pairs. In a typical gateway, this may require around 1000 to
859(continued):
                        2000
860:
         queues.
861:
+=+=+=+= File rfc1255.txt +=+=+=+=
2000 found at line 1361:
          Rapport Communication, Inc.
1359:
          3055 Q Street NW
1360:
1361:
          Washington, DC 20007
1362:
          Tel: +1 202-342-2727
1363:
+=+=+=+= File rfc1259.txt +=+=+=+=
century found at line 345:
343:
         should never go back to any monopoly arrangement like the pre
```

```
343(continued):
344:
         divestiture AT&T which held back market-driven innovation in
345:
         telecommunications for half a century. Given the interconnec
345(continued):
                        tion
         technology now available, we should never again have to accep
346:
346(continued):
                        t the
347:
         argument that we have to sacrifice interoperability for effic
347(continued):
                        iency,
century found at line 594:
592:
593:
            In light of the possibilities for new service offerings by
593(continued):
                         the
            21st century, as well as the growing importance of
594:
595:
            telecommunications and information services to US economic
595(continued):
                         and
            social development, limiting our concept of universal serv
596:
596(continued):
                        ice to
century found at line 744:
         If we have the vision and commitment to try this, the transfo
742:
742(continued):
                        rmation
743:
         of the network frontier from wilderness to civilization need
743(continued):
                        not
         display the brutality of 19th century imperialism. As commer
744(continued):
                        cial
         opportunities to offer applications and services develop,
745:
         entrepreneurs will discover that ease of use sells. The norma
746:
746(continued):
                        ι,
2000 found at line 1115:
          California v. FCC (9th Cir. 1990).
1113:
1114:
          18.
               NTIA Telecomm 2000 at 79.
1115:
1116:
1117:
               Committee on Energy and Commerce, Subcommittee on
          19.
+=+=+=+= 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:
            lastModifiedTime ATTRIBUTE
1049:
```

```
1050:
                WITH ATTRIBUTE-SYNTAX
1051:
                    uTCTimeSyntax
1052:
            ::= {pilotAttributeType 23}
1053:
UTCTime found at line 2990:
            lastModifiedTime ATTRIBUTE
2988:
                WITH ATTRIBUTE-SYNTAX
2989:
2990:
                    uTCTimeSyntax
2991:
            ::= {pilotAttributeType 23}
2992:
+=+=+=+= File rfc1276.txt +=+=+=+=
UTCTime found at line 558:
556:
557:
558:
      EDBVersion ::= UTCTime
558(continued):
559:
560: ______Figure_2: __Replication_Protocol_____
560(continued):
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:
         This is an X.25 protocol-ID assigned for local purposes.
319:
2000 found at line 206:
204:
         (1) <nsap> is a hex string defining the nsap, e.g.,
205:
                           "snmp"/NS+4900590800200038bafe00
206:
207:
208:
         Similarly, SNMP traps are, by convention, sent to a manager l
208(continued):
                        istening
2000 found at line 278:
276:
         (1) <nsap> is a hex string defining the nsap, e.g.,
277:
```

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```
278:
                            "snmp"/NS+4900590800200038bafe00
279:
280:
+=+=+=+= File rfc1284.txt +=+=+=+=
2000 found at line 1146:
          Hopkinton Mass 01748
1144:
1145:
          Phone: 508-435-2000
1146:
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 i
217(continued):
                         s a
218:
                 -- string of 8 octets, represented as
219:
                                                    X' yy yy xx xx xx xx
219(continued):
                          XX XX'
                 -- with the low order 6 octet (xx) from a unique IEEE
220:
                 -- assigned address. The high order two bits of the I
221:
221(continued):
'yy' on a line without 'yyyy' found at line 232:
230:
231:
                 -- (Universal/Local) bit should both be zero.
231(continued):
                         st two
                 -- octets, the yy octets, are implementor-defined.
232:
233:
                 -- The representation of the address portion of the st
234:
234(continued):
                         ation id
+=+=+=+= File rfc1290.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 549: 547: Anonymous FTP to nis.nsf.net
547:
548:
            cd stats
            get nsfyy-mm.ptraffic where yy is year, 91 and mm is mont
549:
549(continued):
                         h, 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 mont
552(continued):
                        h, 06
            get nsf91-06.btraffic btraffic is the byte traffic
553:
554:
```

```
+=+=+=+= File rfc1292.txt +=+=+=+=
UTCTime found at line 3648:
3646:
3647:
3648:
              When comparing attributes of UTCtime syntax, if the secon
3648(continued):
                                 ds field
3649:
              is omitted, QUIPU does not perform the match correctly (i
3649(continued):
                                 .e., the
                                 the attribute values should be ignored,
3650:
              seconds field in
3650(continued):
                                 but are
2000 found at line 4158:
4156:
4157:
          UCOM.X 500 runs on: Sun 3, Sun 4, IBM RS 6000, Philips P 9000
                                  DÉC
4157(continued):
          machines, Bull DPX 2000, HP 9000/300, Siemens IN 6000 and 386
4158(continued):
                                 -based
4159:
                 It can easily be ported to any UNIX machine.
4160:
2000 found at line 4803:
4801:
       HARDWARE PLATFORMS
4802:
          3Com's OSI/TCP CS/2000 and CS/2100.
4803:
4804:
       SOFTWARE PLATFORMS
4805:
2000 found at line 4807:
4805:
       SOFTWARE PLATFORMS
4806:
          The "SW/2000-OT Vers
                                 1.0" software runs on 3Com's OSI/TCP CS/
4807:
4807(continued):
                                 2000 and
          CS/2100, both stand-alone systems.
4808:
4809:
2000 found at line 4812:
4810: AVAILABILITY
4811:
          The dual-stack OSI/TCP terminal server and its "SW/2000-OT Ve
4812:
4812(continued):
                                 rs 1.0"
          software is available from:
4813:
4814:
```

```
+=+=+=+= File rfc1295.txt +=+=+=+=
2000 found at line 98:
96:
       Rapport Communication
        3055 Q Street NW
97:
98:
       Washington, DC 20007
99:
        Phone: +1 202-342-2727
100:
+=+=+=+= File rfc1303.txt +=+=+=+=
UTCTime found at line 189:
                TYPE NOTATION ::=
187:
188:
                                  "LAST-UPDATED"
189:
                                                       UTCTime)
                                      value(update
                                  "PRODUCT-RELEASE"
190:
191:
                                      value(release
                                                       DisplayString
191(continued):
                       )
+=+=+=+= File rfc1305.txt +=+=+=+=
century found at line 428:
426: mechanisms to synchronize time in principle to precisions in the
426(continued):
                        order
     of nanoseconds while preserving a non-ambiguous date well into t
427(continued):
                       he next
     century. The protocol includes provisions to specify the charact
428(continued):
                       eristics
     and estimate the error of the local clock and the time server to
429:
429(continued):
                        which
430: it may be synchronized. It also includes provisions for operation
                       n with a
430(continued):
century found at line 4529:
      political and ritual needs characteristic of the societies in wh
4527(continued):
                               ich they
      flourished. Astronomical observations to establish the winter an
4528:
4528(continued):
                               d summer
      solstices were in use three to four millennia ago. By the 14th c
4529:
4529(continued):
      4530(continued):
                               ys and
4531: the lunar month as 29.5 days. The lunisolar calendar, in which t
4531(continued):
                               he
century found at line 4548:
      with the Shang Chinese, the ancient Egyptians had thus establish
4546(continued):
                               ed the
      solar year at 365.25 days, or within about 11 minutes of the pre
4547:
4547(continued):
                               sent
4548:
      measured value. In 432 BC, about a century after the Chinese had
```

```
4548(continued):
                                  done
       so, the Greek astronomer Meton calculated there were 110 lunar m
4549:
                                 onths of
4549(continued):
       29 days and 125 lunar months of 30 days for a total of 235 lunar
4550(continued):
                                  months
century found at line 4565:
4563:
       not complete until 8 AD.
4564:
       The seven-day Sumerian week was introduced only in the fourth ce
4565:
4565(continued):
                                 ntury AD
       by Emperor Constantine I. During the Roman era a 15-year census
4566:
4566(continued):
                                 cycle,
      called the Indiction cycle, was instituted for taxation purposes
4567:
4567(continued):
century found at line 4588:
       but 14 of these were removed in the Gregorian calendar. While th
4586(continued):
       Gregorian calendar is in use throughout most of the world today,
4587:
4587(continued):
       countries did not adopt it until early in the twentieth century.
4588:
4588(continued):
       While it remains a fascinating field for time historians, the ab
4589(continued):
       narrative provides conclusive evidence that conjugating calendar
4590:
4590(continued):
                                  dates
century found at line 4620:
       sometimes used to represent dates near our own era in convention
4618:
4618(continued):
                                 al time
       and with fewer digits, is defined as MJD = JD <196> 2,400,000.5.
4619:
4619(continued):
       Following the convention that our century began at 0h on 1 Janua
4620:
                                 ry 1900,
4620(continued):
       at which time the tropical year was already 12h old, that eclect
4621(continued):
4622: instant corresponds to MJD 15,020.0. Thus, the Julian timescale
4622(continued):
                                 ticks in
century found at line 4640: 4638: through observations of the Sun, Moon and planets. In 1958 the s
4638(continued):
                                 tandard
       second was defined as 1/31,556,925.9747 of the tropical year tha
4639:
4639(continued):
                                 t began
       this century. On this scale the tropical year is 365.2421987 day
4640:
4640(continued):
                                 s and
4641: the lunar month - one complete revolution of the Moon around the
```

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```
4641(continued):
                                  Earth -
       is 29.53059 days; however, the actual tropical year can be deter
4642:
4642(continued):
                                 mined
1900 found at line 851:
849:
      product of the protocol, a special timestamp format has been
      established. NTP timestamps are represented as a 64-bit unsigned
850:
850(continued):
                         fixed-
      point number, in seconds relative to 0h on 1 January 1900. The i
                        nteger
851(continued):
      part is in the first 32 bits and the fraction part in the last 3
852(continued):
                        2 bits.
853: This format allows convenient multiple-precision arithmetic and
1900 found at line 873:
      integer part) has been set and that the 64-bit field will overfl
871:
871(continued):
                        ow some
      time in 2036. Should NTP be in use in 2036, some external means
872:
                        will be
872(continued):
      necessary to qualify time relative to 1900 and time relative to
873:
                        2036
873(continued):
874:
      (and other multiples of 136 years). Timestamped data requiring s
874(continued):
                        uch
      qualification will be so precious that appropriate means should
875(continued):
1900 found at line 4620:
       sometimes used to represent dates near our own era in convention
4618:
4618(continued):
                                 al time
       and with fewer digits, is defined as MJD = JD < 196 > 2,400,000.5.
4619:
4619(continued):
4620:
       Following the convention that our century began at 0h on 1 Janua
                                 ry 1900,
4620(continued):
       at which time the tropical year was already 12h old, that eclect
4621(continued):
4622:
       instant corresponds to MJD 15,020.0. Thus, the Julian timescale
4622(continued):
                                 ticks in
1900 found at line 4724:
       always coincident with it. At 0h on 1 January 1972 (MJD 41,317.0
4722:
       ontinued):

), the
first tick of the UTC Era, the NTP clock was set to 2,272,060,80
4722(continued):
4723:
4723(continued):
                                 0,
       representing the number of standard seconds since Oh on 1 Januar
4724:
                                 y 1900
4724(continued):
```

```
(MJD 15,020.0). The insertion of leap seconds in UTC and subsequ
4725(continued):
                                 ently
4726:
       into NTP does not affect the UTC or NTP oscillator, only the con
4726(continued):
                                 version
2000 found at line 4489:
       the Mid-Continent Chain, the deployment of LORAN-C transmitters
4487:
4487(continued):
                                 now
       provides complete coverage of the U.S. LORAN-C timing receivers,
4488(continued):
                                  such as
       the Austron 2000, are specialized and extremely expensive (up to
4489(continued):
       $20,000). They are used primarily to monitor local cesium clocks
4490:
       ntinued):
not suited for unattended, automatic operation. While the LORAN-
4490(continued):
4491:
4491(continued):
                                 C system
+=+=+=+= File rfc1309.txt +=+=+=+=
century found at line 48:
46:
47:
        As the pace of industry, science, and technological developme
47(continued):
                         nt
        quickened over the past century, it became increasingly proba
48:
48(continued):
                         ble that
        someone in a geographically distant location would be trying
49(continued):
                         to solve
        the same problems you were trying to solve, or that someone i
50:
50(continued):
+=+=+=+= File rfc1314.txt +=+=+=+=
2000 found at line 1109:
                                                             00000001
1107:
          00DE
                       YPosition
                                              011F
                                                      0005
                                                                       00
1107(continued):
                                 00016C
1108:
                      Group40ptions
                                              0125
                                                      0004
                                                             00000001
                                                                       00
          00EA
1108(continued):
                                 000002
                      ResolutionUnit
                                              0128
                                                      0003
                                                             00000001
1109:
                                                                       00
          00F6
1109(continued):
                                 020000
                      Software
                                                      0002
1110:
          0102
                                              0131
                                                             8000000
                                                                       00
1110(continued):
                                 000174
                                                      0002
                                                             00000014
          010E
                      DateTime
                                              0132
                                                                       00
1111:
1111(continued):
                                 00017C
+=+=+=+= File rfc1323.txt +=+=+=+=
2000 found at line 320:
            1.1MBps, no matter how high the theoretical transfer rate
318:
318(continued):
                         of the
            path.
                   This corresponds to cycling the sequence number spa
319:
319(continued):
                         ce 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
322(continued):
                          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 a
609(continued):
                          nonymous
             FTP from the host NIS.NSF.NET in the 'imr' directory with
610:
                          the file
610(continued):
             names in the form IMRYY-MM.TXT, where YY is the last two d
611:
                          igits of
611(continued):
             the year and MM two digits for the month. For example, th
612:
                          e June
612(continued):
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
2616(continued):
                                    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
2618(continued):
                mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is
2619:
                encoded on the LHS.
2620:
'yy' on a line without 'yyyy' found at line 2619:
2617: the LHS. This is to ensure a reversible mapping. For
2617:
                example, if the is an addres /S=XX/O=YY/ADMD=A/C=NN/ and
2618:
2618(continued):
                mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is
2619:
                encoded on the LHS.
2620:
2621:
'yy' on a line without 'yyyy' found at line 2665:
2663:
                               = "XX"
2664:
                               = "YY"
                   ADMD
2665:
                               = "ZZ"
2666:
                   "RFC-822" = "Smith(a)ZZ.YY.XX"
2667:
'yy' on a line without 'yyyy' found at line 2667:
2665: ADMD = "YY"
2665:
                               = "ZZ"
2666:
                   0
```

```
"RFC-822" = "Smith(a)ZZ.YY.XX"
2667:
2668:
2669:
          This is mapped first to an RFC 822 address, and then back to
2669(continued):
                                 the
'yy' on a line without 'yyyy' found at line 2673:
2671:
                              = "XX"
2672:
                  C
                              = "YY"
                  ADMD
2673:
                              = "ZZ"
2674:
                  0
                              = "Smith"
2675:
                  Surname
UTCTime found at line 1483:
          the full BNF easier to parse.
1481:
1482:
1483:
       3.3.5.
               UTCTime
1484:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1485:
1485(continued):
                                 ear
UTCTime found at line 1485:
1483:
      3.3.5. UTCTime
1484:
1485:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Y
1485(continued):
                                 ear
          (lowest two digits), Month, Day of Month, hour, minute, secon
1486:
1486(continued):
          (optional), and Timezone. 822.date-time also contains an opt
1487:
1487(continued):
                                 ional
UTCTime found at line 1494:
               In practice, a gateway will need to parse various illega
1492:
1492(continued):
1493:
               variants on 822.date-time. In cases where 822.date-time
1493(continued):
               cannot be parsed, _it is recommended that the derived UTC
1494:
1494(continued):
                                 Time
               is set to the value at the time of translation.
1495:
1496:
UTCTime found at line 1497:
               is set to the value at the time of translation.
1495:
1496:
1497:
          When mapping to X.400, the UTCTime format which specifies the
1497(continued):
          timezone offset shall be used.
1498:
1499:
```

```
UTCTime found at line 5143:
5141:
5142:
             The extended syntax of zone defined in the JNT Mail Protoc
5142(continued):
                                 ol shall
             be used in the mapping of UTCTime defined in Chapter 3.
5143:
5144:
5145:
          7. Lack of 822-MTS originator specification
+=+=+=+= File rfc1330.txt +=+=+=+=
2000 found at line 1770:
          While ESnet will provide X.400 routing service for systems, i
1768(continued):
                                 t cannot
          provide routing via commercial X.400 carriers at this time.
1769:
1769(continued):
                                 The
1770:
          FTS-2000 charge for routing X.400 messages is $.45 (US) plus
1770(continued):
                                 X.25
          packet charges.
                            This could result in a charge of several dol
1771:
1771(continued):
                                 lars for
          large messages, a real possibility with the multi-media capac
1772:
1772(continued):
                                 ity of
+=+=+=+= File rfc1336.txt +=+=+=+=
2000 found at line 378:
                  where growing above 100 network numbers seemed excess
376:
376(continued):
                  Todays number of networks in the global infrastructur
377:
377(continued):
                  exceeds 2000 connected networks, and many more if iso
378:
378(continued):
                         lated
                  network islands get included.
379:
380:
+=+=+=+= File rfc1338.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 401: 399: 3.2. Historic growth rates
400:
                       ROUTES
                                                      MM/YY
401:
            MM/YY
                                                                 ROUTES
402:
                       ADVERTISED
                                                                 ADVERTIS
402(continued):
                         ED
403:
403(continued):
'yy' on a line without 'yyyy' found at line 1060:
1058:
             1071 Beal Ave.
1059:
             Ann Arbor, MI 48109
             email: jyy@merit.edu
1060:
1061:
1062:
```

```
+=+=+=+= File rfc1340.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 3390:
3388:
                                             DEC Local Area Transport
          AB-00-03-00-00-00
                                     6004
3388(continued):
                                   (LAT) - old
                                     ????
3389:
          AB-00-04-00-xx-xx
                                              Reserved DEC customer private
3389(continued):
                                  use
3390:
                                              DEC Local Area VAX Cluster
          AB-00-04-01-xx-vv
                                     6007
3390(continued):
                                  groups
                                     Sys. Communication Architecture (SCA)
3391:
          CF-00-00-00-00-00
3392:
                                     9000
                                             Ethernet Configuration Test
3392(continued):
                                  protocol
1900 found at line 4066:
               014.000.000.063
                                   2422-650-23500 00
                                                        Tollpost-Globe AS
4064:
4064(continued):
                                   [OXG]
4065:
               014.000.000.064
                                   2422-330-02500 00
                                                        Tollpost-Globe AS
4065(continued):
                                   [OXG]
                                                        Tollpost-Globe AS
4066:
               014.000.000.065
                                   2422-350-01900 00
4066(continued):
                                   [OXG]
               014.000.000.066
                                   2422-410-00700 00
                                                        Tollpost-Globe AS
4067:
4067(continued):
                                   [OXG]
4068:
               014.000.000.067
                                   2422-539-06200 00
                                                        Tollpost-Globe AS
4068(continued):
                                   [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:
               014.000.000.018
                                   2624-522-80900 52
                                                        FGAN-SIEMENS-X25
4011:
                                  [GB7]
4011(continued):
               014.000.000.019
                                   2041-170-10000 00
                                                        SHAPE-X25
4012:
4012(continued):
                                  [JFW]
               014.000.000.020
                                   5052-737-20000 50
                                                        UQNET
4013:
4013(continued):
                                  ΓΑΧΗΊ
               014.000.000.021
                                   3020-801-00057 50
                                                        DMC-CRC1
4014:
4014(continued):
                                  [VXT]
               014.000.000.022
4015:
                                   2624-522-80329 02
                                                        FGAN-FGANFFMVAX-X25
```

[GB7]

4015(continued):

264:

```
2000 found at line 4838:
4836:
          AIX/370
                                       LOCUS
                                                                   SWIFT
4837:
          AIX-PS/2
                                       MACOS
                                                                   TAC
4838:
          BS-2000
                                                                   TANDEM
                                       MINOS
                               MOS
4839:
          CEDAR
                                                           TENEX
                                       MPE<sub>5</sub>
                                                                   TOPS10
4840:
          CGW
2000 found at line 5188:
          HAZELTINE-1520
                                                    IBM-3278-3
5186:
                                                    IBM-3278-4
5187:
          HAZELTINE-1552
                                                    IBM-3278-5
5188:
          HAZELTINE-2000
                                                    IBM-3279-2
5189:
          HAZELTINE-ESPRIT
                                                    IBM-3279-3
5190:
          HITACHI-5601
+=+=+=+= File rfc1348.txt +=+=+=+=
2000 found at line 143:
         Or in net 11110031f67293.nsap-in-addr.arpa:
141:
142:
143:
         67894444333322220000 NSAP-PTR
                                                  host.school.de.
144:
145:
         The RR data is the ASCII representation of the digits.
145(continued):
                          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
                                 Its format is "ID:: XXX//YYY", where X
               mandatory field.
260:
260(continued):
                         XX is
               the publisher-ID (the controlled symbol of the publisher
261:
261(continued):
               and YYY is the ID (e.g., report number) of the publicati
262:
262(continued):
'yy' on a line without 'yyyy' found at line 262: 260: mandatory field. Its format is "ID:: XXX//YYY", where X
                         XX is
260(continued):
               the publisher-ID (the controlled symbol of the publisher
261:
261(continued):
262:
               and YYY is the ID (e.g., report number) of the publicati
262(continued):
                         on as
               assigned by the publisher. This ID is typically printed
263:
263(continued):
```

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 publishi
681(continued):
         organizations (the XXX part of the "ID:: XXX//YYY") it is sug
682:
682(continued):
                          gested
         that the various organizations that publish reports (such as universities, departments, and laboratories) register their
683:
684:
2-digit found at line 291:
289:
290:
               The format for ENTRY date is "Month Day, Year". The mon
290(continued):
                          th must
                                                 The "Day" is a 1- or 2-d
291:
               be alphabetic (spelled out).
291(continued):
                         igit
                        The "Year" is a 4-digit number.
292:
               number.
293:
2-digit found at line 457:
      DATE (0) -- The publication date. The formats are "Month Year"
455(continued):
                          and
               "Month Day, Year". The month must be alphabetic (spelle d out).
456:
456(continued):
               The "Day" is a 1- or 2-digit number. The "Year" is a 4-
457:
457(continued):
                          diait
458:
               number.
459:
+=+=+=+= File rfc1361.txt +=+=+=+=
1900 found at line 132:
         main product of the protocol, a special timestamp format has
130:
130(continued):
                          been
131:
         established. NTP timestamps are represented as a 64-bit unsig
131(continued):
         fixed-point number, in seconds relative to 0h on 1 January 19 nued): 00. The
132:
132(continued):
         integer part is in the first 32 bits and the fraction part in
133:
133(continued):
                           the
134:
         last 32 bits. This format allows convenient multiple-precisio
134(continued):
1900 found at line 145:
         overflow some time in 2036. Should NTP or SNTP be in use in 2
143:
143(continued):
                          036,
         some external means will be necessary to qualify time relativ
144(continued):
                         e to
```

```
1900 and time relative to 2036 (and other multiples of 136 ye
145:
145(continued):
                        ars).
         Timestamped data requiring such qualification will be so prec
146(continued):
                        ious
         that appropriate means should be readily available. There wil
147:
147(continued):
                        l exist
+=+=+=+= File rfc1379.txt +=+=+=+=
2000 found at line 847:
845:
846:
         objective an MSL of at least 2000 seconds. If there were no
847:
847(continued):
                        TIME-
         WAIT delay, the ultimate limit on transaction rate would be s
848(continued):
                        et by
849:
         speed-of-light delays in the network and by the latency of ho
849(continued):
                        st
2000 found at line 988:
            the official delay of 240 seconds, formula [1] implies a u
986:
986(continued):
            d): pper
bound (as RTT -> 0) of TRmax = 268 Tps; with our target MS
987:
987(continued):
                        L of
            2000 sec, TRmax = 32 Tps. These values are unacceptably l
988:
988(continued):
                        OW.
989:
            To improve this transaction rate, we could use TCP timesta
990:
990(continued):
                        mps to
2000 found at line 1079:
             segment lifetime MSL. For reasonable limiting values of R
1077:
                                   Ts,
1077(continued):
             and MSL, formula [6] leads to a very low value of TRmax.
1078:
1078(continued):
                                 For
             example, with MSL= 2000 secs, R=10**9 Bps, and Ts=0.5 se
1079:
1079(continued):
                                 c, TRmax
             < 2*10**-3 Tps.
1080:
1081:
2000 found at line 1136:
                  TRmax * MSL < 2**31
1134:
1135:
1136:
             For example, if MSL = 2000 seconds then TRmax < 10**6 Tp.
1136(continued):
                                   These
             are acceptable limits for transaction processing.
1137(continued):
             they are not, we could augment CC with TCP timestamps to o
1138:
1138(continued):
                                 btain
```

```
2000 found at line 1276:
1274:
1275:
             (a) no timestamps
                                        2**31/MSL
                                                           MSL
                                                                       3rd seq
1275(continued):
                                   uence
                                  e.g., MSL=2000 sec
1276:
1276(continued):
                                   space
                                        TRmax = 10**6
1277:
1278:
+=+=+=+= File rfc1405.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 378:
376:
         maps into
377:
               C=xx; ADMD=yyy; PRMD=zzz; 0=ooo; OU=uuu; DD.Dnet=net;
378:
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 convers
383(continued):
                          ion
               yyy = Admd of the gateway performing the conversion zzz = Prmd of the gateway performing the conversion
384:
385:
               ooo = Organisation of the gateway performing the convers
386:
386(continued):
                          ion
'yy' on a line without 'yyyy' found at line 474: 472: it is connected to. In this case the
            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:
          (see sect. 5.2 for explication of 'xx', 'yyy', 'zzz', 'ooo', 'uuu
477:
                           ,'net')
477(continued):
478:
479:
         maps into
'yy' on a line without 'yyyy' found at line 487:
485:
            described into section 5.4 apply:
486:
               C=xx; ADMD=yyy; PRMD=www; DD.Dnet=net;
487:
488:
               DD.Mail-11=route::node::localpart;
489:
```

```
'yy' on a line without 'yyyy' found at line 492:
490:
         maps into
491:
              gwnode::gw%"C=xx;ADMD=yyy;PRMD=www;DD.Dnet=net;
492:
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 RE
309(continued):
                        PLY
                                               KERBEROS V4 CLIENT|MUTUA
310:
310(continued):
311:
                                               RESPONSE yy yy yy yy
311(continued):
                        уу уу уу
312:
                                               IAC SE
313:
+=+=+=+= File rfc1411.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 163:
                                               IAC SB AUTHENTICATION RE
161:
161(continued):
                        PLY
162:
                                               KERBEROS V4 CLIENT|MUTUA
162(continued):
                                               RESPONSE yy yy yy yy
163:
163(continued):
                        уу уу уу
                                               IAC SE
164:
165:
+=+=+=+= File rfc1415.txt +=+=+=+=
2000 found at line 2814:
                       1016 Grouping threshold violation
                                                                 ı
                                                                      503
2812:
2812(continued):
                       1017 Inconsistent PDU request
                                                                      503
2813:
2813(continued):
                       2000 Association with user not allowed
2814:
                                                                      532
2814(continued):
                       2002 Unsupported service class
                                                                      504
2815:
2815(continued):
                       2003 Unsupported functional unit
                                                                      211
2816:
2816(continued):
```

```
+=+=+=+= File rfc1416.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 318:
316:
                                               IAC SB AUTHENTICATION RE
316(continued):
                        PLY
317:
                                               KERBEROS V4 CLIENT|MUTUA
317(continued):
                                               RESPONSE yy yy yy yy
318:
318(continued):
                        уу уу уу
                                               IAC SE
319:
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:
         Rapport Communication
196:
         3055 Q Street NW
197:
198:
         Washington, DC
                         20007
199:
200:
         Phone: +1 202-342-2727
+=+=+=+= File rfc1421.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1148:
           BAoTF1JTQSBEYXŘÍNÍFNLY3VyaXR5LCBJbmMuMQ8wDQYDVQQLEwZCZXRhIDEx
1146:
                                 DTAL
1146(continued):
           BgNVBAsTBFRMQ0EwHhcNOTEwOTAxMDgwMDAwWhcNOTIwOTAxMDc1OTU5WjBR
1147:
1147(continued):
                                 MQsw
           CQYDVQQGEwJVUzEgMB4GA1UEChMXUlNBIERhdGEgU2VjdXJpdHksIEluYy4x
1148:
1148(continued):
                                 DZAN
1149:
           BqNVBAsTBkJldGEqMTEPMA0GA1UECxMGTk9UQVJZMHAwCqYEVQqBAQICArwD
1149(continued):
                                 YgAw
           XwJYCsnp6lQCxYykNl0DwutF/jMJ3kL+3PjYyH0wk+/9rLq6X65B/LD4bJHt
1150:
1150(continued):
                                 05XW
'yy' on a line without 'yyyy' found at line 1150:
           CQYDVQQGEwJVUzEgMB4GA1UEChMXUlNBIERhdGEgU2VjdXJpdHksIEluYy4x
1148:
1148(continued):
                                 DZAN
           BgNVBAsTBkJldGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwD
1149:
1149(continued):
                                 YgAw
           XwJYCsnp6lQCxYykNl0DwuŤF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt
1150:
                                 05XW
1150(continued):
           cqAz/7R7XhjYCm0PcqbdzoACZtIlETrKrcJiDYoP+DkZ8k1gCk7hQHpbIwID
1151:
1151(continued):
                                 AQAB
```

```
1152:
           MAOGCSqGSIb3DQEBAgUAA38AAICPv4f9Gx/tY4+p+4DB7MV+tKZnvBoy8zgo
1152(continued):
                                  MG0x
'yy' on a line without 'yyyy' found at line 1256:
1254: BAoTF1JTQSBEYXRhIFNlY3VyaXR5LCBJbmMuMQ8wDQYDVQQLEwZCZXRhIDEx
1254:
1254(continued):
                                  DTAL
           BgNVBAsTBFRMQ0EwHhcNOTEwOTAxMDgwMDAwWhcNOTIwOTAxMDc10TU5WjBR
1255:
1255(continued):
                                  M0sw
1256:
           CQYDVQQGEwJVUzEqMB4GA1UEChMXUlNBIERhdGEqU2VjdXJpdHksIEluYy4x
1256(continued):
                                  Dzan
           BqNVBAsTBkJldGEqMTEPMA0GA1UECxMGTk9UQVJZMHAwCqYEVQqBAQICArwD
1257:
1257(continued):
                                  YgAw
           XwJYCsnp6lQCxYykNl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt
1258:
1258(continued):
                                  05XW
'yy' on a line without 'yyyy' found at line 1258:
1256:
           COYDVOOGEwJVUzEqMB4GA1UEChMXUlNBIERhdGEqU2VidXJpdHksIEluYy4x
1256(continued):
                                  DZAN
1257:
           BgNVBAsTBkJldGEgMTEPMA0GA1UECxMGTk9UQVJZMHAwCgYEVQgBAQICArwD
1257(continued):
                                  YgAw
           XwJYCsnp6lQCxYykNl0DwutF/jMJ3kL+3PjYyH0wk+/9rLg6X65B/LD4bJHt
1258:
1258(continued):
                                  05XW
           cqAz/7R7XhjYCm0PcqbdzoACZtIlETrKrcJiDYoP+DkZ8k1qCk7hQHpbIwID
1259:
1259(continued):
                                  AOAB
           MAOGCSqGSIb3DQEBAgUAA38AAICPv4f9Gx/tY4+p+4DB7MV+tKZnvBov8zqo
1260:
1260(continued):
                                  MG0x
+=+=+=+= File rfc1422.txt +=+=+=+=
UTCTime found at line 1596:
1594:
1595:
          Validity ::=
                            SEQUENCE{
                                    ŪTCTime,
1596:
                   notBefore
1597:
                   notAfter
                                    UTCTime}
1598:
UTCTime found at line 1597:
                            SEQUENCE{
1595:
          Validity ::=
1596:
                   notBefore
                                    UTCTime.
1597:
                   notAfter
                                    UTCTime }
1598:
          SubjectPublicKeyInfo ::=
                                             SEQUENCE{
1599:
UTCTime found at line 1640:
1638:
                                    AlgorithmIdentifier,
                   signature
1639:
                   issuer
                                    Name.
                                    UTCTime,
1640:
                   lastUpdate
1641:
                   nextUpdate
                                    UTCTime,
1642:
                   revokedCertificates
```

```
UTCTime found at line 1641:
1639:
                   issuer
                                    Name,
1640:
                   lastUpdate
                                    UTCTime,
                   nextUpdate
1641:
                                    UTCTime.
                   revokedCertificates
1642:
1643:
                                    SEQUENCE OF CRLEntry OPTIONAL
UTCTime found at line 1647:
          CRLEntry ::= SEQUENCE{
1645:
                   userCertificate SerialNumber,
1646:
1647:
                   revocationDate UTCTime}
1648:
1649:
      References
century found at line 463:
         confusion relating to daylight savings time. Note that UTCT
461:
         expresses the value of a year modulo 100 (with no indication
462:
462(continued):
         century), hence comparisons involving dates in different cent
463:
463(continued):
                         uries
         must be performed with care.
464:
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
                                                  1221 Ave. of the Ameri
712:
                 fax: 617-276-4314
712(continued):
                         cas
713:
                 Digital Equipment Corporation
                                                  New York, NY 10020
+=+=+=+= File rfc1437.txt +=+=+=+=
2000 found at line 185:
         generation of the X.400 specification, X.400-1996.
183:
183(continued):
                          give
         the community ample time to define a more complete specificat
184:
184(continued):
                         ion for
         matter transport as part of X.400-2000, and possibly even a r
185:
                         eadily-
185(continued):
         implementable specification as part of X.400-2004, although s
186:
186(continued):
                         ome will
187:
         no doubt argue that this would be too strong a break with tra
187(continued):
                         dition.
+=+=+=+= 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
```

```
330(continued):
                         may be
         sent and applied to the copy at the receiving site. The form
331:
331(continued):
                          is US
                                  A time zone is optional. If the time
332:
         mm/dd/yy and hh:mm:ss.
332(continued):
                          zone is
         omitted, local time is assumed. If the DATE command is omitt
333:
         nued): ed, time and date of arrival are assumed.
333(continued):
334:
+=+=+=+= File rfc1442.txt +=+=+=+=
UTCTime found at line 362:
                BEGIN
360:
                     TYPE NOTATION ::=
361:
                                   "LAST-UPDATED" value(Update UTCTime)
362:
362(continued):
363:
                                   "ORGANIZATION" Text
                                   "CONTACT-INFO" Text
364:
UTCTime found at line 378:
                                 | Revisions Revision
376:
377:
                     Revision ::=
                                   "REVISION" value(Update UTCTime)
378:
379:
                                   "DESCRIPTION" Text
380:
+=+=+=+= File rfc1453.txt +=+=+=+=
1900 found at line 516:
514:
         [XTP92]
515:
                      Xpress Transfer Protocol, version 3.6, XTP Forum,
515(continued):
                      1900 State Street, Suite D, Santa Barbara, Califo
516:
516(continued):
                         rnia
                      93101 USA, January 11, 1992.
517:
518:
+=+=+=+= File rfc1458.txt +=+=+=+=
2000 found at line 1026:
          Reading, MA 01867
1024:
1025:
                  (617) 942-2000
1026:
          Phone:
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:
500:
501:
'yy' on a line without 'yyyy' found at line 500:
498:
499:
           <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \
                                 "; START=" 'yymmdd' \
["; END=" 'yymmdd'] <CR>
500:
501:
                     The <Update-info> contains also the format ident
502:
502(continued):
                       ifier.
'yy' on a line without 'yyyy' found at line 501:
           499:
500:
501:
502:
                     The <Update-info> contains also the format ident
                       ifier.
502(continued):
503:
'yy' on a line without 'yyyy' found at line 512:
510:
511:
                     The date of the last update of a document is giv
511(continued):
                       en in
512:
                     the form 'yymmdd'.
513:
                     A start date must be set. A document can be pub
513(continued):
                       lished
                     this way before the information in it is valid.
514:
514(continued):
                        (This
'yy' on a line without 'yyyy' found at line 1673:
1671:
                                  | <DirectoryName> )
1672:
            <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \
1673:
                                  "; START=" 'yymmdd' \
1674:
                                  ["; END=" 'yymmdd'] <CR>
1675:
'yy' on a line without 'yyyy' found at line 1674: 1672:
1673:
            <Update-info> ::= "Update: FORMAT=V3; DATE=" 'yymmdd' \
```

```
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```

```
1674:
1675:
1676:

'yy' on a line without 'yyyy' found at line 1675:
1673:
1674:
1674:
1675:
1675:
1676:
1677:

'"; START=" 'yymmdd' \
"; START=" 'yymmdd' \
"; START=" 'yymmdd' \
"; START=" 'yymmdd' \
["; END=" 'yymmdd'] < CR>
1676:
1677:

<window-size> ::= "RTS-window-size: " \
```

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```
+=+=+=+= File rfc1467.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 408:
406:
407:
         [6] Solensky, F., Internet Growth Charts, "big-internet" mail
407(continued):
                        ing
408:
             list, munnari.oz.au:big-internet/nsf-netnumbers-<yymm>.ps
408(continued):
409:
410: 9. Other relevant documents
+=+=+=+= File rfc1470.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 247:
245:
         DATE OF MOST RECENT UPDATE TO THIS CATALOG ENTRY
246:
247:
                 <YYMMDD>
248:
249:
      Keywords
2000 found at line 4696:
                      libraries), but this has not been done. Curses i
4694:
                                s very
4694(continued):
                      slow and cpu intensive on VMS, but the tool has b
4695:
4695(continued):
                      run in a window on a VAXstation 2000.
4696:
                                                              Just don't
4696(continued):
                                 trv
                      to run it on a terminal connected to a 11/750.
4697:
4698:
+=+=+=+= File rfc1479.txt +=+=+=+=
century found at line 752:
         We note that none of the IDPR protocols contain explicit prov
750(continued):
                        isions
751:
         for dealing with an exhausted timestamp space. As timestamp
751(continued):
                        space
         exhaustion will not occur until well into the next century. w
752:
752(continued):
                        e expect
         timestamp space viability to outlast the IDPR protocols.
753:
754:
+=+=+=+= File rfc1486.txt +=+=+=+=
2000 found at line 745:
              Date: Sun, 11 Apr 1993 20:34:12 -0800
743:
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 Prin
302(continued):
                        table
         Strings with the strings containing a UTCTime value.
303:
304:
UTCTime found at line 303:
301:
302:
         Values of type uTCTimeSyntax are encoded as if they were Prin
302(continued):
                        table
         Strings with the strings containing a UTCTime value.
303:
304:
305:
      2.22. Guide (search guide)
UTCTime found at line 377:
       <algorithm-id> ::= <oid> '#' <algorithm-parameters>
375:
376:
       <utc-time> ::= an encoded UTCTime value
377:
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.
1948(continued):
1949:
1950:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
1950(continued):
                                umber.
1951:
                                               and 'yyy' is 'txt' or 'ps
1951(continued):
1952:
'yy' on a line without 'yyyy' found at line 1951:
1949:
                                               where 'nnnn' is the RFC n
1950:
                file /ftp/rfc/rfcnnnn.yyy
1950(continued):
                                umber.
1951:
                                               and 'yyy' is 'txt' or 'ps
1951(continued):
1952:
                                               to get information on how
1953:
                help
1953(continued):
                                  to use
+=+=+=+= File rfc1507.txt +=+=+=+=
UTCTime found at line 5111:
5109:
```

```
5110:
          Validity ::= SEQUENCE {
                                    UTCTime,
5111:
                   NotBefore
5112:
                   NotAfter
                                    UTCTime
5113:
                   }
UTCTime found at line 5112:
5110:
          Validity ::= SEQUENCE {
                                    UTCTime.
5111:
                   NotBefore
5112:
                   NotAfter
                                    UTCTime
5113:
                   }
5114:
UTCTime found at line 6297:
                             INTEGER { 1988(0)} SerialNumber ::= INTEGER
6295:
          Version ::=
6295(continued):
                                  Validity
6296:
          ::=
                   SEQUENCE{
6297:
                                             UTCTime,
                   notBefore
6298:
                   notAfter
                                             UTCTime }
6299:
UTCTime found at line 6298:
                   SEQUENCE{
6296:
          ::=
6297:
                                             UTCTime,
                   notBefore
6298:
                                             UTCTime }
                   notAfter
6299:
          SubjectPublicKeyInfo ::= SEQUENCE {
6300:
+=+=+=+= File rfc1512.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 243:
241:
                 FddiSMTStationIdType ::= OCTET STRING (SIZE (8))
                 -- The unique identifier for the FDDI station. This i
242:
242(continued):
                          s a
243:
                 -- string of 8 octets, represented as X' yy yy xx xx x
243(continued):
                         X XX
                 -- xx xx' with the low order 6 octet (xx) from a uniqu
244:
244(continued):
                          e IEEE
                 -- assigned address. The high order two bits of the I
245:
245(continued):
                          EEE
'yy' on a line without 'yyyy' found at line 248:
246: -- address, the group address bit and the administrati
246(continued):
                          on bit
                 -- (Universal/Local) bit should both be zero.
247:
                                                                   The fir
247(continued):
                          st two
                 -- octets, the yy octets, are implementor-defined.
248:
249:
250:
                 -- The representation of the address portion of the st
250(continued):
                         ation id
```

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```
+=+=+=+= 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
                                                               ADVERTIS
402(continued):
                       ED
403:
403(continued):
'yy' on a line without 'yyyy' found at line 1318:
          Ann Arbor, MI 48109
1316:
1317:
1318:
          EMail: ivv@merit.edu
1319:
1320:
+=+=+=+= File rfc1527.txt +=+=+=+=
century found at line 793:
791:
         ubiquitous as the current telephone network and provides all
         Americans with access to information in much the same way as
792:
                        public
792(continued):
793:
        libraries were created for a similar purpose a century ago.
794:
795:
         Congress must understand that the NREN is not just a new tech
795(continued):
                        nology
century found at line 875:
873:
         regulated companies from becoming viable players. We must re
873(continued):
                        alize
         that we are about to enter a power struggle for the control o
874:
874(continued):
                        f the
         information resources of the 21st century that promises to be
875:
875(continued):
                         every
         bit as harsh and bruising as the power struggle for natural r
876:
876(continued):
                        esources
877:
        was at the end of the last century.
century found at line 877:
         information resources of the 21st century that promises to be
875:
875(continued):
                         every
876:
         bit as harsh and bruising as the power struggle for natural r
876(continued):
                        esources
877:
        was at the end of the last century.
878:
879:
         While the intentions of most appear to be good, as this study
879(continued):
                         has
```

```
+=+=+=+= File rfc1537.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 165: 163: Example: zone file for foo.xx:
164:
165:
                       MX 100
         pqr
                                relay.yy.
                       MX 100
166:
                                                  (no trailing dot!)
                                relay.yy
         XYZ
167:
'yy' on a line without 'yyyy' found at line 166:
164:
                       MX 100
                                relay.yy.
165:
         pqr
                       MX 100
                                                  (no trailing dot!)
166:
         XYZ
                                relay.yy
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:
            par.foo.xx. MX 100
                                   relay.yy.
178:
            xyz.foo.xx. MX 100 relay.yy.foo.xx. (name extension!)
179:
180: 6. Missing secondary servers
    on a line without 'yyyy' found at line 256:
254:
255:
                foo.xx.
                             MX 100
                                      gateway.xx.
256:
                             MX 200
                                      fallback.yy.
                             MX 100
MX 200
257:
                *.foo.xx.
                                      gateway.xx.
258:
                                      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:
                86400 ; Refresh
                                    24 hours
87:
                 7200 ; Retry
                                     2 hours
88:
```

```
89:
             2592000 ; Expire
                                   30 days
90:
              345600 ; Minimum TTL 4 days
91:
+=+=+=+= File rfc1540.txt +=+=+=+=
                                               The text version is sent.
1836:
1836(continued):
1837:
                                              where 'nnnn' is the RFC n
1838:
                file /ftp/rfc/rfcnnnn.yyy
1838(continued):
                                umber.
                                               and 'yyy' is 'txt' or 'ps
1839:
1839(continued):
1840:
'yy' on a line without 'yyyy' found at line 1839:
1837:
1838:
                file /ftp/rfc/rfcnnnn.yyy
                                              where 'nnnn' is the RFC n
1838(continued):
                                umber.
                                               and 'yyy' is 'txt' or 'ps
1839:
1839(continued):
1840:
1841:
                help
                                               to get information on how
1841(continued):
                                 to use
+=+=+=+= File rfc1555.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 155:
         In addition, Listserv usually maintains automatic archives of
153:
153(continued):
                         all
154:
         postings to a list.
                              These archives, contained in the file "l
154(continued):
                        istname
         LOGyymm", do not contain the MIME headers, so all encoding
155:
156:
         information will be lost. This is a limitation of the Listse
156(continued):
         software.
157:
+=+=+=+= File rfc1564.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 811:
809:
810:
         The following searches should be tried. Unless otherwise sta
810(continued):
                       ted, the
         "XXX" or "YYY" part of the search filter should be chosen in
811:
811(continued):
                        such a
         way as to return a single result. Unless stated otherwise th
812:
812(continued):
         results should return all attributes for the entry.
813:
```

```
'yy' on a line without 'yyyy' found at line 848:
846:
847:
                 objectClass=person AND
                 (commonName=XXXX* OR telephoneNumber=*YYY)
848:
849:
850:
         75. Search returning all entries (i.e., 100 entries in the si
850(continued):
                        nale
2000 found at line 527:
525:
         42. If the DSA runs as a static server, state the start-up ti
526:
526(continued):
                        me for a
             DSA with a database of 20000 entries. If this varies wid
527:
527(continued):
                        elv
528:
             according to configuration options, give figures for the
528(continued):
                        various
529:
             options.
529(continued):
                         . . . . . . . .
2000 found at line 709:
707:
708:
         i. The tests should be made against an organisational databa
708(continued):
                         se of
             20000 entries. Some tests are against subsets of this da
709(continued):
                        ta, and
             so the database should be set up according to the followi
710:
710(continued):
711:
             instructions.
2000 found at line 713:
             instructions.
711:
712:
713:
             Create an organisational DSA with 20000 entries below the
713(continued):
             organisation node. Sub-divide this data into a number of
714:
714(continued):
             organisational units, one of which should contain 1000 en
715:
715(continued):
                        tries.
2000 found at line 808:
             unit.
806:
807:
         ii. An organisation subtree search, on the subtree of 20000 e
808:
808(continued):
                        ntries.
809:
         The following searches should be tried. Unless otherwise sta
810:
810(continued):
                        ted, the
```

```
2000 found at line 851:
849:
850:
         75. Search returning all entries (i.e., 100 entries in the si
850(continued):
                        ngle
             level search, and all 20000 entries in the subtree search
851:
851(continued):
852:
                 objectClass=*
853:
+=+=+=+= File rfc1578.txt +=+=+=+=
2000 found at line 1946:
          700 13th Street, NW
1944:
          Suite 950
1945:
          Washington, DC 20005
1946:
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 MAXFREO 100
                                          /* max frequency error (ppm)
1981(continued):
+=+=+=+= File rfc1593.txt +=+=+=+=
2000 found at line 1088:
1086:
                                   response(6)
1087:
                         enumeration values between 2000 and 3999 are r
1088:
1088(continued):
                                 eserved
1089:
                         for IP socket traces,
1090:
2000 found at line 1149:
                                   testReg(26),
1147:
1148:
                         enumeration values between 2000 and 3999 are r
1149:
1149(continued):
                                 eserved
                         for IP socket traces.
1150:
        --
1151:
                                   ipTestFrame(2001),
+=+=+=+= File rfc1594.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 379:
377:
                                              The text version is sent.
377(continued):
378:
```

```
379:
               file /ftp/rfc/rfcnnnn.yyy
                                              where 'nnnn' is the RFC n
379(continued):
                        umber.
380:
                                              and 'yyy' is 'txt' or 'ps
380(continued):
381:
'yy' on a line without 'yyyy' found at line 380:
378:
                                              where 'nnnn' is the RFC n
379:
               file /ftp/rfc/rfcnnnn.yyy
379(continued):
                        umber.
                                              and 'yyy' is 'txt' or 'ps
380(continued):
381:
382:
                                              to get information on how
               help
382(continued):
                         to use
'yy' on a line without 'yyyy' found at line 574:
            In addition, back issues of the Report are available for a
572:
572(continued):
                        nonymous
            FTP from the host ftp.isi.edu in the in-notes/imr director
573:
                        y, with
573(continued):
574:
            the file names in the form imryymm.txt, where yy is the la
                        st two
574(continued):
            digits of the year and mm two digits for the month.
575:
575(continued):
                        xample.
            the July 1992 Report is in the file imr9207.txt.
576:
+=+=+=+= File rfc1595.txt +=+=+=+=
2000 found at line 300:
298:
299:
                 ifSpeed
                                    Speed of line rate for SONET/SDH,
                                    (e.g., 155520000 bps).
300:
301:
                                    The value of the Circuit Identifier
302:
                 ifPhvsAddress
302(continued):
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
359(continued):
                        of
+=+=+=+= File rfc1600.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1950:
1948:
                                               The text version is sent.
1948(continued):
```

13:

14: Status of this Memo century found at line 60:

58: Cerf [Page 1] 58(continued): 59:

RFC 1607 A View from the 21st Century 60: 1 Ap ril 1994 60(continued):

61: 62:

century found at line 116: 114: Cerf

114(continued):

[Page 2] 115:

RFC 1607 A View from the 21st Century 1 Ap **116**: ril 1994 116(continued):

117: 118:

century found at line 172:

170: Cerf

170(continued): [Page 3]

171:

172: RFC 1607 A View from the 21st Century 1 Ap

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```
century found at line 508:
506: Cerf
                   [Page 9]
506(continued):
507:
508: RFC 1607 A Vie
508(continued): ril 1994
                             A View from the 21st Century
                                                                      1 Ap
509:
510:
century found at line 564:
                                                                         562: Cerf
                    Page 10]
562(continued):
563:
564: RFC 1607 A Vie
564(continued): ril 1994
                             A View from the 21st Century
                                                                      1 Ap
565:
566:
century found at line 620:
618: Cerf
                                                                         618(continued): Page 11]
619:
620: RFC 1607
                             A View from the 21st Century
                                                                      1 Ap
620: RFC 1607 A Vie
620(continued): ril 1994
621:
622:
century found at line 676:
                                                                         Г
674: Cerf
                   Page 12]
674(continued):
675:
676: RFC 1607
                             A View from the 21st Century
                                                                      1 Ap
676(continued):

A Vie
677:
678:
century found at line 732:
                                                                         730: Cerf
730(continued):
                    Page 13]
731:
732:
     RFC 1607
                             A View from the 21st Century
                                                                     1 Ap
732: RFC 100/ A VIO
732(continued): ril 1994
733:
734:
2000 found at line 663:
         transmission, switching and computing in a cost-effective way. For a long time, this technology involved rather
661:
662:
```

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```
bulky equipment - some of the early 3DV clips from 2000-
2005 showed rooms full of gear required to steer beams
663:
664:
665:
         around. A very interesting combination of fiber optics and
+=+=+=+= File rfc1608.txt +=+=+=+=
UTCTime found at line 240:
238:
                       :: DistinguishedNameSvntax.
           provider
            /* points to network provider */
239:
240:
           onlineDate :: uTCTimeSyntax
            /* date when network got connected to the Internet */
241:
242:
UTCTime found at line 370:
           asGuardian :: DistinguishedNameSyntax, */
368:
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
                imply that assTo "owns" this number now. */
422:
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
1049(continued):
                                          id-nw-at.14
                                                          :caseIgnoreString
1050:
          nodeName, nd:
1050(continued):
UTCTime found at line 1071:
1069:
1070:
1071:
          onlineDate:
                                          id-nw-at.27
                                                          :utcTime
1072:
           ipNodeName,IPnd:
                                          id-nw-at.28
                                                          :caseIgnoreString
1072(continued):
          protocol:
1073:
                                          id-nw-at.29
                                                          :caseIgnoreString
1073(continued):
UTCTime found at line 1083:
          assBy:
                                          id-nw-at.37
                                                          : DN
1081:
1082:
          assTo:
                                          id-nw-at.38
                                                          : DN
                                                          :utcTime
1083:
          assDate:
                                          id-nw-at.39
```

```
1084:
          nicHandle:
                                        id-nw-at.40
                                                       :caseIgnoreString
1084(continued):
          relNwElement:
1085:
                                        id-nw-at.41
                                                       : DN
+=+=+=+= File rfc1609.txt +=+=+=+=
UTCTime found at line 588:
            /* (average) use in percent of nominal bandwidth
586:
                  [ this needs more specification later ] */
587:
           configurationDate :: uTCTimeSyntax,
588:
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.
1948(continued):
1949:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
1950:
1950(continued):
                                 umber.
                                               and 'yyy' is 'txt' or 'ps
1951:
1951(continued):
1952:
'yy' on a line without 'yyyy' found at line 1951:
1949:
                                               where 'nnnn' is the RFC n
1950:
                file /ftp/rfc/rfcnnnn.yyy
1950(continued):
                                 umber.
1951:
                                               and 'yyy' is 'txt' or 'ps
1951(continued):
1952:
1953:
                help
                                               to get information on how
1953(continued):
                                  to use
century found at line 926:
                   An Experimental protocol.
924:
925:
            1607 - A View from the 21st Century
926:
927:
                   This is an information document and does not specif
928:
928(continued):
                        y any
+=+=+=+= File rfc1614.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1565:
          The general format of a Gopher+ view descriptor is:
1563:
1564:
```

```
1565:
             xxx/yyy zzz: <nnnK>
1566:
1567:
'yy' on a line without 'yyyy' found at line 1575:
1573:
1574:
          where xxx is a general type-of-information advisory, yyy is w
1575:
                                 hat
1575(continued):
          information format you need understand to interpret this info
1576(continued):
                                 rmation,
          zzz is a language advisory (coded using POSIX definitions), a
1577:
1577(continued):
                                nd nnn
'yy' on a line without 'yyyy' found at line 1584:
1582:
          the need to be consistent in the use of type/encoding attribu
1582(continued):
                                 tes with
          the MIME specification.
1583:
                                    The Gopher+ Type Registry may thus
          eventually disappear, together with the set of xxx/yyy values
1584:
                                 it
1584(continued):
1585:
          currently contains.)
1586:
+=+=+=+= File rfc1625.txt +=+=+=+=
2000 found at line 255:
                   ( use = "wb", relation = "ro", term = 0 )
253:
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 r
                                 equired
3793(continued):
            to check the DN, the bind IS allowed.
3794:
          - When comparing attributes of UTCtime syntax, if the seconds
3795:
3795(continued):
                                  field
            is omitted, QUIPU does not perform the match correctly (i.e.
                                ., the
3796(continued):
            seconds field in the attribute values should be ignored, bu
3797:
3797(continued):
                                t are
```

```
2000 found at line 1214:
           1-800-257-OPEN (U.S. and Canada)
1212:
1213:
           1-612-482-6736 (worldwide)
           FAX: 1-612-482-2000 (worldwide)
1214:
1215:
           EMAIL: info@cdc.com
1216:
                    or
+=+=+=+= File rfc1635.txt +=+=+=+=
1900 found at line 605:
         Most archive machines perform other functions as well. Pleas
603(continued):
         respect the needs of their primary users and restrict your FT
604(continued):
                        P access
         to non-prime hours (generally between 1900 and 0600 hours loc
605(continued):
                        al time
         for that site) whenever possible. It is especially important
606(continued):
                         to
         remember this for sites located on another continent or acros
607:
607(continued):
                        s 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:
         The HOLDuntil command allows for the delayed delivery of a me
592:
592(continued):
                        ssage,
+=+=+=+= File rfc1646.txt +=+=+=+=
2000 found at line 428:
426:
427:
                      Command Rejected
                                                             0X10030000
428:
                      Intervention Required
                                                             0X08020000
                      Data Check
429:
                                                             0X10010000
430:
                      Operation Check
                                                             0X10050000
2000 found at line 431:
429:
                      Data Check
                                                             0X10010000
                      Operation Check
430:
                                                             0X10050000
                      Component Disconnected (LU)
431:
                                                             0X08020000
432:
433:
         Note 2*:
                    Device End - A positive response to the Server's
433(continued):
                        data
+=+=+=+= File rfc1647.txt +=+=+=+=
2000 found at line 1355:
                                        Command Reject
1353:
                        0x00
                                                               0x10030000
```

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```
1353(continued):
1354:
1355:
                        0x01
                                    Intervention Required
                                                              0x08020000
1355(continued):
1356:
                                       Operation Check
1357:
                        0x02
                                                              0x10050000
1357(continued):
+=+=+=+= File rfc1671.txt +=+=+=+=
1900 found at line 410:
408:
                 +41 22 767-4967
         Phone:
409:
                 +41 22 767-7155
         Fax:
410:
                 419000 cer ch
         Telex:
411:
         EMail: brian@dxcoms.cern.ch
412:
+=+=+=+= File rfc1679.txt +=+=+=+=
century found at line 95:
        examined below. The time frame for design, development, and
93:
94:
        deployment of HPN based systems and subsystems is 1996 into t
                        he
94(continued):
95:
        twenty first century.
96:
97:
        Three general problem domains have been identified by the HPN
97(continued):
                         working
+=+=+=+= File rfc1689.txt +=+=+=+=
century found at line 6899:
6897:
          vision of how information management must change in the 1990s
6897(continued):
                                 to meet
6898:
          the social and economic opportunities and challenges of the 2
6898(continued):
                                 1st
6899:
          century. Members of the Coalition Task Force include, among
                                others,
6899(continued):
          higher education institutions, publishers, network service pr
6900:
6900(continued):
                                oviders,
          computer hardware, software, and systems companies, library n
6901(continued):
                                etworks
2000 found at line 421:
            archie did for the world of ftp. A central server periodi
419:
419(continued):
                        cally
            scans the complete menu hierarchies of Gopher servers appe
420:
420(continued):
                        aring on
```

```
421:
            an ever-expanding list (over 2000 sites as of November 199
421(continued):
                         3).
                               The
422:
             resulting index is provided by a veronica server and can b
422(continued):
423:
            accessed by any gopher client.
2000 found at line 471:
469:
            There are currently (as of November 1993) some 500 registe
470:
470(continued):
                         red WAIS
            databases with an estimated 2000 additional databases that
471(continued):
                          are not
            yet registered. There are approximately another 100 comme
472:
472(continued):
                         rcial
473:
            WAIS databases.
+=+=+=+= File rfc1693.txt +=+=+=+=
2000 found at line 574:
                 Baker
                                                         $849
                                                                 Sportswea
572:
                                 Boston
572(continued):
                                 Washington
                                                       $3,100
                                                                 Weiahts
573:
              5
                 Baker
                                                       $2000
574:
              6
                 Baker
                                 Washington
                                                                 Camping G
574(continued):
                         ear
                                 Atlanta
                                                                 Baseball
575:
                 Baker
                                                         $290
575(continued):
                         Gloves
                                                                 Sportswea
576:
              8
                 Baker
                                 Boston
                                                       $1,500
576(continued):
+=+=+=+= File rfc1696.txt +=+=+=+=
2000 found at line 109:
107:
      mdmMIB MODULE-IDENTITY
108:
          LAST-UPDATED "9406120000Z"
109:
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]
                 {1
                              - RDN, [SET OF]
512:
                  {2
                              - AttributeValueAssertion, [SEQUENCE]
         30
             80
                  5504yy
                              -- OID identifying an attribute named in
513:
         06
             03
514:
                              -- the Directory standard
515:
                              -- which one is determined by yy
'yy' on a line without 'yyyy' found at line 515:
513:
                              -- OID identifying an attribute named in
         06
             03 5504yy
                              -- the Directory standard
-- which one is determined by yy
514:
515:
```

```
516:
         13 La xxxxxx
                             -- [Printable string]
                             -- could be T61 string, with tag 14
517:
'yy' on a line without 'yyyy' found at line 522:
520:
         The most likely attributes for an RDN have the following hex
521:
521(continued):
                        values
         for yy.
522:
523:
524:
              CommonName
                                        03
'yy' on a line without 'yyyy' found at line 903:
901:
902:
            yy is exactly one octet (i.e., one hex digit per y) holdin
903:
903(continued):
                          part
            of the length
904:
905:
'yy' on a line without 'yyyy' found at line 918:
            innermost nest of construction)
916:
917:
918:
            yy - as part of a value - a variable value, each y represe
918(continued):
                        nts 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
1052(continued):
                                 future.
+=+=+=+= File rfc1700.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 9905:
9903: AB-00-03-00-00
                                6004
                                        DEC Local Area Transport (LAT) -
                                  old
9903(continued):
                                ????
      AB-00-04-00-xx-xx
                                        Reserved DEC customer private us
9904:
9904(continued):
                                 e
                                6007
9905:
       AB-00-04-01-xx-yy
                                        DEC Local Area VAX Cluster group
9905(continued):
                                 S
                                        Sys. Communication Architecture
9906:
                                 (SCA)
9906(continued):
9907: CF-00-00-00-00
                                9000
                                        Ethernet Configuration Test prot
9907(continued):
                                 ocol
```

```
1900 found at line 10173:
10171:
         014.000.000.063
                             2422-650-23500 00
                                                  Tollpost-Globe AS
                                                                          [0X
10171(continued):
                                  G]
                                                                          [0X]
10172:
         014.000.000.064
                             2422-330-02500 00
                                                  Tollpost-Globe AS
10172(continued):
                                  G7
         014.000.000.065
10173:
                             2422-350-01900 00
                                                  Tollpost-Globe AS
                                                                          ΓΟΧ
10173(continued):
                                  G]
                                                                          ΓΟΧ
         014.000.000.066
                             2422-410-00700 00
                                                  Tollpost-Globe AS
10174:
                                  G]
10174(continued):
                             2422-539-06200 00
                                                                          ΓΟΧ
10175:
         014.000.000.067
                                                  Tollpost-Globe AS
                                  G]
10175(continued):
1900 found at line 10255:
10253:
10254:
10255:
         014.000.000.131
                           2422-190-41900 00
                                                  T-G Airfreight AS
                                                                          [0X]
10255(continued):
                                  GΙ
                            2422-616-16100 00
                                                  Tollpost-Globe AS
                                                                          [OX
10256:
         014.000.000.132
10256(continued):
                                  G]
10257:
         014.000.000.133
                            2422-150-50700-00
                                                  Tollpost-Globe Int.
                                                                          [0X
10257(continued):
                                  G1
1900 found at line 11112:
                                           Something from Emulex
11110:
        1569
                 621
11111:
        1571
                 623
                         UNKNOWN???
                                          Running on a Novell Server
        1900
                 076C
11112:
                         Xerox
11113:
        2857
                 0b29
                         Site Lock
                         Site Lock Applications
11114:
        3113
                 0c29
2000 found at line 2822:
       tcp-id-port
2820:
                        1999/tcp
                                    cisco identification port
2821:
       tcp-id-port
                        1999/udp
                                    cisco identification port
       callbook
2822:
                        2000/tcp
2823:
       callbook
                        2000/udp
2824:
       dc
                        2001/tcp
2000 found at line 2823:
       tcp-id-port
                                    cisco identification port
2821:
                        1999/udp
2822:
       callbook
                        2000/tcp
2823:
       callbook
                        2000/udp
2824:
                        2001/tcp
       dc
2825:
       wizard
                        2001/udp
                                     curry
2000 found at line 10120:
         014.000.000.018
                             2624-522-80900 52
                                                  FGAN-SIEMENS-X25
                                                                          ΓGB
10118:
10118(continued):
                                  71
                             2041-170-10000 00
         014.000.000.019
                                                  SHAPE-X25
                                                                          ΓJF
10119:
10119(continued):
                                  W]
```

```
10120:
         014.000.000.020
                            5052-737-20000 50
                                                 UQNET
                                                                         H]
10120(continued):
10121:
         014.000.000.021
                            3020-801-00057 50
                                                 DMC-CRC1
                                                                         10121(continued):
                                 Τ]
10122:
         014.000.000.022
                            2624-522-80329 02
                                                 FGAN-FGANFFMVAX-X25
                                                                         ΓGB
10122(continued):
                                  7]
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
```

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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:
        AMIGA-2000/LC040
11577:
        AMIGA-2000/EC040
11578:
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
        HAZELTINE-1552
12355:
12356:
        HAZELTINE-2000
12357:
        HAZELTINE-ESPRIT
        HITACHI-5601
12358:
+=+=+=+= File rfc1705.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1166:
1164:
          will be made.
1165:
          node.sub.domain.name
1166:
                                   IN
                                          TA
                                               xx.yy.zz.aa.bb.cc.dd.ee
1167:
          ee.dd.cc.bb.aa.zz.yy.aa.in-addr.tcp IN PTR node.sub.domain.n
1168:
1168(continued):
'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:
          ee.dd.cc.bb.aa.zz.yy.aa.in-addr.tcp IN PTR node.sub.domain.n
1168:
1168(continued):
1169:
1170:
          Using these entries, along with the existing DNS A records, a
1170(continued):
```

```
'yy' on a line without 'yyyy' found at line 1172:
          Using these entries, along with the existing DNS A records, a
1170(continued):
          requesting node can determine where the remote node is locate
1171:
1171(continued):
                                  d.
                                      The
1172:
          format xx.yy.zz is the IEEE assigned portion and aa.bb.cc.dd.
1172(continued):
                                  ee is
          the encoded machine serial number as described in section 4.1
1173:
1173(continued):
1174:
+=+=+=+= File rfc1712.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 208:
                            marsh.cs.curtin.edu.au. postmaster.cs.curtin
206: a
             ΙN
                   SOA 
206(continued):
                          .edu.au.
207:
                                                  ; Serial (yymmddnn)
208:
                                94070503
                                                 ; Refresh (3 hours)
209:
                                10800
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 r
102(continued):
                         ewrite
         and still seems to be actively working on improving it.
103(continued):
                          program
         is available from ftp://ftp.nikhef.nl/pub/network/host_YYMMDD
104(continued):
                          .tar.Z
105:
         (YYMMDD is the date of the latest release).
106:
'yy' on a line without 'yyyy' found at line 105:
         and still seems to be actively working on improving it.
103:
103(continued):
                          program
         is available from ftp://ftp.nikhef.nl/pub/network/host_YYMMDD
104:
104(continued):
                          .tar.Z
105:
         (YYMMDD is the date of the latest release).
106:
107:
         By default, host just maps host names to Internet addresses,
107(continued):
                         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 ge
967:
967(continued):
                         neral
                             This is only a partial list of the availab
         IETF information.
968:
968(continued):
                  (The 'yymm' below refers to the year and month.)
969:
         files.
970:
971:
         o Omtg-agenda.txt
                                             Agenda for the meeting
'yy' on a line without 'yyyy' found at line 972:
970:
971:
            Omtg-agenda.txt
                                              Agenda for the meeting
                                              Logistics information for t
972:
            Omtg-at-a-glance-yymm.txt
         0
972(continued):
                         he meeting
973:
            Omtg-rsvp.txt
                                              Meeting registration form
         0
974:
            Omtg-sites.txt
                                              Future meeting sites and da
         0
974(continued):
'yy' on a line without 'yyyy' found at line 975: 973: o Omtg-rsvp.txt Meeti
                                              Meeting registration form
         0
974:
         0
            Omtg-sites.txt
                                             Future meeting sites and da
974(continued):
            Omtg-multicast-guide-yymm.txt Schedule for MBone-multicas
975:
975(continued):
                         t sessions
         o Omtg-traveldirections-yymm.txt Directions to the meeting s
976:
976(continued):
                         ite
                                              This document
977:
         o Otao.txt
'yy' on a line without 'yyyy' found at line 976:
974:
         o Omtg-sites.txt
                                             Future meeting sites and da
974(continued):
                         tes
975:
            Omtg-multicast-guide-yymm.txt Schedule for MBone-multicas
         0
975(continued):
                         t sessions
            Omtg-traveldirections-yymm.txt Directions to the meeting s
976:
976(continued):
                         ite
                                             This document
977:
      o Otao.txt
978:
+=+=+=+= File rfc1720.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2230:
                                                 The text version is sent.
2228:
2228(continued):
2229:
```

```
2230:
                file /ftp/rfc/rfcnnnn.yyy
                                                where 'nnnn' is the RFC n
2230(continued):
                                 umber.
2231:
                                                and 'yyy' is 'txt' or 'ps
2231(continued):
2232:
'yy' on a line without 'yyyy' found at line 2231:
2229:
                                                where 'nnnn' is the RFC n
2230:
                file /ftp/rfc/rfcnnnn.yyy
2230(continued):
                                 umber.
                                                and 'yyy' is 'txt' or 'ps
2231:
2231(continued):
2232:
2233:
                                                to get information on how
                help
2233(continued):
                                  to use
+=+=+=+= File rfc1730.txt +=+=+=+=
2digit found at line 3334:
3332:
                           ::= date text / <"> date text <">
          date
3333:
                           ::= 1*2digit
3334:
          date day
3335:
                               ;; Day of month
3336:
2digit found at line 3337:
3335:
                               ;; Day of month
3336:
3337:
                           ::= (SPACE digit) / 2digit
          date day fixed
3338:
                               ;; Fixed-format version of date_day
3339:
2digit found at line 3348:
3346:
          date year
                           ::= 4digit
3347:
3348:
          date year old
                           ::= 2diait
                               ;; OBSOLETE, (year - 1900)
3349:
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:
          date_time
3351:
                          ::= <"> (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 impen
253(continued):
                        ding end
            of the century. Clients that fail to accept a four-digit
254:
254(continued):
                        year or
            a signed four-digit timezone value will not work properly
255(continued):
                        with 
256:
            IMAP4.
+=+=+=+= File rfc1733.txt +=+=+=+=
2000 found at line 94:
92:
        message or part of a message. For example, a user connected
92(continued):
                        to an
        IMAP4 server via a dialup link can determine that a message h
93:
93(continued):
                        as a
94:
        2000 byte text segment and a 40 megabyte video segment, and e
94(continued):
                        lect 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
                22CF.EDU
1044:
                                 22nd Century Foundation
1045:
                3.EDU
                                 Reserved Domain
                                           Show them? N
1046:
          ** There are 1499 more matches.
+=+=+=+= File rfc1740.txt +=+=+=+=
2000 found at line 383:
            This field denotes the version of AppleSingle format in th
381:
381(continued):
                        e event
            the format evolves (more fields may be added to the header
382:
382(continued):
                           The
            version described in this note is version $00020000 or
383:
384:
            0x00020000.
385:
2000 found at line 384:
382:
            the format evolves (more fields may be added to the header
382(continued):
                        ). The
            version described in this note is version $00020000 or
383:
```

```
384:
             0x00020000.
385:
386:
         Filler
2000 found at line 590:
         #define F fStationary
588:
                                    0x0800 /* file is a stationary pad */
588(continued):
         #define F_fNameLocked
                                    0x1000 /* file can't be renamed by Fi
589:
589(continued):
                          nder */
         #define F fHasBundle
590:
                                    0x2000 /* file has a bundle */
         #define F_fInvisible
                                    0x4000 /* file's icon is invisible */
591:
591(continued):
         #define F fAlias
                                    0x8000 /* file is an alias file (Syst
592:
                         em 7) */
592(continued):
2000 found at line 624:
622:
623:
              uint32 magicNum; /* internal file type tag */
              uint32 versionNum; /* format version: 2 = 0x00020000 */
uchar8 filler[16]; /* filler, currently all bits 0 */
uint16 numEntries; /* number of entries which follow */
624:
625:
626:
2000 found at line 752:
750:
751:
          /* Times are stored as a "signed number of seconds before of
751(continued):
                          after
          * 12:00 a.m. (midnight), January 1, 2000 Greenwich Mean Time
752(continued):
                           (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:
                                     sdlcPortAdminTopology == multipoint
735:
                          ..
735(continued):
                            DEFVAL { 2000 }
736:
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 Gro
1928(continued):
                                   up be
           formed with Bob Gilligan of Sun Microsystems and xxx of yyy a
1929:
1929(continued):
                                   s co-
1930:
           chairs to design the mechanisms and procedures to support the
```

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```
1930(continued):
          transition of the Internet from IPv4 to IPv6 and to give advi
1931:
1931(continued):
+=+=+=+= File rfc1758.txt +=+=+=+=
2000 found at line 180:
                              c/o Rapport Communication
178:
                              2721 N Street NW
179:
180:
                             Washington, DC 20007
181:
                             US
182:
2000 found at line 205:
203:
         Rapport Communication
         2721 N Street NW
204:
205:
         Washington, DC 20007
206:
         Phone: +1 202-342-2727
207:
+=+=+=+= 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:
         main product of the protocol, a special timestamp format has
216:
216(continued):
                        been
217:
         established. NTP timestamps are represented as a 64-bit unsig
217(continued):
                        ned
         fixed-point number, in seconds relative to 0h on 1 January 19 nued):
218:
218(continued):
         integer part is in the first 32 bits and the fraction part in
219:
219(continued):
                          the
220:
         last 32 bits. In the fraction part, the non-significant low-o
220(continued):
                        rder
1900 found at line 248:
246:
         overflow some time in 2036. Should NTP or SNTP be in use in 2
246(continued):
                        036,
247:
         some external means will be necessary to qualify time relativ
247(continued):
                        e to
         1900 and time relative to 2036 (and other multiples of 136 ye
248:
248(continued):
                        ars).
249:
         Timestamped data requiring such qualification will be so prec
```

```
249(continued):
                        ious
         that appropriate means should be readily available. There wil
250:
250(continued):
                        l exist
+=+=+=+= File rfc1778.txt +=+=+=+=
UTCTime found at line 309:
307: 2.21. UTC Time
308:
         Values of type uTCTimeSyntax are encoded as if they were Prin
309:
309(continued):
                        table
         Strings with the strings containing a UTCTime value.
310:
311:
UTCTime found at line 310:
308:
309:
         Values of type uTCTimeSyntax are encoded as if they were Prin
309(continued):
                        table
         Strings with the strings containing a UTCTime value.
310:
311:
312:
      2.22. Guide (search guide)
UTCTime found at line 399:
397:
398:
           <utc-time> ::= an encoded UTCTime value
399:
400:
           <hex-string> ::= <hex-digit> | <hex-digit> <hex-string>
401:
+=+=+=+= File rfc1780.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2118:
2116:
                                               The text version is sent.
2116(continued):
2117:
                                               where 'nnnn' is the RFC n
2118:
                file /ftp/rfc/rfcnnnn.yyy
2118(continued):
                                 umber.
                                               and 'yyy' is 'txt' or 'ps
2119:
2119(continued):
2120:
'yy' on a line without 'yyyy' found at line 2119:
2117:
                file /ftp/rfc/rfcnnnn.yyy
2118:
                                               where 'nnnn' is the RFC n
2118(continued):
                                 umber.
2119:
                                               and 'yyy' is 'txt' or 'ps
2119(continued):
2120:
                                               to get information on how
2121:
                help
2121(continued):
                                  to use
```

```
+=+=+=+= File rfc1786.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2992:
2990:
          USA
          +1 313 936 2655
2991:
          jyy@merit.edu
2992:
2993:
2994:
'yy' on a line without 'yyyy' found at line 3694:
3692:
3693:
            Format:
                 <email-address> YYMMDD
3694:
3695:
3696:
'yy' on a line without 'yyyy' found at line 3704:
3702:
3703:
                 <email-address> should be the address of the person wh
3703(continued):
                                 o made
                 the last change. YYMMDD denotes the date this change w
3704:
3704(continued):
                                 as made.
3705:
3706:
            Example:
'yy' on a line without 'yyyy' found at line 3950:
3948:
               Format:
3949:
                     <email-address> YYMMDD
3950:
3951:
                     <email-address> should be the address of the person
3952:
3952(continued):
'yy' on a line without 'yyyy' found at line 3953:
3951:
3952:
                     <email-address> should be the address of the person
3952(continued):
                     made the last change. YYMMDD denotes the date this
3953:
3953(continued):
                                 change
3954:
                     was made.
3955:
'yy' on a line without 'yyyy' found at line 4170:
4168:
4169:
               Format:
                     <email-address> YYMMDD
4170:
4171:
4172:
                    <email-address> should be the address of the person
4172(continued):
                                  who
```

```
'yy' on a line without 'yyyy' found at line 4173:
4171:
4172:
                    <email-address> should be the address of the person
4172(continued):
                                  who
4173:
                    made the last change. YYMMDD denotes the date this
4173(continued):
                                 change
                    was made.
4174:
4175:
'yy' on a line without 'yyyy' found at line 4305:
4303:
4304:
               Format:
4305:
                    YYMMDD
4306:
                    YYMMDD denotes the date this route was withdrawn.
4307:
'yy' on a line without 'yyyy' found at line 4307:
4305:
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
4396(continued):
                                  who
'yy' on a line without 'yyyy' found at line 4397:
4395:
4396:
                    <email-address> should be the address of the person
4396(continued):
                                  who
4397:
                    made the last change. YYMMDD denotes the date this
4397(continued):
                                 change
4398:
                    was made.
4399:
+=+=+=+= File rfc1800.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1950:
                                                The text version is sent.
1948:
1948(continued):
1949:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
1950:
```

```
1950(continued):
                                  umber.
                                                 and 'yyy' is 'txt' or 'ps
1951:
1951(continued):
1952:
'yy' on a line without 'yyyy' found at line 1951:
1949:
                                                 where 'nnnn' is the RFC n
1950:
                 file /ftp/rfc/rfcnnnn.yyy
1950(continued):
                                  umber.
                                                 and 'yyy' is 'txt' or 'ps
1951:
1951(continued):
1952:
1953:
                                                 to get information on how
                 help
1953(continued):
                                   to use
+=+=+=+= File rfc1806.txt +=+=+=+=
century found at line 8:
6:
7:
    Network Working Group
                                                                        R
7(continued):
                           Troost
    Request for Comments: 1806
                                                             New Century
8(continued):
                          Systems
    Category: Experimental
                                                                        S
9(continued):
                         . Dorner
10:
                                                            QUALCOMM Inco
10(continued):
                         rporated
century found at line 402:
400:
401:
         Rens Troost
402:
         New Century Systems
403:
         324 East 41st Street #804
         New York, NY, 10017 USA
404:
century found at line 408:
         Phone: +1 (212) 557-2050
406:
         Fax: +1 (212) 557-2049
407:
408:
         EMail: rens@century.com
409:
410:
+=+=+=+= File rfc1807.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 318:
316: mandatory field. The ID field ide
                                  The ID field identifies the bibliogra
                         phic
316(continued):
              record and is used in management of these records.
317:
```

```
Its format is "ID:: XXX//YYY", where XXX is the
318:
319:
               publisher-ID (the controlled symbol of the publisher)
320:
               and YYY is the ID (e.g., report number) of the
322:
               typically printed on the cover, and may contain slashes.
322(continued):
'yy' on a line without 'yyyy' found at line 767:
765:
               in its "ID::
766:
767:
               Format:
                          END:: XXX//YYY
768:
               Example: END:: OUKS//CS-TR-91-123
769:
'yy' on a line without 'yyyy' found at line 778:
776:
777:
         In order to avoid conflicts among the symbols of the publishi
777(continued):
         organizations (the XXX part of the "ID:: XXX//YYY") it is sug
778:
778(continued):
                          gested
         that the various organizations that publish reports (such as
779:
         universities, departments, and laboratories) register their
780:
2-digit found at line 348:
               The format for ENTRY date is "Month Day, Year". The month must be alphabetic (spelled out). The "Day" is a 1- or 2-digit number. The "Year" is a 4-digit number.
346:
347:
348:
349:
                          ENTRY:: <date>
350:
               Format:
2-digit found at line 513:
      DATE (0) -- The publication date. The formats are "Month Year"
511:
               and "Month Day, Year". The month must be alphabetic (spelled out). The "Day" is a 1- or 2-digit number.
512:
513:
513(continued):
               "Year" is a 4- digit number.
514:
515:
1900 found at line 406:
               omitted, the record is assumed to be a new record and no
404(continued):
405:
                             If the revision date is specified as 0, thi
               a revision.
405(continued):
```

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```
406:
              is assumed to be January 1, 1900 (the previous RFC, used
406(continued):
407:
              revision data of 0, 1, 2, 3, etc. this specification is
407(continued):
                        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,
187(continued):
                        below.
            39 MATHEMATICAL OPERATORS
                                                2200-22FF
                                                           See note 1,
188:
188(continued):
                        below.
189:
            44 BOX DRAWING
                                                2500-257F
+=+=+=+= File rfc1819.txt +=+=+=+=
2000 found at line 5855:
               HelloLossFactor
                                        Number of consecutively missed H
5853:
           5
5853(continued):
                                ELL0
                                        messages before declaring link f
5854:
5854(continued):
                                 ailure
              DefaultRecoveryTimeout
                                        Interval between successive HELL
        2000
5855(continued):
                                0s
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 200000
401(continued):
                        00
402:
         (decimal 536870912) according to the following chart:
403:
2000 found at line 405:
403:
                    0 - 1fffffff
                                    defined by rpc@sun.com
404:
405:
             20000000 - 3fffffff
                                    defined by user
             40000000 - 5fffffff
406:
                                    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/yYjVj48eqzUVvGTGMsV6
```

```
1881(continued):
                                 MdlynU
               d4jcJgRnQIQvIxm2VRgH8W8MkAlul+RWGu7jnxjp0sNsU562+RZr0f4F
1882:
1882(continued):
                                 3K3n4w
               onUUP265UvvMj23RSTquZ/nl/0xnFM6SzDqV39V/i/RofqI=
1883:
'yy' on a line without 'yyyy' found at line 1994:
1992:
             U6B13vzpE8wMSVefzaCTSpXRSCh08ceVEZrIYS53/CKZV2/Sga71pGNlux
                                 8MsJpY
1992(continued):
1993:
             Lwdj5Q3NKocg1LMngMo8yrMAe+avMjfOnhui49Xon1Gft+N5XDH/+wI9qx
1993(continued):
                                 I9fkQv
             NZVDlWIhCYEkxd5ke549tLkJjEqHQbgJW5C+K/uxdiD2dBt+nRCXcu00Px
                                 3yKRyÝ
1994(continued):
             g/9BgTf36padSHuv48xBg5YaqaEWpEzLI0Qd31vAyP23rqiPhfBn6sjhQ2
1995:
1995(continued):
                                 KrWhiF
1996:
             2l3TV8kQsIGHHZUkaUbqkXJe6PEdWWhwsqCFPDdkpjzQRrTuJH6xleNUFg
1996(continued):
                                 +CG1V+
+=+=+=+= File rfc1861.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 766:
          554 Error, failed (technical reason)
764:
765:
766:
      4.5.6 HOLDuntil <YYMMDDHHMMSS> [+/-GMTdifference]
767:
         The HOLDuntil command allows for the delayed delivery of a me
768:
768(continued):
                        ssage,
'yy' on a line without 'yyyy' found at line 1061:
1059:
          the current transaction should be kept in the following forma
1059(continued):
1060:
                               (example: 950925143501+7)
1061:
           YYMMDDHHMMSS+GMT
1062:
1063:
+=+=+=+= File rfc1865.txt +=+=+=+=
1900 found at line 1564:
1562:
1563:
          START
          GET ITU-1900
1564:
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>...</div>
              => <H1>,"foo",</H1>,<P>,"..."
1077:
            xxx <P ID=z23> yyy
    => "xxx ",<P>," yyy
Let &alpha; &amp; &beta; be finite sets.
1078:
1079:
1080:
'yy' on a line without 'yyyy' found at line 1079: 
1077: => <H1>,"foo",</H1>,<P>,"..."
1077:
            xxx <P ID=z23> yyy
1078:
            => "xxx ",<P>," yyy
Let &alpha; &amp; &beta; be finite sets.
=> "Let &alpha; & &beta; be finite sets."
1079:
1080:
1081:
+=+=+=+= File rfc1876.txt +=+=+=+=
2000 found at line 103:
101:
                     exponent.
102:
103:
                     Since 20000000m (represented by the value 0x29) is
                           greater
103(continued):
104:
                     than the equatorial diameter of the WGS 84 ellipsoi
104(continued):
                           d
                     (12756274m), it is therefore suitable for use as a
105:
2000 found at line 219:
217:
      rwy04L.logan-airport.boston. LOC 42 21 28.764 N 71 00 51.617
218:
218(continued):
219:
                                               -44m 2000m
220:
221:
+=+=+=+= File rfc1880.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2062:
2060:
                                                    The text version is sent.
2060(continued):
2061:
                  file /ftp/rfc/rfcnnnn.yyy
                                                    where 'nnnn' is the RFC n
2062:
2062(continued):
                                    umber.
                                                    and 'yyy' is 'txt' or 'ps
2063:
2063(continued):
2064:
'yy' on a line without 'yyyy' found at line 2063:
2061:
                                                   where 'nnnn' is the RFC n
2062:
                  file /ftp/rfc/rfcnnnn.yyy
2062(continued):
                                    umber.
```

```
2063:
                                               and 'yyy' is 'txt' or 'ps
2063(continued):
2064:
                                               to get information on how
2065:
                help
2065(continued):
                                  to use
+=+=+=+= File rfc1888.txt +=+=+=+=
1900 found at line 859:
         Group Leader, Communications Systems
                                                             +41 22 767-
857:
                                                     Phone:
857(continued):
                         4967
         Computing and Networks Division
                                                             +41 22 767-
858:
                                                     Fax:
858(continued):
                         7155
                                                     Telex:
                                                             419000 cer
859:
         CERN
859(continued):
                         ch
860:
         European Laboratory for Particle Physics Email: brian@dxcoms
860(continued):
                         .cern.ch
         1211 Geneva 23, Switzerland
861:
+=+=+=+= File rfc1889.txt +=+=+=+=
1900 found at line 518:
         Wallclock time (absolute time) is represented using the times
516:
                         tamp
516(continued):
         format of the Network Time Protocol (NTP), which is in second
517:
517(continued):
         relative to 0h UTC on 1 January 1900 [5]. The full resolution
518:
518(continued):
                          NTP
         timestamp is a 64-bit unsigned fixed-point number with the in
519:
519(continued):
                         teger
520:
         part in the first 32 bits and the fractional part in the last
520(continued):
                          32
2000 found at line 1526:
1524:
          ntp_sec =0xb44db705 v
                                                 dlsr=0x0005.4000 (
1525:
                                                                        5
1525(continued):
                                 .250s)
                                                 lsr =0xb705:2000 (46853
          ntp_frac=0x20000000
1526:
1526(continued):
                                 .125s)
            (3024992016.125 s)
1527:
1528:
                                            ^ RR(n)
2000 found at line 1535:
1533:
                0xb710:8000 (46864.500 s)
1534:
          DLSR -0x0005:4000 (
                                  5.250 s
1535:
          LSR
               -0xb705:2000 (46853.125 s)
1536:
          delay 0x
1537:
                     6:2000 (
                                  6.125 s
```

```
2000 found at line 1537:
          LSR -0xb705:2000 (46853.125 s)
1535:
1536:
                     6:2000 (
                                 6.125 s)
1537:
          delay 0x
1538:
1539:
                  Figure 2: Example for round-trip time computation
2000 found at line 3182:
           * Big-endian mask for version, padding bit and packet type p
3180:
3180(continued):
3181:
          #define RTCP_VALID MASK (0xc000 | 0x2000 | 0xfe)
3182:
          #define RTCP_VALID_VALUE ((RTP_VERSION << 14) | RTCP_SR)
3183:
3184:
+=+=+=+= File rfc1890.txt +=+=+=+=
2000 found at line 293:
291:
292:
         The sampling frequency should be drawn from the set: 8000, 11
292(continued):
                        025
         16000, 22050, 24000, 32000, 44100 and 48000 Hz. (The Apple Ma
293:
293(continued):
                        cintosh
         computers have native sample rates of 22254.54 and 11127.27,
294:
                        which
294(continued):
         can be converted to 22050 and 11025 with acceptable quality b
295(continued):
                        У
2000 found at line 568:
566:
         Sampling rate and channel count are contained in the payload.
567:
567(continued):
                         MPEG-I
         audio supports sampling rates of 32000, 44100, and 48000 Hz (
568:
568(continued):
                        ISO/IEC
         11172-3, section 1.1; "Scope"). MPEG-II additionally supports
569:
                         ISO/ÍEC
569(continued):
         11172-3 Audio...").
570:
+=+=+=+= File rfc1898.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1271:
1269:
           3rWM5Ir3ier3/7WM5Ir36+v35v73ife1j0WK94n3/7T3/ffm5uD+7N339/f3
1269(continued):
                                9/eq3ff3
           9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d
1270:
1270(continued):
                                9/exuKX3
           5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KitL+2
1271:
1271(continued):
                                pf/wi7nw
           3ard30==
1272:
1273:
          $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
```

```
'yy' on a line without 'yyyy' found at line 1273:
1271:
          5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KjtL+2
1271(continued):
                              pf/wi7nw
          3ard30==
1272:
1273:
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
1274:
1275:
         1275(continued):
                              #######
'yy' on a line without 'yyyy' found at line 1328:
         merchant-date: 19950121100505.nnn
1326:
1327:
         merchant-response-code: failure/success/etc.
         pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1328:
1329:
         pr-signed-hash:
1330:
          a/OmeaMHRinNVd8ng/fKsYg5AfTZZUCXOS3gkjAhZTmcrkp6RZvppmDd/P7l
1330(continued):
                              boFLFDBh
'yy' on a line without 'yyyy' found at line 1340:
1338:
          rHzP5YqaMnk5iRBHvwKb5MaxKXGOOef5ms8M5W8lI2d0XPecH4xNBn8BMAJ6
                              iSkZmszo
1338(continued):
          QfDeWgga48g2tglA6ifZGp7daDR81lumtGMCvg==
1339:
1340:
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
1341:
         1342:
1342(continued):
                              #######
'yy' on a line without 'yyyy' found at line 1474:
1472: mjD6ickhd+SQZhbRCNerlTiQGhuL4wUAxzGh8aHk2oXjoMpVzWw2EImPu5Qa
1472:
1472(continued):
                              PEc36xgr
          mNz8vCovDiuy3tZ42IGArxBweasLPLCbm0Y=
1473:
1474:
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
1475:
         1476:
1476(continued):
                              #######
'yy' on a line without 'yyyy' found at line 1482:
         order-id: 12313424234242
1480:
1481:
         merchant-amount: usd 10.00
1482:
         pr-hash: 7Tm/djB05pLIw3JAyy5E7A==
1483:
         pr-signed-hash:
          a/OmeaMHRinNVd8ng/fKsYg5AfTZZUCXOS3gkjAhZTmcrkp6RZvppmDd/P7l
1484:
1484(continued):
                              boFLFDBh
'yy' on a line without 'yyyy' found at line 1490:
1488:
         date: 19950121100505.nnn
1489:
         merchant-signature:
1490:
          v4qZMe2d7mÜXztVdC3ZPMmMgYHlBA7bhR96LSehKP15ylqR/1KwwbBAX8CEq
1490(continued):
                              ns55UIYY
```

'yy' on a line without 'yyyy' found at line 1827:

1823:

1823(continued):

Xrn/hLUC

8zgw0ipgtLtte0tBz5/5VPNJPPonfTwkfZPbtuk5lgMykKDvThh00ycrfT7e

**Informational** 

2d3Hijxy

IV8gWHx1f8eCkWsCsM0E3M8mnTbQ7IBBcEmyGDAwjdbaLu5Qm/bh060X1npe

[Page 184]

'yy' on a line without 'yyyy' found at line 2064:

order-id: 1231-3424-234242

pr-signed-hash:

2062: 2063:

2064:

2065:

2066:

Nesser

2066(continued):

response-code: failure/success/etc.

pr-hash: 7Tm/djB05pLIw3JAyy5E7A==

```
'yy' on a line without 'yyyy' found at line 2068:
          IV8gWHx1f8eCkWsCsM0E3M8mnTbQ7IBBcEmyGDAwjdbaLu5Qm/bh060X1npe
2066:
2066(continued):
                               2d3Hijxy
          +X8vKcVE6l6To27u7A7UmGm+po9lCUSLxqtyqyn3jWhHZpc5NZpwoTCf2pAK
2067:
2067(continued):
2068:
         card-hash: 7Tm/djB05pLIw3JAyy5E7A==
         card-number: 4811123456781234
2069:
2070:
         card-type: visa
'yy' on a line without 'yyyy' found at line 2151: 2149: transaction: 123123213
2149:
2150:
         date: 19950121100505.nnn
2151:
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
2152:
         2153:
2153(continued):
                               #######
'yy' on a line without 'yyyy' found at line 2193:
2191:
                by their CyberCash application...
2192:
         supported-versions: 08.win, 0.81win, 0.8mac
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
2193:
2194:
2195:
         #######
2195(continued):
'yy' on a line without 'yyyy' found at line 2359:
2357:
2358:
2359:
          35XiC9Yn8flE4Va14UxMf2RCR1B/XoV6AEd64KwPeCYy0YvwbRcYpRMBXFLy
                               YqWM+ME1
2359(continued):
          +yp7c66SrCBhW4Q8AJYQ+5j5uy07uKyyq70hrV0IMpRDPjiQXZMooLZ0ifJP
2360:
2360(continued):
                               mpvJ66hC
2361:
          VZuWMuA6LR+TJzWUm4sUP9Zb6zMQShedUy0Prtw1vkJXU1vZ5aI80JAgUcLE
2361(continued):
                               itcD+dsY
'yy' on a line without 'yyyy' found at line 2360:
2358:
          35XiC9Yn8flE4Va14UxMf2RCR1B/XoV6AEd64KwPeCYy0YvwbRcYpRMBXFLy
2359:
2359(continued):
                               YgWM+ME1
          +yp7c66SrCBhW4Q8AJYQ+5j5uy07uKyyq70hrV0IMpRDPjiQXZMooLZ0ifJP
2360:
2360(continued):
                               mpvJ66hC
2361:
          VZuWMuA6LR+TJzWUm4sUP9Zb6zMQShedUy0Prtw1vkJXU1vZ5aI80JAgUcLE
2361(continued):
                               itcD+dsY
          Df4CzA00fC10P0kJ58HZB/pSBfUrHAa+IqMHyZkV/HBi9TjTwmktJi+8T9or
2362:
2362(continued):
                               XS0iSvor
'yy' on a line without 'yyyy' found at line 2502:
2500:
          lw51IHbmo1Jj7H6wyNnRpEjy4tM73jcosBfGeQDHxgyH1uaiFNr2D+WvmuYo
```

```
2500(continued):
                             7eun2dsy
2501:
         Wve20/FwicWHvkg5aDPsg0jzetsn1JCNZzbW
2502:
         $$-CyberCash-End-7Tm/djB05pLIw3JAyy5E7A==-$$
2503:
         2504:
2504(continued):
                             #######
'yy' on a line without 'yyyy' found at line 2591: 2589: x-opaque: [if can't decrypt]
2589:
2590:
          9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d
2590(continued):
                             9/exuKX3
          5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KjtL+2
2591:
2591(continued):
                             pf/wi7nw
2592:
2593:
         2593(continued):
                             #######
'yy' on a line without 'yyyy' found at line 2653:
2651:
         x-opaque: [if can't decrypt]
          9/eFiJK5tLizsoeSmpW7uLS8/7iio7Wisfv38biio7uyufv3tfv35uH+7N3d
2652:
2652(continued):
                             9/exuKX3
          5+z3vuu4oq07srnsvvz8/venoq00v7al/7iio7WisYy+iv7s3ff3p6KjtL+2
2653:
2653(continued):
                             pf/wi7nw
2654:
2655:
         2655(continued):
                             #######
+=+=+=+= File rfc1900.txt +=+=+=+=
1900 found at line 8:
6:
   Network Working Group
                                                          B. C
7:
7(continued):
                      arpenter
   Request for Comments: 1900
                                                            Υ.
8(continued):
                      Rekhter
   Category: Informational
9:
9(continued):
                          TAR
10:
                                                          Febru
10(continued):
                     ary 1996
1900 found at line 60:
58: Carpenter & Rekhter
                               Informational
                     [Page 1]
58(continued):
59:
60:
    RFC 1900
                           Renumbering Needs Work
                                                          Febru
60(continued):
                     ary 1996
61:
62:
```

```
1900 found at line 116:
      Carpenter & Rekhter
                                    Informational
114:
114(continued):
                       [Page 2]
115:
116:
      RFC 1900
                                Renumbering Needs Work
                                                                   Febru
116(continued): ary 1996
117:
118:
1900 found at line 172:
170: Carpenter & Rekhter
                                    Informational
170(continued):
                       [Page 3]
171:
      RFC 1900
172:
                                Renumbering Needs Work
                                                                   Febru
                      ary 1996
172(continued):
173:
174:
1900 found at line 207:
         Phone: +41 22 767-4967
Fax: +41 22 767-7155
205:
206:
               419000 cer ch
207:
         Telex:
208:
         EMail: brian@dxcoms.cern.ch
209:
+=+=+=+= File rfc1902.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2027:
          Several clauses defined in this document use the UTC Time for
2025(continued):
                                 mat:
2026:
2027:
            YYMMDDHHMMZ
2028:
            where: YY - last two digits of year
2029:
'vv' on a line without 'yyyy' found at line 2029:
2027:
            YYMMDDHHMMZ
2028:
            where: YY - last two digits of year
2029:
2030:
                   MM - month (01 through 12)
                   DD - day of month (01 through 31)
2031:
UTCTime found at line 136:
134: BEGIN
135:
          TYPE NOTATION ::=
                         "LAST-UPDATED" value(Update UTCTime)
136:
                         "ORGANIZATION" Text
137:
                         "CONTACT-INFO" Text
138:
```

```
UTCTime found at line 152:
                       | Revisions Revision
150:
151:
          Revision ::=
                         "REVISION" value(Update UTCTime)
152:
                         "DESCRIPTION" Text
153:
154:
+=+=+=+= File rfc1910.txt +=+=+=+=
2000 found at line 1702:
1700:
       usecMIB MODULE-IDENTITY
1701:
           LAST-UPDATED "9601120000Z"
1702:
           ORGANIZATION "IETF SNMPv2 Working Group"
1703:
           CONTACT-INFO
1704:
+=+=+=+= File rfc1917.txt +=+=+=+=
century found at line 259:
         should be noted that careful extrapolations of the current tr
257:
257(continued):
                         ends
258:
         suggest that the address space will be exhausted early in the
258(continued):
                          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.
2172(continued):
2173:
2174:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
2174(continued):
                                 umber.
                                               and 'yyy' is 'txt' or 'ps
2175:
2175(continued):
2176:
'yy' on a line without 'yyyy' found at line 2175:
2173:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
2174(continued):
                                 umber.
                                               and 'yyy' is 'txt' or 'ps
2175:
2175(continued):
2176:
2177:
                                               to get information on how
                help
2177(continued):
                                  to use
```

```
1900 found at line 851:
                      An Experimental protocol.
849:
850:
851:
              1900 - Renumbering Needs Work
852:
853:
                      This is an information document and does not specif
853(continued):
                            y any
+=+=+=+= File rfc1941.txt +=+=+=+=
2000 found at line 2826:
            700 13th Street, NW
2824:
2825:
            Suite 950
           Washington, DC 20005
Phone: 202-434-8954
2826:
2827:
                    sellers@quest.arc.nasa.gov
2828:
            EMail:
+=+=+=+= File rfc1945.txt +=+=+=+=
2-digit found at line 500:
               Specific repetition: "<n>(element)" is equivalent to
498:
               "<n>*<n>(element)"; that is, exactly <n> occurrences of (element). Thus 2DIGIT is a 2-digit number, and 3ALPHA is
499:
500:
500(continued):
501:
               string of three alphabetic characters.
502:
2digit found at line 500:
               Specific repetition: "<n>(element)" is equivalent to "<n>*<n>(element)"; that is, exactly <n> occurrences of
498:
499:
500:
               (element). Thus 2DIGIT is a 2-digit number, and 3ALPHA is
500(continued):
               string of three alphabetic characters.
501:
502:
2digit found at line 872:
870:
               asctime-date
                                 = wkday SP date3 SP time SP 4DIGIT
871:
872:
                                 = 2DIGIT SP month SP 4DIGIT
               date1
                                 ; day month year (e.g., 02 Jun 1982)
= 2DIGIT "-" month "-" 2DIGIT
873:
874:
               date2
2digit found at line 874:
872:
               date1
                                 = 2DIGIT SP month SP 4DIGIT
                                 ; day month year (e.g., 02 Jun 1982)
= 2DIGIT "-" month "-" 2DIGIT
873:
874:
               date2
                                    ; day-month-year (e.g., 02-Jun-82)
875:
                                 = month SP ( 2DIGIT | ( SP 1DIGIT ))
876:
               date3
```

```
2digit found at line 876:
                             = 2DIGIT "-" month "-" 2DIGIT
874:
             date2
875:
                               ; day-month-year (e.g., 02-Jun-82)
                             = month SP ( 2DIGIT | ( SP 1DIGIT ))
; month day (e.g., Jun 2)
             date3
876:
877:
878:
2digit found at line 879:
877:
                               ; month day (e.g., Jun 2)
878:
                             = 2DIGIT ":" 2DIGIT ":" 2DIGIT
             time
879:
                               ; 00:00:00 - 23:59:59
880:
881:
+=+=+=+= File rfc1967.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 276:
274:
                         +----+
275:
276:
                    CO and 80 are representative LZS-DCP headers; nn,
            where:
276(continued):
                         xx, yy,
                    and zz are values determined by the packet's conte
277:
277(continued):
                         xt.
278:
+=+=+=+= File rfc1980.txt +=+=+=+=
century found at line 301:
            ALT="Our products">
<AREA SHAPE=RECT COORDS="0,51,100,100 HREF="technology.htm"
299:
300:
300(continued):
                  ALT="Technology for the next century">
301:
            </MAP>
302:
303:
+=+=+=+= File rfc1997.txt +=+=+=+=
2000 found at line 130:
         690 may define research, educational and commercial community
128:
128(continued):
                          values
         that may be used for policy routing as defined by the operato
129:
129(continued):
                         rs 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:
                             RFC Numbers 1900-1999
14:
15:
16:
    Status of This Memo
1900 found at line 18:
16: Status of This Memo
17:
       This RFC is a slightly annotated list of the 100 RFCs from RF
18:
18(continued): C 1900
19: through RFCs 1999. This is a status report on these RFCs. T
                      his memo
19(continued):
20: provides information for the Internet community. It does not
20(continued):
                       specify
1900 found at line 60:
58: Elliott
                                 Informational
              [Page 1]
58(continued):
59:
60:
   RFC 1999
                              Summary of 1900-1999
                                                               Janu
                 ary 1997
60(continued):
61:
62:
1900 found at line 116:
                                  Informational
114: Elliott
114(continued):
                  [Page 2]
115:
     RFC 1999
116:
                               Summary of 1900-1999
                                                                Janu
116(continued): arv 1997
117:
118:
1900 found at line 172:
                                  Informational
170: Elliott
                  [Page 3]
170(continued):
171:
     RFC 1999
                               Summary of 1900-1999
172:
                                                                Janu
                  ary 1997
172(continued):
173:
174:
1900 found at line 228:
                                  Informational
226: Elliott
               [Page 4]
226(continued):
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227: 228: RFC 1999 **Summary of 1900-1999** Janu 228(continued): ary 1997 229: 230: 1900 found at line 284: **Informational** 282: Elliott [Page 5] 282(continued): 283: **Summary of 1900-1999** 284: RFC 1999 Janu ary 1997 284(continued): 285: 286: 1900 found at line 340: 338: Elliott Informational 338(continued): [Page 6] 339: 340: RFC 1999 Summary of 1900-1999 Janu 340(continued): ary 1997 341: 342: 1900 found at line 396: 394: Elliott Informational 394(continued): [Page 7] 395: RFC 1999 396: **Summary of 1900-1999** Janu 396(continued): ary 1997 397: 398: 1900 found at line 452: 450: Elliott **Informational** 「Page 8] 450(continued): 451: **Summary of 1900-1999** RFC 1999 452: Janu ary 1997 452(continued): 453: 454: 1900 found at line 508: **Informational** 506: Elliott 506(continued): [Page 9] 507:

RFC 2626	The Internet	and the	Millennium	Problem	(Year	2000)	lune	1999
NI	IIIE TIICELIIE	. anu tne	TICC CEIIII CUIII	FIUDICEIII	\ i eai	20001	Julie	T333

508: RFC 1999 508(continued): 509: 510:	Summary of 1900-1999 ary 1997	Janu
1900 found at line 564: 562: Elliott 562(continued): 563: 564: RFC 1999 564(continued): 565: 566:	Informational Page 10] Summary of 1900-1999 ary 1997	[ Janu
1900 found at line 620: 618: Elliott 618(continued): 619: 620: RFC 1999 620(continued): 621: 622:	Informational Page 11] Summary of 1900-1999 ary 1997	[ Janu
1900 found at line 676: 674: Elliott 674(continued): 675: 676: RFC 1999 676(continued): 677: 678:	Informational Page 12] Summary of 1900-1999 ary 1997	[ Janu
1900 found at line 732: 730: Elliott 730(continued): 731: 732: RFC 1999 732(continued): 733: 734:	Informational Page 13] Summary of 1900-1999 ary 1997	[ Janu
1900 found at line 788: 786: Elliott 786(continued): 787:	Informational Page 14]	Γ

```
788: RFC 1999
788: RFC 1999
788(continued): ary 1997
                               Summary of 1900-1999
                                                                Janu
789:
790:
1900 found at line 844:
842: Elliott
                                  Informational
                                                                   Γ
842(continued): Page 157
843:
844: RFC 1999
                               Summary of 1900-1999
                                                                Janu
844(continued): ary 1997
845:
846:
1900 found at line 900:
                                  Informational
898: Elliott
                                                                   Γ
898(continued): Page 16]
899:
900: RFC 1999
                               Summary of 1900-1999
                                                                Janu
900(continued): ary 1997
901:
902:
1900 found at line 956:
                                 Informational
954: Elliott
                                                                   Γ
                 Page 17]
954(continued):
955:
956: RFC 1999
                               Summary of 1900-1999
                                                                Janu
956: RFC 1999
956(continued): ary 1997
957:
958:
1900 found at line 1012:
1010: Elliott
                                   Informational
                                                                    Γ
1010(continued):
                               Page 18]
1011:
      RFC 1999
                                Summary of 1900-1999
1012:
                                                                 Janu
                               ary 1997
1012(continued):
1013:
1014:
1900 found at line 1068:
1066: Elliott
                                   Informational
                                                                    Γ
1066(continued):
                               Page 197
1067:
```

```
1068: RFC 1999
                                  Summary of 1900-1999
                                                                     Janu
                                 ary 1997
1068(continued):
1069:
1070:
1900 found at line 1095:
1093:
1094:
       1900
               Carpenter
                            Feb 96 Renumbering Needs Work
1095:
1096:
      Hosts in an IP network are identified by IP addresses, and the I
1097:
1097(continued):
+=+=+=+= File rfc2000.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 3070:
3068:
                                               The text version is sent.
3068(continued):
3069:
                file /ftp/rfc/rfcnnnn.yyy
                                               where 'nnnn' is the RFC n
3070:
3070(continued):
                                 umber.
                                               and 'yyy' is 'txt' or 'ps
3071:
3071(continued):
3072:
'yy' on a line without 'yyyy' found at line 3071:
3069:
3070:
                                               where 'nnnn' is the RFC n
                file /ftp/rfc/rfcnnnn.yyy
3070(continued):
                                 umber.
3071:
                                               and 'yyy' is 'txt' or 'ps
3071(continued):
3072:
3073:
                help
                                               to get information on how
3073(continued):
                                  to use
1900 found at line 1264:
                    This memo.
1262:
1263:
             1999 - Request for Comments Summary RFC Numbers 1900-1999
1264:
1265:
                    This is an information document and does not specif
1266:
1266(continued):
                                 y any
2000 found at line 8:
6:
    Network Working Group
                                                  Internet Architectu
7:
7(continued):
                        re Board
8: Request for Comments: 2000
                                                             J. Postel
8(continued):
                        , Editor
```

Nesser Informational [Page 195]

```
9: Obsoletes: 1920, 1880, 1800, 1780, 1720,
                                                            Febru
9(continued):
                      ary 1997
10: 1610, 1600, 1540, 1500, 1410, 1360,
2000 found at line 60:
    Internet Architecture Board Standards Track
58:
                 [Page 1]
58(continued):
59:
    RFC 2000
                                                             Febru
60: RFC 2000
60(continued): ary 1997
60:
                              Internet Standards
61:
62:
2000 found at line 116:
114: Internet Architecture Board Standards Track
114(continued):
                 [Page 2]
115:
116:
     RFC 2000
                               Internet Standards
                                                              Febru
116(continued): ary 1997
117:
118:
2000 found at line 172:
170: Internet Architecture Board Standards Track
170(continued):
                 [Page 3]
171:
172:
     RFC 2000
                               Internet Standards
                                                              Febru
172(continued): ary 1997
173:
174:
2000 found at line 228:
226: Internet Architecture Board Standards Track
226(continued):
                      [Page 4]
227:
     RFC 2000
228:
                               Internet Standards
                                                              Febru
228(continued): ary 1997
229:
230:
2000 found at line 284:
282: Internet Architecture Board Standards Track
282(continued):
                 [Page 5]
283:
284:
     RFC 2000
                               Internet Standards
                                                              Febru
284(continued): ary 1997
285:
286:
```

```
2000 found at line 340:
     Internet Architecture Board Standards Track
338:
338(continued):
                      [Page 6]
339:
     RFC 2000
                                                                Febru
340:
                                Internet Standards
340(continued): ary 1997
341:
342:
2000 found at line 396:
394: Internet Architecture Board Standards Track
394(continued):
                      [Page 7]
395:
     RFC 2000
396:
                                Internet Standards
                                                               Febru
396(continued): ary 1997
397:
398:
2000 found at line 452:
450: Internet Architecture Board Standards Track
                      [Page 8]
450(continued):
451:
452:
     RFC 2000
                                Internet Standards
                                                                Febru
                ary 1997
452(continued):
453:
454:
2000 found at line 508:
506: Internet Architecture Board Standards Track
506(continued):
                      [Page 9]
507:
     RFC 2000
                                Internet Standards
508:
                                                                Febru
508(continued): ary 1997
509:
510:
2000 found at line 564:
562: Internet Architecture Board Standards Track
                                                                    Γ
562(continued):
                      Page 10]
563:
     RFC 2000
                                Internet Standards
                                                               Febru
564:
                   ary 1997
564(continued):
565:
566:
2000 found at line 620:
618: Internet Architecture Board Standards Track
                                                                   Γ
618(continued):
                      Page 11]
```

Nesser Informational [Page 197]

```
619:
620:
     RFC 2000
                                Internet Standards
                                                                Febru
                     ary 1997
620(continued):
621:
622:
2000 found at line 676:
674: Internet Architecture Board Standards Track
                                                                    674(continued):
                      Page 12]
675:
     RFC 2000
                                Internet Standards
                                                                Febru
676:
676(continued):
                      ary 1997
677:
678:
2000 found at line 732:
730: Internet Architecture Board Standards Track
                                                                    Γ
730(continued):
                      Page 13]
731:
732:
     RFC 2000
                                Internet Standards
                                                                Febru
732(continued): ary 1997
733:
734:
2000 found at line 788:
786: Internet Architecture Board Standards Track
                                                                    786(continued):
                      Page 14]
787:
     RFC 2000
                                Internet Standards
788:
                                                                Febru
788(continued):
                     ary 1997
789:
790:
2000 found at line 844:
     Internet Architecture Board Standards Track
                                                                    Γ
                      Page 15]
842(continued):
843:
     RFC 2000
                                Internet Standards
                                                                Febru
844:
                 ary 1997
844(continued):
845:
846:
2000 found at line 900:
898: Internet Architecture Board Standards Track
                                                                    Γ
898(continued):
                       Page 16]
899:
```

```
900: RFC 2000
                 ary 1997
                                 Internet Standards
                                                                 Febru
900(continued):
901:
902:
2000 found at line 956:
954:
     Internet Architecture Board Standards Track
                                                                     Γ
954(continued):
                       Page 17]
955:
956:
     RFC 2000
                                 Internet Standards
                                                                 Febru
956(continued): ary 1997
957:
958:
2000 found at line 1012:
1010: Internet Architecture Board Standards Track
                                                                      Γ
1010(continued):
                                Page 18]
1011:
                                  Internet Standards
1012:
     RFC 2000
                                                                  Febru
                                ary 1997
1012(continued):
1013:
1014:
2000 found at line 1068:
1066: Internet Architecture Board Standards Track
                                                                      Γ
                               Page 19]
1066(continued):
1067:
      RFC 2000
1068:
                                  Internet Standards
                                                                  Febru
1068(continued):
                                ary 1997
1069:
1070:
2000 found at line 1124:
1122: Internet Architecture Board Standards Track
                                                                      Γ
1122(continued):
                                Page 20]
1123:
1124:
      RFC 2000
                                  Internet Standards
                                                                  Febru
1124(continued):
                                ary 1997
1125:
1126:
2000 found at line 1180:
1178: Internet Architecture Board Standards Track
                                                                      Γ
1178(continued):
                                Page 21]
1179:
```

```
1180: RFC 2000
                                   Internet Standards
                                                                    Febru
1180(continued):
                                ary 1997
1181:
1182:
2000 found at line 1236:
1234:
      Internet Architecture Board Standards Track
                                                                        Γ
1234(continued):
                                 Page 22]
1235:
1236:
       RFC 2000
                                   Internet Standards
                                                                    Febru
1236(continued):
                                 ary 1997
1237:
1238:
2000 found at line 1260:
                    A Proposed Standard protocol.
1258:
1259:
             2000 - Internet Official Protocol Standards
1260:
1261:
1262:
                    This memo.
2000 found at line 1292:
1290: Internet Architecture Board Standards Track
                                                                        1290(continued):
                                Page 231
1291:
1292:
      RFC 2000
                                   Internet Standards
                                                                    Febru
1292(continued):
                                 ary 1997
1293:
1294:
2000 found at line 1348:
                                                                        Γ
1346: Internet Architecture Board Standards Track
1346(continued):
                                Page 24]
1347:
      RFC 2000
                                   Internet Standards
                                                                    Febru
1348:
1348(continued):
                                 ary 1997
1349:
1350:
2000 found at line 1404:
1402: Internet Architecture Board Standards Track
                                                                        Γ
1402(continued):
                                Page 251
1403:
1404:
       RFC 2000
                                   Internet Standards
                                                                    Febru
1404(continued):
                                ary 1997
1405:
1406:
```

```
2000 found at line 1460:
       Internet Architecture Board Standards Track
                                                                       Г
1458:
1458(continued):
                                Page 261
1459:
      RFC 2000
                                   Internet Standards
1460:
                                                                   Febru
1460(continued):
                                arv 1997
1461:
1462:
2000 found at line 1516:
1514: Internet Architecture Board Standards Track
                                                                       1514(continued):
                               Page 27]
1515:
1516:
      RFC 2000
                                   Internet Standards
                                                                   Febru
1516(continued):
                                ary 1997
1517:
1518:
2000 found at line 1572:
1570: Internet Architecture Board Standards Track
                                                                       1570(continued):
                                Page 28]
1571:
1572:
      RFC 2000
                                   Internet Standards
                                                                   Febru
1572(continued):
                                arv 1997
1573:
1574:
2000 found at line 1628:
                                                                       Γ
1626: Internet Architecture Board Standards Track
1626(continued):
                                Page 29]
1627:
                                   Internet Standards
      RFC 2000
                                                                   Febru
1628:
1628(continued):
                                ary 1997
1629:
1630:
2000 found at line 1684:
1682: Internet Architecture Board Standards Track
                                                                       Γ
1682(continued):
                                Page 30]
1683:
      RFC 2000
                                  Internet Standards
                                                                   Febru
1684:
1684(continued):
                                ary 1997
1685:
1686:
2000 found at line 1740:
1738: Internet Architecture Board Standards Track
                                                                       Γ
1738(continued):
                                Page 31]
```

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```
1739:
1740:
      RFC 2000
                                Internet Standards
                                                               Febru
1740(continued):
                              ary 1997
1741:
1742:
2000 found at line 1796:
                                                                   1794: Internet Architecture Board Standards Track
1794(continued):
                              Page 32]
1795:
      RFC 2000
                                Internet Standards
                                                               Febru
1796:
1796(continued):
                              ary 1997
1797:
1798:
2000 found at line 1852:
1850: Internet Architecture Board Standards Track
                                                                   Γ
1850(continued):
                              Page 331
1851:
1852:
     RFC 2000
                                Internet Standards
                                                               Febru
1852(continued):
                              ary 1997
1853:
1854:
2000 found at line 1859:
1857: Protocol
                                                         Status
                                                                   R
                 Name
1857(continued):
                              FC STD *
1858: ======
                 1858(continued):
                              == === =
                 Internet Official Protocol Standards
1859: -----
                                                                  20
                                                         Req
1859(continued):
                              00
                                   1
1860:
                 Assigned Numbers
                                                         Reg
                                                                  17
1860(continued):
                              00
                                   2
                 Host Requirements - Communications
1861: -----
                                                         Rea
                                                                  11
1861(continued):
                              22
2000 found at line 1908:
1906: Internet Architecture Board Standards Track
                                                                   1906(continued):
                              Page 34]
1907:
      RFC 2000
                                Internet Standards
                                                               Febru
1908:
1908(continued):
                              ary 1997
1909:
1910:
2000 found at line 1964:
1962: Internet Architecture Board Standards Track
                                                                   Γ
1962(continued):
                              Page 351
```

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```
1963:
1964:
       RFC 2000
                                  Internet Standards
                                                                   Febru
1964(continued):
                                ary 1997
1965:
1966:
2000 found at line 2020:
2018: Internet Architecture Board Standards Track
                                                                        Γ
2018(continued):
                                Page 36]
2019:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2020:
2020(continued):
                                ary 1997
2021:
2022:
2000 found at line 2076:
2074: Internet Architecture Board Standards Track
                                                                        Γ
2074(continued):
                               Page 37]
2075:
2076:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2076(continued):
                                ary 1997
2077:
2078:
2000 found at line 2132:
2130: Internet Architecture Board Standards Track
                                                                        Γ
2130(continued):
                               Page 381
2131:
       RFC 2000
2132:
                                   Internet Standards
                                                                   Febru
2132(continued):
                                ary 1997
2133:
2134:
2000 found at line 2188:
2186: Internet Architecture Board Standards Track
                                                                        Γ
                                Page 391
2186(continued):
2187:
                                   Internet Standards
2188:
      RFC 2000
                                                                   Febru
2188(continued):
                                ary 1997
2189:
2190:
2000 found at line 2244:
2242: Internet Architecture Board Standards Track
                                                                        Γ
2242(continued):
                                Page 401
2243:
     RFC 2000
                                   Internet Standards
                                                                   Febru
2244:
2244(continued):
                                ary 1997
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```
2245:
2246:
2000 found at line 2300:
                                                                        Γ
2298: Internet Architecture Board Standards Track
2298(continued):
                                Page 41]
2299:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2300:
2300(continued):
                                 ary 1997
2301:
2302:
2000 found at line 2356:
                                                                        Γ
2354: Internet Architecture Board Standards Track
2354(continued):
                                Page 42]
2355:
                                   Internet Standards
                                                                   Febru
2356:
      RFC 2000
2356(continued):
                                 ary 1997
2357:
2358:
2000 found at line 2412:
2410: Internet Architecture Board Standards Track
                                                                        2410(continued):
                                Page 431
2411:
2412:
       RFC 2000
                                   Internet Standards
                                                                   Febru
2412(continued):
                                 ary 1997
2413:
2414:
2000 found at line 2468:
                                                                        Γ
2466: Internet Architecture Board Standards Track
2466(continued):
                                Page 44]
2467:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2468:
2468(continued):
                                 ary 1997
2469:
2470:
2000 found at line 2524:
2522: Internet Architecture Board Standards Track
                                                                        2522(continued):
                                Page 45]
2523:
2524:
       RFC 2000
                                   Internet Standards
                                                                   Febru
2524(continued):
                                ary 1997
2525:
2526:
```

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```
2000 found at line 2580:
       Internet Architecture Board Standards Track
                                                                        Г
2578:
2578(continued):
                                Page 461
2579:
      RFC 2000
                                   Internet Standards
2580:
                                                                   Febru
2580(continued):
                                arv 1997
2581:
2582:
2000 found at line 2636:
2634: Internet Architecture Board Standards Track
                                                                        2634(continued):
                                Page 47]
2635:
      RFC 2000
                                   Internet Standards
2636:
                                                                   Febru
2636(continued):
                                ary 1997
2637:
2638:
2000 found at line 2692:
2690: Internet Architecture Board Standards Track
                                                                        2690(continued):
                                Page 48]
2691:
2692:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2692(continued):
                                arv 1997
2693:
2694:
2000 found at line 2748:
                                                                        Γ
2746: Internet Architecture Board Standards Track
2746(continued):
                                Page 49]
2747:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2748:
2748(continued):
                                ary 1997
2749:
2750:
2000 found at line 2804:
2802: Internet Architecture Board Standards Track
                                                                        Γ
2802(continued):
                                Page 50]
2803:
      RFC 2000
                                   Internet Standards
                                                                   Febru
2804:
2804(continued):
                                ary 1997
2805:
2806:
2000 found at line 2860:
2858: Internet Architecture Board Standards Track
                                                                        Γ
2858(continued):
                                Page 51]
```

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```
2859:
2860:
       RFC 2000
                                  Internet Standards
                                                                   Febru
2860(continued):
                                ary 1997
2861:
2862:
2000 found at line 2916:
2914: Internet Architecture Board Standards Track
                                                                       Γ
2914(continued):
                                Page 52]
2915:
      RFC 2000
                                  Internet Standards
                                                                   Febru
2916:
2916(continued):
                                ary 1997
2917:
2918:
2000 found at line 2972:
2970: Internet Architecture Board Standards Track
                                                                       Γ
2970(continued):
                               Page 53]
2971:
      RFC 2000
2972:
                                  Internet Standards
                                                                   Febru
2972(continued):
                                ary 1997
2973:
2974:
2000 found at line 3028:
3026: Internet Architecture Board Standards Track
                                                                       Page 547
3026(continued):
3027:
      RFC 2000
3028:
                                  Internet Standards
                                                                   Febru
3028(continued):
                                ary 1997
3029:
3030:
2000 found at line 3084:
3082: Internet Architecture Board Standards Track
                                                                       Γ
3082(continued):
                                Page 551
3083:
                                  Internet Standards
      RFC 2000
                                                                   Febru
3084:
3084(continued):
                                ary 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:
           hIwDY32hYGCE8MkBA/wOu7d45aUxF4Q0RKJprD3v5Z9K1YcRJ2fve87lMlD
152:
                         lx40j
152(continued):
           eW4GDdBfLbJE7VUpp13N19GL8e/AgbyyjHH4aS0YoTk10QQ9nnRvjY8nZL3
153:
153(continued):
                         MPXSZ
           g9VGQxFeGqzykzmykU6A26MSMexR4ApeeON6xzZWfo+0y0qAq6lb46wsvld
154:
154(continued):
                         Z96YA
155:
           AABH78hyX7YX4uT1tNCWEIIBoggvCeIMpp7UQ2IzBrXg6GtukS8NxbukLea
155(continued):
                         mqVW3
+=+=+=+= File rfc2025.txt +=+=+=+=
UTCTime found at line 751:
                                                     -- see Section 6.3
749:
                 context-id
                                   Random-Integer,
749(continued):
                                   BIT STRING,
750:
                                                      -- protocol versio
                 pvno
750(continued):
                         n number
751:
                                   UTCTime OPTIONAL, -- mandatory for S
                 timestamp
                         PKM-2
751(continued):
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 OPTÍONAL, -- prot. versio
922(continued):
                         n number
923:
                 timestamp
                                   UTCTime OPTIONAL, -- mandatory for S
                         PKM-2
923(continued):
924:
                 randTara
                                   Random-Integer.
                 src-name [1]
925:
                                   Name OPTIONAL,
UTCTime found at line 2159:
2157:
                  context-id
                                    Random-Integer,
2158:
                  pvno
                                    BIT STRING.
2159:
                                    UTCTime OPTIONAL, -- mandatory for S
                   timestamp
2159(continued):
                                 PKM-2
2160:
                  randSrc
                                    Random-Integer,
2161:
                  targ-name
                                    Name,
UTCTime found at line 2248:
2246:
                                    BIT STRING OPTIONAL,
2247:
                  [0] onvq
                                    UTCTime OPTIONAL, -- mandatory for S
2248:
                  timestamp
```

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```
2248(continued):
                                  PKM-2
2249:
                   randTarg
                                      Random-Integer,
2250:
                   src-name [1]
                                      Name OPTIONAL,
UTCTime found at line 2459:
2457:
2458:
           Validity ::= SEQUENCE {
                                       UTCTime.
2459:
                   notBefore
                   notAfter
                                       UTCTime
2460:
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,
                                             Name,
UTCTime,
UTCTime OPTIONAL,
2492:
                   issuer
2493:
                   thisUpdate
2494:
                   nextUpdate
2495:
                   revokedCertificates
                                             SEQUENCE OF SEQUENCE {
UTCTime found at line 2494:
                                             Name,
2492:
                   issuer
                                             UTCTime,
2493:
                   thisUpdate
                                             UTCTime OPTIONAL,
2494:
                   nextUpdate
2495:
                   revokedCertificates
                                             SEQUENCE OF SEQUENCE {
                                                CertificateSerialNumber,
2496:
                         userCertificate
UTCTime found at line 2497:
                                             SEQUENCE OF SEQUENCE {
2495:
                   revokedCertificates
                                                CertificateSerialNumber,
2496:
                         userCertificate
                                                UTCTime
2497:
                         revocationDate
                                                                    } OPTION
2497(continued):
                                  AL
2498:
           }
2499:
+=+=+=+= File rfc2028.txt +=+=+=+=
2000 found at line 320:
318:
         Digital Equipment Corporation
319:
         1401 H Street NW
         Washington DC 20005
320:
321:
         Phone: +1 202 383 5615
322:
```

```
+=+=+=+= File rfc2030.txt +=+=+=+=
1900 found at line 321:
319:
         main product of the protocol, a special timestamp format has
319(continued):
                         been
320:
         established. NTP timestamps are represented as a 64-bit unsig
320(continued):
                         ned
         fixed-point number, in seconds relative to 0h on 1 January 19 nued): 00. The
321:
321(continued):
         integer part is in the first 32 bits and the fraction part in
322:
322(continued):
                          the
         last 32 bits. In the fraction part, the non-significant low o
323:
323(continued):
                         rder can
1900 found at line 362:
         64-bit field will overflow some time in 2036 (second 4,294,96
360:
360(continued):
                        7,296).
         Should NTP or SNTP be in use in 2036, some external means wil
361:
361(continued):
                         l be
         necessary to qualify time relative to 1900 and time relative
362:
362(continued):
                         to 2036
         (and other multiples of 136 years). There will exist a 200-pi
363:
363(continued):
                         cosecond
         interval, henceforth ignored, every 136 years when the 64-bit
364:
364(continued):
                         field
1900 found at line 375:
            following convention: If bit 0 is set, the UTC time is in
373:
373(continued):
                         the
374:
            range 1968-2036 and UTC time is reckoned from 0h 0m 0s UTC
374(continued):
                         on 1
            January 1900. If bit 0 is not set, the time is in the rang
375:
                         e 2036-
375(continued):
            2104 and UTC time is reckoned from 6h 28m 16s UTC on 7 Feb
376:
376(continued):
                         ruarv
            2036. Note that when calculating the correspondence, 2000
377:
377(continued):
                         is not a
2000 found at line 377:
            January 1900. If bit 0 is not set, the time is in the rang
375:
375(continued):
                         e 2036-
            2104 and UTC time is reckoned from 6h 28m 16s UTC on 7 Feb
376:
376(continued):
                         ruary
            2036. Note that when calculating the correspondence, 2000
377:
377(continued):
                         is not a
            leap year. Note also that leap seconds are not counted in
378:
378(continued):
                         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:
         [RFC 1814] Gerich, E., "Unique Addresses are Good", June 1995
636(continued):
637:
         [RFC 1900] Carpenter, B., and Y. Rekhter, "Renumbering Needs
638:
638(continued):
                        Work",
639:
            February 1996.
640:
+=+=+=+= File rfc2052.txt +=+=+=+=
1900 found at line 420:
              Errors", RFC 1912, February 1996.
418:
419:
420:
         RFC 1900: Carpenter, B., and Y. Rekhter, "Renumbering Needs W
420(continued):
                        ork"
              RFC 1900, February 1996.
421:
422:
1900 found at line 421:
419:
         RFC 1900: Carpenter, B., and Y. Rekhter, "Renumbering Needs W
420:
                        ork"
420(continued):
              RFC 1900, February 1996.
421:
422:
423:
         RFC 1920: Postel, J., "INTERNET OFFICIAL PROTOCOL STANDARDS",
423(continued):
+=+=+=+= 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:
                        ::= 2digit ":" 2digit ":" 2digit
4101:
       time
4102:
                            ;; Hours minutes seconds
4103:
+=+=+=+= File rfc2062.txt +=+=+=+=
2digit found at line 330:
328:
                          ::= partial
329:
330:
                          ::= 2digit
         date year old
                              ;; (year - 1900)
331:
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 "-" dat
333(continued):
                         e year
+=+=+=+= File rfc2063.txt +=+=+=+=
2000 found at line 716:
714:
                                                           start time =
715:
                                start time = 1
715(continued):
                         1
                                                        flow count = 200
716:
         Usage record N:
                                flow count = 2000
716(continued):
                         0 (done)
717:
718:
                                start time = 1
                                                           start time =
718(continued):
                         5
2000 found at line 725:
723:
         In the continuing flow case, the same flow was reported when
724:
724(continued):
                        its
         count was 2000, and again at 3000: the total count to date i
725:
725(continued):
                        s 3000.
         In the OLD/NEW case, the old flow had a count of 2000.
726:
726(continued):
                        ecord
727:
```

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```
2000 found at line 726:
724:
          In the continuing flow case, the same flow was reported when
724(continued):
                          its
          count was 2000, and again at 3000: the total count to date i
725:
725(continued):
                          s 3000.
726:
          In the OLD/NEW case, the old flow had a count of 2000.
726(continued):
                          ecord
727:
728:
+=+=+=+= File rfc2068.txt +=+=+=+=
2-digit found at line 772:
            Specific repetition: "<n>(element)" is equivalent to
770:
            "<n>*<n>(element)"; that is, exactly <n> occurrences of (el
771:
                          ement).
771(continued):
            Thus 2DIGIT is a 2-digit number, and 3ALPHA is a string of
772:
772(continued):
                          three
773:
            alphabetic characters.
774:
2digit found at line 772:
            Specific repetition: "<n>(element)" is equivalent to
770:
            "<n>*<n>(element)"; that is, exactly <n> occurrences of (el
771:
771(continued):
                          ement).
            Thus 2DIGIT is a 2-digit number, and 3ALPHA is a string of
772(continued):
                          three
773:
            alphabetic characters.
774:
2digit found at line 1163:
                  asctime-date = wkday SP date3 SP time SP 4DIGIT
1162:
1163:
                  date1
                                 = 2DIGIT SP month SP 4DIGIT
                                 ; day month year (e.g., 02 Jun 1982)
= 2DIGIT "-" month "-" 2DIGIT
1164:
1165:
                  date2
2digit found at line 1165:
                                 = 2DIGIT SP month SP 4DIGIT
1163:
                  date1
                                 ; day month year (e.g., 02 Jun 1982)
= 2DIGIT "-" month "-" 2DIGIT
1164:
                  date2
1165:
                                 ; day-month-year (e.g., 02-Jun-82) = month SP ( 2DIGIT | ( SP 1DIGIT ))
1166:
1167:
                  date3
```

```
2digit found at line 1167:
                               = 2DIGIT "-" month "-" 2DIGIT
1165:
                 date2
1166:
                                 ; day-month-year (e.g., 02-Jun-82)
                               = month SP ( 2DIGIT | ( SP 1DIGIT ))
; month day (e.g., Jun 2)
                 date3
1167:
1168:
1169:
2digit found at line 1170:
                                  ; month day (e.g., Jun 2)
1168:
1169:
                               = 2DIGIT ":" 2DIGIT ":" 2DIGIT
                 time
1170:
1171:
                                 ; 00:00:00 - 23:59:59
1172:
2digit found at line 7652:
7650:
                 warning-value = warn-code SP warn-agent SP warn-text
7651:
7652:
                 warn-code = 2DIGIT
                 warn-agent = ( host [ ":" port ] ) | pseudonym
7653:
7654:
                                   ; the name or pseudonym of the server
7654(continued):
                                 adding
1900 found at line 1083:
          for TCP connections on that port of that host, and the Reques
1081(continued):
                                 t-URI
          for the resource is abs_path. The use of IP addresses in URL'
1082:
                                 s SHOULD
1082(continued):
          be avoided whenever possible (see RFC 1900 [24]). If the abs_
1083:
1083(continued):
                                 path is
          not present in the URL, it MUST be given as "/" when used as
1084:
1084(continued):
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",
8248(continued):
          1900, IAB, February 1996.
8250:
          [25] Deutsch, P., "GZIP file format specification version 4.3
8251:
                                 ." RFC
8251(continued):
2000 found at line 8453:
8451:
        o HTTP/1.1 clients and caches should assume that an RFC-850 d
8451(continued):
                                 ate
            which appears to be more than 50 years in the future is in
8452:
                                 fact
8452(continued):
```

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1900, February 1996.

2607:

dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWI0ZTZlNzMzNGQzODkw

**160**:

161: 162: 163:

```
+=+=+=+= File rfc2096.txt +=+=+=+=
1900 found at line 134:
132:
133:
      ipForward MODULE-IDENTITY
          LAST-UPDATED "9609190000Z" -- Thu Sep 26 16:34:47 PDT 19
134:
134(continued):
                        96
          ORGÁNIZATION "IETF OSPF Working Group"
135:
136:
          CONTACT-INFO
1900 found at line 147:
145:
          DESCRIPTION
                  "The MIB module for the display of CIDR multipath IP
146:
                         Routes."
146(continued):
          REVISION
                        "9609190000Z"
147:
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:
    Status of This Memo
16:
17:
18:
        This RFC is a slightly annotated list of the 100 RFCs from RF
                        C 2000
18(continued):
        through RFCs 2099. This is a status report on these RFCs. T
19:
19(continued):
                        his memo
       provides information for the Internet community. It does not
20:
20(continued):
                         specify
2000 found at line 60:
58: Elliott
                                  Informational
58(continued):
                       [Page 1]
59:
    RFC 2099
60:
                               Summary of 2000-2099
                                                                   Ma
                      rch 1997
60(continued):
61:
62:
2000 found at line 116:
                                   Informational
     Elliott
114:
                 [Page 2]
114(continued):
115:
```

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116: RFC 2099 116(continued): rch 1997 116: RFC 2099 Summary of 2000-2099 Ma 117: 118: 2000 found at line 172: 170: Elliott **Informational** 170(continued): [Page 3] 171: 172: RFC 2099 Summary of 2000-2099 Ma 172(continued): rch 1997 **173**: 174: **2000 found at line 228: Informational** 226: Elliott [Page 4] 226(continued): 227: 228: RFC 2099 Summary of 2000-2099 Ma 228(continued): rch 1997 229: 230: 2000 found at line 284: Informational 282: Elliott [Page 5] 282(continued): 283: 284: RFC 2099 Summary of 2000-2099 Ma 284(continued): rch 1997 285: 286: **2000 found at line 340:** 338: Elliott **Informational** 338(continued): [Page 6] 339: 340: RFC 2099 Summary of 2000-2099 Ma 340(continued): rch 1997 341: 342: **2000 found at line 396:** 394: Elliott **Informational** 394(continued): [Page 7]

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Summary of 2000-2099

Ma

395:

396: RFC 2099

2000 found at line 452: 450: Elliott Informational

450(continued): [Page 8]

451:

452: RFC 2099 Summary of 2000-2099 Ma

452(continued): rch 1997

453: 454:

2000 found at line 508:

506: Elliott Informational

506(continued): [Page 9]

507:

508: RFC 2099 Summary of 2000-2099 Ma

508(continued): rch 1997

509: 510:

2000 found at line 564:

562: Elliott Informational [

562(continued): Page 10]

563:

564: RFC 2099 Summary of 2000-2099 Ma

564(continued): rch 1997

565: 566:

**2000 found at line 620:** 

618: Elliott Informational [

618(continued): Page 11]

619:

620: RFC 2099 Summary of 2000-2099 Ma

620(continued): rch 1997

621: 622:

**2000 found at line 676:** 

674: Elliott Informational [

674(continued): Page 12]

675:

676: RFC 2099 Summary of 2000-2099 Ma

676(continued): rch 1997

677: 678:

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```
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```

2000 found at line 732: 730: Elliott 730(continued): 731: 732: RFC 2099 732(continued): 733: 734:	Informational Page 13] Summary of 2000-2099 rch 1997	[ Ma
2000 found at line 788: 786: Elliott 786(continued): 787: 788: RFC 2099 788(continued): 789:	Informational Page 14] Summary of 2000-2099 rch 1997	[ Ma
2000 found at line 844: 842: Elliott 842(continued): 843: 844: RFC 2099 844(continued): 845: 846:	Informational Page 15] Summary of 2000-2099 rch 1997	[ Ma
2000 found at line 900: 898: Elliott 898(continued): 899: 900: RFC 2099 900(continued): 901: 902:	Informational Page 16] Summary of 2000-2099 rch 1997	[ Ma
2000 found at line 956: 954: Elliott 954(continued): 955: 956: RFC 2099 956(continued): 957:	Informational Page 17] Summary of 2000-2099 rch 1997	[ Ma
2000 found at line 1012 1010: Elliott 1010(continued):	: Informational Page 18]	[

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[Page 219]

```
1011:
1012:
       RFC 2099
                                  Summary of 2000-2099
                                                                       Ma
1012(continued):
                                 rch 1997
1013:
1014:
2000 found at line 1068:
1066: Elliott
                                     Informational
                                                                         Γ
1066(continued):
                                 Page 19]
1067:
       RFC 2099
                                  Summary of 2000-2099
1068:
                                                                       Ma
1068(continued):
                                 rch 1997
1069:
1070:
2000 found at line 1124:
1122: Elliott
                                     Informational
                                                                         Γ
1122(continued):
                                 Page 201
1123:
1124:
       RFC 2099
                                  Summary of 2000-2099
                                                                       Ma
                                 rch 1997
1124(continued):
1125:
1126:
2000 found at line 1144:
1142:
1143:
1144:
               I.A.B.
                             Feb 97
                                      INTERNET OFFICIAL PROTOCOL STANDAR
       2000
1144(continued):
                                 DS
1145:
      This memo describes the state of standardization of protocols us
1146:
1146(continued):
                                 ed in
+=+=+=+= File rfc2101.txt +=+=+=+=
1900 found at line 353:
351:
            Changing providers is just one possible reason for renumbe
352:
352(continued):
                        rina.
353:
            The informational document [RFC 1900] shows why renumber in
            ed):
g is an
increasingly frequent event. Both DHCP [RFC 1541] and PPP
353(continued):
354:
354(continued):
                         [RFC
            1661] promote the use of dynamic address allocation.
355:
1900 found at line 534:
532:
         solutions for renumbering sites. The need to contain the ov
532(continued):
                         erhead
         in a rapidly growing Internet routing system is likely to mak
533:
```

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```
533(continued):
                        e
         renumbering more and more common [RFC 1900].
534:
535:
         The need to scale the Internet routing system, and the use of
536:
536(continued):
                         CIDR as
1900 found at line 632:
         Protocol", RFC 1825, September 1995.
630:
631:
         [RFC 1900] Carpenter, B., and Y. Rekhter, "Renumbering Needs
632:
632(continued):
         RFC 1900, February 1996.
633:
634:
1900 found at line 633:
631:
         [RFC 1900] Carpenter, B., and Y. Rekhter, "Renumbering Needs
632:
632(continued):
633:
         RFC 1900, February 1996.
634:
         [RFC 1918] Rekhter, Y., Moskowitz, B., Karrenberg, D., de Gr
635:
635(continued):
                        oot, G.
+=+=+=+= File rfc2109.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1054:
          date value in a fixed-length variant format in place of Max-A
1052(continued):
1053:
1054:
          Wdy, DD-Mon-YY HH:MM:SS GMT
1055:
1056:
          Note that the Expires date format contains embedded spaces, a
1056(continued):
                                 nd that
+=+=+=+= File rfc2116.txt +=+=+=+=
2000 found at line 4132:
             * MAIL.X-OD V2.3
4130:
4131:
4132:
             * MAIL.2000 V1.2, AKOM
4133:
             * MS-Mail
4134:
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 eightee
32(continued):
                        n years
2000 found at line 140:
         8. The address, including street and number, of the initial
138:
            registered office of the corporation is c/o C T Corporatio
139:
139(continued):
            System, 1030 15th Street, N.W., Washington, D.C. 20005, an
140(continued):
                        d the
            name of its initial registered agent at such address is C
141:
141(continued):
142:
            Corporation System.
+=+=+=+= File rfc2150.txt +=+=+=+=
century found at line 2197:
          scholarly music resources. http://rism.harvard.edu/RISM/
2195:
2196:
2197:
          Crescendo is used in the web pages at http://mcentury.citi.do
2197(continued):
                                 c.ca
          along with a growing number of others. One very interesting
2198:
2198(continued):
                                 use of
          Crescendo occurs on the Music Theory Online publication, a se
2199:
2199(continued):
                                 rious
century found at line 3150:
3148:
          Joseph Aiuto
3149:
          Sepideh Boroumand
          Michael Century
3150:
          Kelly Cooper
Lile Elam
3151:
3152:
+=+=+=+= File rfc2151.txt +=+=+=+=
2000 found at line 1805:
1803:
         * About Hill Associates
         * HAI Products and Services Catalog
1804:
1805:
         * Datacomm/2000-ED Series
         * Contacting Hill Associates
1806:
         * Employment Opportunities
1807:
2000 found at line 2808:
2806:
       [23] ____, Editor, "Internet Official Protocol Standards,"
2807:
```

```
2808:
             STD 1/RFC 2000, Internet Architecture Board, February 1997.
2808(continued):
2810: [24] ____, "Introduction to the STD Notes," RFC 1311, USC/Infor 2810(continued):
+=+=+=+= File rfc2156.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 3210:
3208:
                the prefix, all attributes remaining in the OR address s
3208(continued):
                                  hall be
                encoded on the LHS. This is to ensure a reversible mapp
3209:
3209(continued):
                                  ing. For
                example, if there is an address /S=XX/0=YY/ADMD=A/C=NN/
3210:
                                  and a
3210(continued):
3211:
                mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is e
3211(continued):
                                  ncoded
                on the LHS.
3212:
'yy' on a line without 'yyyy' found at line 3211:
3209:
                encoded on the LHS. This is to ensure a reversible mapp
3209(continued):
                                  ing. For
3210:
                example, if there is an address /S=XX/O=YY/ADMD=A/C=NN/
3210(continued):
                                  and a
                mapping for /ADMD=A/C=NN/ is used, then /S=XX/O=YY/ is e
3211(continued):
                                  ncoded
                on the LHS.
3212:
3213:
'yy' on a line without 'yyyy' found at line 3317:
3315:
                                    "XX"
3316:
                                  = "YY"
                      ADMD
3317:
                                  = "ZZ"
3318:
                       "RFC-822"
                                  = "Smith(a)ZZ.YY.XX"
3319:
'yy' on a line without 'yyyy' found at line 3319:
3317:
                                  = "YY"
                      ADMD
                                  = "ZZ"
3318:
                       "RFC-822"
                                  = "Smith(a)ZZ.YY.XX"
3319:
3320:
           This is mapped first to an RFC 822 address, and then back to
3321:
3321(continued):
```

```
'yy' on a line without 'yyyy' found at line 3325:
3323:
                                  "XX"
3324:
                      C
                                 = "YY"
                      ADMD
3325:
                                 = "ZZ"
3326:
                      0
                                 = "Smith"
3327:
                      Surname
UTCTime found at line 1705:
                "yen*{165}"
1703:
1704:
       3.3.5.
               UTCTime
1705:
1706:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Ye
1707:
1707(continued):
                                 ar,
UTCTime found at line 1707:
       3.3.5. UTCTime
1705:
1706:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Ye
1707:
1707(continued):
                                 ar,
          Month, Day of Month, hour, minute, second (optional), and Tim
1708:
1708(continued):
                                 ezone
          (technically a time differential in UTCTime). 822.date-time
1709:
1709(continued):
                                 also
UTCTime found at line 1709:
          Both UTCTime and the RFC 822 822.date-time syntax contain: Ye
1707:
1707(continued):
                                 ar,
1708:
          Month, Day of Month, hour, minute, second (optional), and Tim
1708(continued):
                                 ezone
          (technically a time differential in UTCTime). 822.date-time
1709:
                                 also
1709(continued):
          contains an optional day of the week, but this is redundant.
1710:
                                  With
1710(continued):
          the exception of Year, a symmetrical mapping can be made betw
1711:
1711(continued):
                                 een
UTCTime found at line 1717:
             In practice, a gateway will need to parse various illegal
1715(continued):
                                 variants
                                 In cases where 822.date-time cannot be
1716:
             on 822.date-time.
1716(continued):
                                 parsed,
             it is recommended that the derived UTCTime is set to the v
1717:
1717(continued):
                                 alue at
             the time of translation.
                                        Such errors may be noted in an R
1718:
                                 FC 822
1718(continued):
             comment, to aid detection and correction.
1719:
```

```
UTCTime found at line 1721:
             comment, to aid detection and correction.
1719:
1720:
          When mapping to X.400, the UTCTime format which specifies the
1721:
1721(continued):
          timezone offset shall be used.
1722:
1723:
UTCTime found at line 1745:
          RFC 822, as modified by RFC 1123, requires use of a four digi
1743(continued):
                                  t year.
          Note that the original RFC 822 uses a two digit date, which i
1744:
1744(continued):
                                  s no
          longer legal. UTCTime uses a two digit date. To map a year
1745:
1745(continued):
                                  from RFC
1746:
          822 to X.400, simply use the last two digits. To map a year
1746(continued):
                                  from
          X.400 to RFC 822, assume that the two digit year refers to a
1747(continued):
                                  year in
+=+=+=+= File rfc2162.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 797:
795:
            maps into
796:
               C=xx; ADMD=yyy; PRMD=zzz; 0=ooo; OU=uuu; DD.Dnet=net:
797:
798:
               DD.Mail-11=route::node::localpart;
799:
'yy' on a line without 'yyyy' found at line 806:
804:
            maps into
805:
               C=xx; ADMD=yyy; PRMD=zzz; 0=ooo; OU=uuu; DD.Dnet=net;
806:
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 convers
811(continued):
                         ion
              yyy = Admd of the gateway performing the conversion zzz = Prmd of the gateway performing the conversion
812:
813:
814:
               ooo = Organisation of the gateway performing the convers
814(continued):
                         ion
'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;
```

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```
917:
918:
         (see sect. 5.2 for explication of 'xx', 'yyy', 'zzz', 'ooo', 'uuu
                          ,'net')
918(continued):
919:
920:
         maps into
'yy' on a line without 'yyyy' found at line 926:
         and for DECnet/OSI addresses
924:
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:
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
```

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DD.Mail-11=route::node::localpart;

DD.Mail-11=route::node::localpart;

'yy' on a line without 'yyyy' found at line 918:

916:

917:

916:

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DD.Mail-11=route::gwnode::gw(p)(q)x400-text-address(q);

DD.Mail-11=gwnode::gw(p)(q)x400-text-address(q);

C=xx; ADMD=yyy; DD.Dnet=net;

C=xx; ADMD=yyy; DD.Dnet=net;

'yy' on a line without 'yyyy' found at line 1104:

maps into

2digit found at line 1026:

2digit found at line 1027:

2digit found at line 1028:

2digit found at line 1030:

hour = 2digit

minute = 2digit

second = 2digit

milli-second = 3digit

+=+=+=+= File rfc2167.txt +=+=+=+=

year = 4digit
month = 2digit

day = 2digit

hour = 2digit

year = 4digit

day = 2digit

hour = 2digit minute = 2digit

month = 2digit

day = 2digit

month = 2digit

1094: 1095:

1096:

1097:

1102:

1103: 1104:

1105:

1106:

1024: 1025:

1026:

1027: 1028:

1025:

1026:

1027:

1028:

1029:

1026:

1027:

**1028**:

1029:

1030:

1031:

1032:

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host-name = dns-char \*(dns-char / ".")

```
2digit found at line 3186:
3184:
3185:
          year = 4digit
3186:
          month = 2diqit
          day = 2digiť
3187:
          hour = 2digit
3188:
2digit found at line 3187:
3185:
          year = 4digit
          month = 2digit
3186:
3187:
          day = 2digit
3188:
          hour = 2digit
          minute = 2digit
3189:
2digit found at line 3188:
3186:
          month = 2digit
          day = 2digiť
3187:
3188:
          hour = 2digit
3189:
          minute = 2digit
3190:
          second = 2digit
2digit found at line 3189:
3187:
          day = 2digit
          hour = 2diait
3188:
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:
                         000800h
           soa
3625:
           status
                         001000h
3626:
                         002000h
           xfer
3627:
           X
                         004000h
3628:
```

```
+=+=+=+= File rfc2170.txt +=+=+=+=
2000 found at line 427:
425:
                                               Server: MyAgent/1.0
426:
                                               ATM-Service: CBR
                                               ATM-QoS-PCR: 2000
427:
428:
                                               Content-type: video/mpeg
428(continued):
429:
2000 found at line 464:
                                               Server: MyAgent/1.0 ATM.
462(continued):
                       address
463:
                                               ATM-Service: CBR
                                               ATM-QoS-PCR: 2000
464:
465:
                                               Content-type: video/mpeg
465(continued):
466:
+=+=+=+= File rfc2179.txt +=+=+=+=
2000 found at line 292:
           a setuid file anywhere in the system, including those on NF
290:
290(continued):
           mounted partitions.
291:
         * "find / -group kmem -perm -2000 -print" will do the same fo
292:
292(continued):
                        r kmem
293:
           group permissions.
294:
+=+=+=+= File rfc2182.txt +=+=+=+=
2000 found at line 495:
493:
         Instead, for this example, set the primary's serial number to
494:
494(continued):
495:
         2000000000, and wait for the secondary servers to update to t
495(continued):
                        hat
                The value 2000000000 is chosen as a value a lot bigger
496:
         zone.
496(continued):
                         than
         the current value, but less that 2^31 bigger (2^31 is 2147483
497(continued):
                        648).
2000 found at line 496:
         Instead, for this example, set the primary's serial number to
494:
494(continued):
         200000000, and wait for the secondary servers to update to t
495:
495(continued):
                        hat
                The value 2000000000 is chosen as a value a lot bigger
496:
         zone.
496(continued):
                         than
         the current value, but less that 2^31 bigger (2^31 is 2147483
497:
```

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C: dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWI0ZTZlNzMzNGQzODkw

S: A0001 OK CRAM authentication successful

'yy' on a line without 'yyyy' found at line 161:

131: 132:

133:

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```
159:
            AUTHENTICATE command (or the similar POP3 AUTH command), y
159(continued):
                         ielding
160:
                  dGltIGI5MTNhNjAyYzdlZGE3YTQ5NWI0ZTZlNzMzNGQzODkw
161:
162:
163:
+=+=+=+= File rfc2200.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 2118:
2116:
                                                 The text version is sent.
2116(continued):
2117:
                                                 where 'nnnn' is the RFC n
2118:
                 file /ftp/rfc/rfcnnnn.yyy
2118(continued):
                                  umber.
                                                 and 'yyy' is 'txt' or 'ps
2119:
2119(continued):
2120:
'yy' on a line without 'yyyy' found at line 2119:
2117:
                                                 where 'nnnn' is the RFC n
                 file /ftp/rfc/rfcnnnn.yyy
2118:
2118(continued):
                                  umber.
                                                 and 'yyy' is 'txt' or 'ps
2119:
2119(continued):
2120:
2121:
                                                 to get information on how
                 help
2121(continued):
                                   to use
2000 found at line 9:
   Network Working Group
                                                    Internet Architectu
7:
7(continued):
                         re Board
   Request for Comments: 2200
8:
                                                               J. Postel
8(continued):
                           Editor
    Obsoletes: 2000, 1920, 1880, 1800, 1780,
                                                                        J
9:
                         une 1997
9(continued):
     1720, 1610, 1600, 1540, 1500, 1410, 1360, 1280, 1250, 1200, 1140, 1130, 1100, 1083
10:
2000 found at line 921:
                    level of standard.
919:
920:
921:
            2099 - Request for Comments Summary - RFC Numbers 2000-209
921(continued):
                         9
922:
923:
                    This is an information document and does not specif
923(continued):
                         y any
```

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```
+=+=+=+= File rfc2203.txt +=+=+=+=
2000 found at line 1096:
                                               0x0000010
1094:
             GSS_S_GAP_TOKEN
             GSS S BAD MECH
1095:
                                               0x00010000
             GSS S BAD NAME
1096:
                                               0x00020000
                                               0x00030000
1097:
             GSS_S_BAD_NAMETYPE
             GSS S BAD BINDINGS
1098:
                                               0x00040000
2000 found at line 1113:
             GSS_S_UNAVAILABLE
1111:
                                               0x00100000
             GSS S DUPLICATE ELEMENT
1112:
                                               0x00110000
             GSS_S_NAME_NOT_MN
                                               0x00120000
1113:
             GSS_S_CALL_INACCESSIBLE_READ
GSS_S_CALL_INACCESSIBLE_WRITE
1114:
                                               0x01000000
                                               0x02000000
2000 found at line 1115:
1113:
             GSS S NAME NOT MN
                                               0x00120000
             GSS_S_CALL_INACCESSIBLE_READ
1114:
                                               0x01000000
             GSS S CALL INACCESSIBLE WRITE
1115:
                                               0x02000000
             GSS S CALL BAD STRUCTURE
1116:
                                               0x03000000
1117:
+=+=+=+= File rfc2204.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 292:
            available for transmission.
290:
291:
292:
         Date stamp (YYMMDD)
293:
294:
            A file qualifier indicating the date the Virtual File was
294(continued):
                         made
'yy' on a line without 'yyyy' found at line 1866:
1864:
              1 | SFIDDSN | Virtual File Dataset Name
                                                                        | V
1864(continued):
                                   X(26)
                              | Reserved
1865:
          | 27 | SFIDRSV1
                                   X(9)
1865(continued):
      | 36 | SFIDDATE
                              | Virtual File Date stamp, (YYMMDD)
1866(continued):
          | 42 | SFIDTIME
                              | Virtual File Time stamp, (HHMMSS)
                                                                        | V
1867:
                                   X(6) |
1867(continued):
1868: | 48 | SFIDUSER
                                                                        | V
                              | User Data
                                   X(8)
1868(continued):
'yy' on a line without 'yyyy' found at line 1895: 1893: SFIDDATE Virtual File Date stamp
                                                                          S
1893(continued):
                                  tring(6)
1894:
1895:
            Format: 'YYMMDD' 6 decimal digits representing the year, m
```

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```
1895(continued):
                                  onth
1896:
                     and day respectively [ISO-8601].
1897:
'yy' on a line without 'yyyy' found at line 2394:
2392:
              1 | EERPDSN
                             | Virtual File Dataset Name
                                                                        | V
2392(continued):
                                   X(26) |
2393:
             27 | EERPRSV1
                              | Reserved
                                                                          F
2393(continued):
                                   X(9)
             36 | EERPDATE
                              | Virtual File Date stamp, (YYMMDD)
2394:
                                                                        | V
2394(continued):
                                   X(6)
                                                                        | V
          | 42 | EERPTIME
                              | Virtual File Time stamp, (HHMMSS)
2395:
2395(continued):
                                   X(6)
                             | User Data
X(8)
2396:
       | 48 | EERPUSER
                                                                        | V
2396(continued):
'yy' on a line without 'yyyy' found at line 2429:
2427: EERPDATE Virtual File Date stamp
                                                                          S
2427(continued):
                                  tring(6)
2428:
            Format: 'YYMMDD'
                                6 decimal digits representing the year, m
2429:
2429(continued):
                                  onth
2430:
                     and day respectively [ISO-8601].
2431:
2000 found at line 304:
         field. Since the ODETTE-FTP only uses this information to id
302:
                         entify a
302(continued):
303:
         particular Virtual File it will continue to operate correctly
303(continued):
                          in the
304:
         year 2000 and beyond.
305:
         The User Monitor may use the Virtual File Date attribute in l
306:
306(continued):
                         ocal
2000 found at line 308:
         The User Monitor may use the Virtual File Date attribute in l
306:
306(continued):
                         ocal
         processes involving date comparisons and calculations. Any s
307:
307(continued):
                         uch use
         falls outside the scope of this protocol and year 2000 handli
308:
308(continued):
                         ng is a
309:
         local implementation issue.
310:
+=+=+=+= File rfc2227.txt +=+=+=+=
2000 found at line 1949:
1947:
               Toward the Development of Web Measurement Standards. Thi
```

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```
1947(continued):
                                 s is a
              draft paper, currently available at http://
1948:
1949:
              www2000.ogsm.vanderbilt.edu/novak/web.standards/webstand.
1949(continued):
                                 html.
              Cited by permission of the author; do not quote or cite w
1950:
1950(continued):
                                 ithout
1951:
              permission.
+=+=+=+= File rfc2234.txt +=+=+=+=
2-digit found at line 424:
422:
423:
         That is, exactly <N> occurrences of <element>. Thus 2DIGIT
423(continued):
         2-digit number, and 3ALPHA is a string of three alphabetic
424:
425:
         characters.
426:
2digit found at line 423:
421:
              <n>*<n>element
422:
         That is, exactly <N> occurrences of <element>. Thus 2DIGIT
423:
423(continued):
                         is a
         2-digit number, and 3ALPHA is a string of three alphabetic
424:
425:
         characters.
+=+=+=+= File rfc2235.txt +=+=+=+=
2000 found at line 862:
860:
861:
      1997
862:
           2000th RFC: "Internet Official Protocol Standards"
863:
           71,618 mailing lists registered at Liszt, a mailing list di
864:
864(continued):
                        rectory
+=+=+=+= File rfc2244.txt +=+=+=+=
2digit found at line 3555:
3553:
                                ;; Timestamp in UTC
3554:
3555:
          time-day
                             = 2DIGIT ;; 01-31
3556:
3557:
          time-hour
                             = 2DIGIT ;; 00-23
2digit found at line 3557:
3555:
                             = 2DIGIT ;; 01-31
          time-day
3556:
3557:
          time-hour
                             = 2DIGIT ;; 00-23
3558:
3559:
          time-minute
                             = 2DIGIT ;; 00-59
```

```
2digit found at line 3559:
          time-hour
                              = 2DIGIT ;; 00-23
3557:
3558:
          time-minute
                              = 2DIGIT :: 00-59
3559:
3560:
3561:
          time-month
                              = 2DIGIT ;; 01-12
2digit found at line 3561:
3559:
          time-minute
                              = 2DIGIT ;; 00-59
3560:
          time-month
                              = 2DIGIT ;; 01-12
3561:
3562:
                              = 2DIGIT ;; 00-60
3563:
          time-second
2digit found at line 3563:
3561:
          time-month
                              = 2DIGIT ;; 01-12
3562:
                              = 2DIGIT ;; 00-60
          time-second
3563:
3564:
          time-subsecond
                              = *DIGIT
3565:
2000 found at line 2217:
             criteria):
2215:
                 AND COMPARE "modtime" "+i:octet" "19951206103400"
2216:
                     COMPARE "modtime" "-i;octet" "19960112000000"
2217:
             refers to all entries modified between 10:34 December 6 19
2218:
2218(continued):
                                 95 and
             midnight January 12, 1996 UTC.
2219:
+=+=+=+= File rfc2252.txt +=+=+=+=
UTCTime found at line 1300:
1298:
          Values in this syntax are encoded as if they were printable s
1299:
1299(continued):
                                 trinas
          with the strings containing a UTCTime value. This is histori
1300:
1300(continued):
                                 cal; new
          attribute definitions SHOULD use GeneralizedTime instead.
1301:
1302:
+=+=+=+= File rfc2261.txt +=+=+=+=
2000 found at line 1923:
1921:
1922:
          snmpFrameworkMIB MODULE-IDENTITY
              LAST-UPDATED "9711200000Z"
1923:
                                                      -- 20 November 1997
1923(continued):
              ORGANIZATION "SNMPv3 Working Group"
1924:
              CONTACT-INFO "WG-email: snmpv3@tis.com
1925:
```

```
+=+=+=+= File rfc2262.txt +=+=+=+=
2000 found at line 818:
816:
         SNMpMPDMIB MODULE-IDENTITY
817:
             LAST-UPDATED "9711200000Z"
                                                    -- 20 November 19
818:
818(continued):
                        97
             ORGANIZATION "SNMPv3 Working Group"
819:
             CONTACT-INFO "WG-email: snmpv3@tis.com
820:
+=+=+=+= File rfc2264.txt +=+=+=+=
2000 found at line 1715:
1713:
      snmpUsmMIB MODULE-IDENTITY
1714:
          LAST-UPDATED "9711200000Z"
1715:
                                                -- 20 Nov 1997, midnig
1715(continued):
                               ht
1716: ORGÁNIZATION "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, midnig
554(continued):
                       ht
          ORGANIZATION "SNMPv3 Working Group"
555:
556:
          CONTACT-INFO "WG-email: snmpv3@tis.com
+=+=+=+= File rfc2271.txt +=+=+=+=
2000 found at line 1923:
1921:
1922:
          snmpFrameworkMIB MODULE-IDENTITY
              LAST-UPDATED "9711200000Z"
                                                   -- 20 November 1997
1923:
1923(continued):
              ORGANIZATION "SNMPv3 Working Group"
1924:
              CONTACT-INFO "WG-email: snmpv3@tis.com
1925:
+=+=+=+= File rfc2272.txt +=+=+=+=
2000 found at line 818:
816:
         snmpMPDMIB MODULE-IDENTITY
817:
             LAST-UPDATED "9711200000Z"
                                                    -- 20 November 19
818:
818(continued):
                       97
             ORGANIZATION "SNMPv3 Working Group"
819:
             CONTACT-INFO "WG-email: snmpv3@tis.com
820:
+=+=+=+= File rfc2274.txt +=+=+=+=
2000 found at line 1715:
1713:
```

```
1714:
       snmpUsmMIB MODULE-IDENTITY
           LAST-UPDATED "9711200000Z"
                                                  -- 20 Nov 1997, midnig
1715:
1715(continued):
                                ht
           ORGANIZATION "SNMPv3 Working Group"
1716:
           CONTACT-INFO "WG-email:
1717:
                                     snmpv3@tis.com
+=+=+=+= File rfc2275.txt +=+=+=+=
2000 found at line 554:
552:
553:
      snmpVacmMIB
                        MODULE-IDENTITY
          LAST-UPDATED "9711200000Z"
                                                 -- 20 Nov 1997, midnig
554:
554(continued):
                        ht
          ORGANIZATION "SNMPv3 Working Group"
555:
          CONTACT-INFO "WG-email: snmpv3@tis.com
556:
+=+=+=+= File rfc2280.txt +=+=+=+=
2000 found at line 2119:
2117:
          missing, they default to:
2118:
2119:
             flap damp(1000, 2000, 750, 900, 900, 20000)
2120:
          That is, a penalty of 1000 is assigned at each route flap, th
2121:
2121(continued):
                                e route
2000 found at line 2122:
2120:
2121:
          That is, a penalty of 1000 is assigned at each route flap, th
2121(continued):
                                e route
          is suppressed when penalty reaches 2000. The penalty is redu
2122:
                                cedin
2122(continued):
2123:
          half after 15 minutes (900 seconds) of stability regardless o
2123(continued):
2124:
          whether the route is up or down. A supressed route is reused
2124(continued):
                                 when
+=+=+=+= File rfc2281.txt +=+=+=+=
1900 found at line 854:
852:
         Santa Clara, CA 95054
853:
         Phone: (408) 327-1900
854:
855:
         EMail: tli@juniper.net
856:
```

```
1900 found at line 863:
861:
            Santa Clara, CA 95054
862:
863:
            Phone: (408) 327-1900
            EMail: cole@juniper.net
864:
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.
                        For example, '/opt/MYYpkg/bin/myyproc' would be returned for process 'myyproc' whose execution path is '/opt/MYYpkg/bin/myyproc'."
1439:
1440:
1441:
'yy' on a line without 'yyyy' found at line 1440:
                        "The full path and filename of the process.
1438:
                        For example, '/opt/MYYpkg/bin/myyproc' would be returned for process 'myyproc' whose execution path is '/opt/MYYpkg/bin/myyproc'."
1439:
1440:
1441:
                   ::= { sysApplElmtRunEntry 7 }
1442:
'yy' on a line without 'yyyy' found at line 1441:
                        For example, '/opt/MYYpkg/bin/myyproc' would
1439:
                        be returned for process 'myyproc' whose execution path is '/opt/MYYpkg/bin/myyproc'."
1440:
1441:
1442:
                   ::= { sysApplElmtRunEntry 7 }
1443:
'yy' on a line without 'yyyy' found at line 1706:
                   DESCRIPTION
1704:
1705:
                        "The full path and filename of the process.
                        For example, '/opt/MYYpkg/bin/myyproc' would be returned for process 'myyproc' whose execution path was '/opt/MYYpkg/bin/myyproc'."
1706:
1707:
1708:
'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
                        be returned for process 'myyproc' whose execution
1707:
                        path was '/opt/MYYpkg/bin/myyproc'."
1708:
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"
              ORGANIZATION "IETF Applications MIB Working Group"
403:
404:
              CONTACT-INFO
+=+=+=+= File rfc2292.txt +=+=+=+=
2000 found at line 547:
          #define ND_NA_FLAG_ROUTER
545:
                                               0x80000000
          #define ND_NA_FLAG_SOLICITED
546:
                                               0x40000000
          #define ND_NA_FLAG_OVERRIDE
547:
                                               0x20000000
                 /*BYTE ORDER == LITTLE_ENDIAN */
548:
          #else
          #define ND NA FLAG ROUTER
549:
                                              0x00000080
+=+=+=+= File rfc2298.txt +=+=+=+=
2000 found at line 1310:
           Date: Wed, 20 Sep 1995 00:19:00 (EDT) -0400
1308:
           From: Joe Recipient <Joe_Recipient@mega.edu>
1309:
           Message-Id: <199509200019.12345@mega.edu>
1310:
1311:
           Subject: Disposition notification
1312:
           To: Jane Sender <Jane Sender@huge.com>
+=+=+=+= File rfc2300.txt +=+=+=+=
2000 found at line 9:
    Network Working Group
                                                       Internet Architectu
7:
7(continued):
                           re Board
    Request for Comments: 2300
                                                                  J. Postel
                            Editor
8(continued):
    Obsoletes: 2200, 2000, 1920, 1880, 1800,
9:
9(continued):
                           May 1998
     1780, 1720, 1610, 1600, 1540, 1500, 1410, 1360, 1280, 1250, 1200, 1140, 1130, 1100, 1083
10:
11:
+=+=+=+= File rfc2308.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 873:
                     NS2.XX.EXAMPLE. 600 IN NXT XX.EXAMPLE. NXT A NXT
871:
871(continued):
                           SIG
                     NS2.XX.EXAMPLE. 600 IN SIG NXT ... XX.EXAMPLE. ..
872:
872(continued):
                     EXAMPLE.
                                   65799 IN NS NS1.YY.EXAMPLE.
873:
```

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```
EXAMPLE.
                                       65799 IN NS NS2.YY.EXAMPLE.
874:
875:
                                       65799 IN SIG NS ... XX.EXAMPLE. ...
                     EXAMPLE.
875(continued):
'yy' on a line without 'yyyy' found at line 874:
872:
                     NS2.XX.EXAMPLE. 600 IN SIG NXT ... XX.EXAMPLE. ..
872(continued):
                     EXAMPLE.
                                       65799 IN NS NS1.YY.EXAMPLE.
873:
                                       65799 IN NS NS2.YY.EXAMPLE.
874:
                     EXAMPLE.
                     EXAMPLE.
875:
                                       65799 IN SIG NS ... XX.EXAMPLE. ...
875(continued):
                 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. ...
                     NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1
879:
                     NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
880:
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
                     XX.EXAMPLE. 65800 IN SIG KEY ... EXAMPLE. ... NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1
878:
879:
                     NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
880:
                     NS2.YY.EXAMPLE. 65799 IN A 10.100.0.2
NS3.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
881:
882:
'yy' on a line without 'yyyy' found at line 881:
879: NS1.YY.EXAMPLE. 65799 IN A 10.100.0.1
879:
                     NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
880:
                     NS2.YY.EXAMPLE. 65799 IN A
                                                      10.100.0.2
881:
                     NS3.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
882:
                     EXAMPLE.
                                       65799 IN KEY 0x4100 1 1 ...
883:
'yy' on a line without 'yyyy' found at line 882:
880: NS1.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
                     NS2.YY.EXAMPLE. 65799 IN A
881:
                                                      10.100.0.2
                     NS3.YY.EXAMPLE. 65799 IN SIG A ... EXAMPLE. ...
882:
883:
                     EXAMPLE.
                                       65799 IN KEY 0x4100 1 1 ...
                     EXAMPLE.
                                       65799 IN SIG KEY ... . ...
884:
2000 found at line 805:
803:
                $ORIGIN XX.EXAMPLE.
804:
                     IN SOA
                                           NS1.XX.EXAMPLE. HOSTMATER.XX.EXA
                           MPLE. (
804(continued):
805:
                                           1997102000
                                                             : serial
                                           1800 ; refresh (30 mins)
806:
807:
                                           900
                                                    ; retry (15 mins)
```

```
+=+=+=+= File rfc2311.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 269:
267: Sending agents MUST encode signing time through the year 2049
267(continued):
                                  as
            UTCTime; signing times in 2050 or later MUST be encoded as GeneralizedTime. Agents MUST interpret the year field (YY) as
268:
269:
269(continued):
            follows: if YY is greater than or equal to 50, the year is interpreted as 19YY; if YY is less than 50, the year is inter
270:
271:
271(continued):
                                 preted
'yy' on a line without 'yyyy' found at line 270:
            UTCTime; signing times in 2050 or later MUST be encoded as GeneralizedTime. Agents MUST interpret the year field (YY) as
268:
269:
269(continued):
270:
            follows: if YY is greater than or equal to 50, the year is
            interpreted as 19YY; if YY is less than 50, the year is inter
271:
271(continued):
                                preted
272:
            as 20YY.
'yy' on a line without 'yyyy' found at line 271:
269:
            GeneralizedTime. Agents MUST interpret the year field (YY) as
269(continued):
            follows: if YY is greater than or equal to 50, the year is interpreted as 19YY; if YY is less than 50, the year is inter
270:
271:
271(continued):
                                preted
            as 20YY.
272:
273:
'yy' on a line without 'yyyy' found at line 272:
270: follows: if YY is greater than or equal to 50, the year is
271: interpreted as 19YY; if YY is less than 50, the year is inter
271(continued):
                                preted
            as 20YY.
272:
273:
274:
        2.5.2 S/MIME Capabilities Attribute
UTCTime found at line 268:
266:
267:
            Sending agents MUST encode signing time through the year 2049
267(continued):
                                  as
            UTCTime; signing times in 2050 or later MUST be encoded as GeneralizedTime. Agents MUST interpret the year field (YY) as
268:
269:
269(continued):
            follows: if YY is greater than or equal to 50, the year is
270:
1900 found at line 1972:
1970:
             Mountain View, CA 94043
```

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```
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:
                           "smpte" | "smpte-30-drop" | "smpte-25"
904:
         smpte-type
905:
                                           ; other timecodes may be adde
905(continued):
                         d
                           1*2DIGIT ":" 1*2DIGIT ":" 1*2DIGIT [ ":" 1*2
906:
         smpte-time
                         DIGIT ] [ "." 1*2DIGIT ]
906(continued):
907:
908:
2digit found at line 907:
905:
                                           ; other timecodes may be adde
905(continued):
                         d
                           1*2DIGIT ":" 1*2DIGIT ":" 1*2DIGIT [ ":" 1*2
         smpte-time
906:
906(continued):
                         DIGIT
                                "." 1*2DIGIT ]
907:
908:
909:
         Examples:
2digit found at line 940:
                           npt-hh ":" npt-mm ":" npt-ss [ "." *DIGIT ]
938:
         npt-hhmmss
                      =
                                        ; any positive number
                           1*DIGIT
939:
         npt-hh
                       =
                                        ; 0-59
940:
         npt-mm
                       =
                           1*2DIGIT
                                        ; 0-59
                           1*2DIGIT
941:
         npt-ss
                       =
942:
2digit found at line 941:
                                         any positive number
939:
         npt-hh
                       =
                           1*DIGIT
                                        ; 0-59
; 0-59
940:
         npt-mm
                           1*2DIGIT
                       =
941:
         npt-ss
                       =
                           1*2DIGIT
942:
         Examples:
943:
```

```
+=+=+=+= File rfc2332.txt +=+=+=+=
1900 found at line 2839:
                                        3260 Jay St.
Santa Clara, CA 95054
Phone: +1 408 327 1900
2837:
         1620 Tuckerstown Road
         Dresher, PA 19025 USA
2838:
         Phone: +1 215 830 0692
2839:
         EMail: dave@corecom.com
                                                   bcole@jnx.com
2840:
                                           EMail:
2841:
+=+=+=+= File rfc2353.txt +=+=+=+=
2000 found at line 211:
        native IP DLC, this field is not used to convey a port number
209(continued):
                       for
        replies; moreover, the zero setting is not used. IANA has re
210:
                 gistered
210(continued):
        port numbers 12000 through 12004 for use in these two fields
211:
211(continued):
                      by the
        native IP DLC; use of these port numbers allows prioritizatio
212:
212(continued):
                      n in the
213:
        IP network. For more details of the use of these fields, see
213(continued):
                       2.6.1.
2000 found at line 1694:
1692:
         At an intermediate HPR node, link activation failure can be r
1693:
1693(continued):
                              eported
         with sense data X'08010000' or X'80020000'. At a node with r
1694(continued):
                              oute-
         selection responsibility, such failure can be reported with s
1695:
                              ense
1695(continued):
         data X'80140001'.
1696:
2000 found at line 1841:
1839: | the same connection network.
1839(continued):
1840: +------
1840(continued):
1841: | Link failure
                                                             I X'800
                            20000' |
1841(continued):
1842: +------
1842(continued):
1843: | Route selection services has determined that no path | X'801
                              40001' |
1843(continued):
2000 found at line 1868:
        will be able to exploit routers that provide priority function
1866(continued):
1867:
         The 5 UDP port numbers, 12000-12004 (decimal), have been assi
1868:
```

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```
1868(continued):
                                gned by
          the Internet Assigned Number Authority (IANA). Four of these
1869:
1869(continued):
                                 port
          numbers are used for ANR-routed network layer packets (NLPs)
1870:
1870(continued):
2000 found at line 1872:
          numbers are used for ANR-routed network layer packets (NLPs)
1870:
1870(continued):
                                and
          correspond to the APPN transmission priorities (network, 1200
1871:
                                1; high,
1871(continued):
          12002; medium, 12003; and low, 12004), and one port number (1
1872:
1872(continued):
                                2000) is
          used for a set of LLC commands (i.e., XID, TEST, DISC, and DM
1873:
                                 ) and
1873(continued):
          function-routed NLPs (i.e., XID_DONE_RQ and XID DONE RSP). T
1874:
1874(continued):
                                hese
2000 found at line 2417:
          the source port number is not relevant. That is, the firewal
2415:
                                l should
2415(continued):
2416:
          accept traffic with the IP addresses of the HPR/IP nodes and
2416(continued):
                                with
          destination port numbers in the range 12000 to 12004.
2417:
          2417(continued):
2418:
2418(continued):
                                such
          attacks could cause the RTP connection to fail or even introd
2419:
2419(continued):
+=+=+=+= File rfc2355.txt +=+=+=+=
2000 found at line 1488:
1486:
                     0x00
                                    Command Reject
                                                           0x10030000
1487:
                                 Intervention Required
1488:
                     0x01
                                                           0x08020000
1489:
                     0x02
                                    Operation Check
                                                           0x10050000
1490:
+=+=+=+= File rfc2361.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 30:
28: * video/vnd.avi; codec=XXX identifies a specific video codec
          ed): (i.e.,
XXX) within the AVI Registry.
28(continued):
29:
30:
        * audio/vnd.wave; codec=YYY identifies a specific audio codec
30(continued):
31:
          (i.e., YYY) within the WAVE Registry.
32:
```

```
'yy' on a line without 'yyyy' found at line 31:
          XXX) within the AVI Registry.
29:
30:
        * audio/vnd.wave; codec=YYY identifies a specific audio codec
30(continued):
31:
          (i.e., YYY) within the WAVE Registry.
32:
33:
        Appendix A and Appendix B provides an authoritative reference
33(continued):
                          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:
         PO Box 582
1472:
1473:
         Stellenbosch Stellenbosch South Africa
1474:
         27 21 888 2000
1475:
         A.75
                 DF GSM610
1476:
2000 found at line 1487:
1485:
         PO Box 582
         Stellenbosch 7600 South Africa
1486:
         27 21 888 2000
1487:
1488:
         A.76
1489:
                 ISIAudio
2000 found at line 1545:
         4900 Old Ironsides Drive
1543:
         Santa Clara, California 95054 USA
1544:
         (408) 492-2000
1545:
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=2
1994(continued):
                                 000
1995:
         WAVE form wFormatTag ID:
                                                   WAVE FORMAT DVM
2000 found at line 1994:
1992:
1993:
         WAVE form Registration Number (hex):
                                                   0x2000
```

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```
1994:
         Codec ID in the IANA Namespace:
                                                   audio/vnd.wave;codec=2
1994(continued):
                                 000
1995:
         WAVE form wFormatTag ID:
                                                   WAVE FORMAT DVM
         Contact:
1996:
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:
         707 California Street
3209:
3210:
         Mountain View, California 94041 USA
3211:
         650-526-2000
3212:
         B.83
                 TrueMotion 2.0
3213:
2000 found at line 3239:
         707 California Street
3237:
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 mailt
238(continued):
                         o URLs,
239: they just may not appear in unencoded form. The standard URL 239(continued): encoding
         mechanisms ("%" followed by a two-digit hex number) must be u
240:
240(continued):
                         sed in
241:
         certain cases.
242:
+=+=+=+= File rfc2373.txt +=+=+=+=
2digit found at line 1192:
             IPv4address = 1*3DIGIT "." 1*3DIGIT "." 1*3DIGIT "." 1*3DI
1190:
1190(continued):
                                 GIT
1191:
1192:
             IPv6prefix = hexpart "/" 1*2DIGIT
1193:
             hexpart = hexseq | hexseq "::" [ hexseq ] | "::" [ hexseq
1194:
1194(continued):
```

```
+=+=+=+= File rfc2378.txt +=+=+=+=
2digit found at line 1078:
1076:
          response = code [index] [field] text CRLF
1077:
1078:
                   = [-] LDIG 2DIGIT ":"
                   = number ":"
1079:
          index
                   = 1*SPACE attribute ":" 1*SPACE
          field
1080:
+=+=+=+= File rfc2389.txt +=+=+=+=
2digit found at line 133:
131:
              error-response = error-code SP *TCHAR CRLF
132:
              error-code = ("4" / "5") 2DIGIT
133:
134:
135:
         Note that in ABNF, strings literals are case insensitive. Th
135(continued):
+=+=+=+= File rfc2397.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 107:
105: a/TPg7JpJHxyendzWTBfX0cxOnKPjgBzi4diinWGdkF8kjdfnycQZXZeYGejm
105(continued):
                        Jι
         ZeGl9i2icVgaNVailT6F5iJ90m6mvuTS40K05M0vDk0Q4XUtwvK0zrcd3ig9u
106:
106(continued):
                        is
         F81M10IcR7lEewwcLp7tuNNkM3uNna3F2JQFo97Vriy/Xl4/f1cf5VWzXyym7
107(continued):
                        PH
108: hhx4dbgYKAAA7"
         ALT="Larry">
109:
+=+=+=+= File rfc2400.txt +=+=+=+=
2000 found at line 9:
   Network Working Group
                                                  Internet Architectu
7(continued):
                        re Board
   Request for Comments: 2400
8:
8(continued):
                         . Postel
    Obsoletes: 2300, 2200, 2000, 1920, 1880,
                                                                   J.
9:
9(continued):
                        Reynolds
    1800, 1780, 1720, 1610, 1600, 1540, 1500, 1410,
10:
10(continued):
                         Editors
11: 1360, 1280, 1250, 1200, 1140, 1130, 1100, 1083
                                                                 Septem
                        ber 1998
11(continued):
+=+=+=+= File rfc2407.txt +=+=+=+=
2000 found at line 832:
830:
         Attribute #2:
831:
```

ce. CRC

Stinson, Douglas, Cryptography Theory and Practi

2000 found at line 2976:

**2975(continued):** 

[Stinson]

2974: 2975:

```
2976:
                        Press, Inc., 2000, Corporate Blvd., Boca Raton,
2976(continued):
                        33431-9868, ISBN 0-8493-8521-0, 1995
2977:
2978:
+=+=+=+= File rfc2425.txt +=+=+=+=
yy' on a line without 'yyyy' found at line 1106:
.104: 9ucyBDb3JwLjEYMBYGA1UEAxMPVGltb3RoeSBBIEhvd2VzMSEwHwYJKoZIhvcNA
1104:
1104(continued):
                                  QkBF
        hJob3dlc0BuZXRzY2FwZS5jb20xFTATBgoJkiaJk/IsZAEBEwVob3dlczBcMA0G
1105:
1105(continued):
                                  CSqG
        SIb3DQEBAQUAA0sAMEgCQQC0JZf6wkg8pLMXHHCUvMfL5H6zjSk4vTTXZpYyrdN
1106:
1106(continued):
                                  2dXc
        oX49LKiOmgeJSzoiFKHtLOIboyludF90CgqcxtwKnAgMBAAGjNjA0MBEGCWCGSA
1107:
1107(continued):
                                  GG+E
        IBAQQEAwIAoDAfBqNVHSMEGDAWqBT84FToB/GV3jr3mcau+hUMbsQukjANBqkqh
1108:
1108(continued):
                                 kiG9
+=+=+=+= File rfc2426.txt +=+=+=+=
'yy' on a line without 'yyyy' found at line 1479:
1477:
                 MPVGltb3ŘóeSBBIEhvd2VzMSEwHwYJKoZIhvcNAQkBFhJob3dlc0BuZ
1477(continued):
                                  XRz
                 Y2FwZS5jb20xFTATBgoJkiaJk/IsZAEBEwVob3dlczBcMA0GCSgGSIb
1478:
1478(continued):
                                  3DQ
                 EBAQUAAOsAMEgCQQCOJZf6wkg8pLMXHHCUvMfL5H6zjSk4vTTXZpYyr
1479:
1479(continued):
                                  dN2
                 dXcoX49LKiOmgeJSzoiFKHtLOIboyludF90CgqcxtwKnAgMBAAGjNjA
1480:
1480(continued):
1481:
                 EGCWCGSAGG+EIBAQQEAwIAoDAfBgNVHSMEGDAWgBT84FToB/GV3jr3m
1481(continued):
                                  cau
2-digit found at line 372:
370:
         and minutes (e.g., +hh:mm). The time is specified as a 24-hou
                         r clock.
370(continued):
         Hour values are from 00 to 23, and minute values are from 00
371:
                         to 59.
371(continued):
         Hour and minutes are 2-digits with high order zeroes required
372:
372(continued):
         maintain digit count. The extended format for ISO 8601 UTC of
373:
373(continued):
                         fsets
         MUST be used. The extended format makes use of a colon charac
374:
374(continued):
                         ter as a
```

```
2digit found at line 379:
        The value is defined by the following notation:
377:
378:
                                            ;00-23
379:
                             = 2DIGIT
             time-hour
                                            ;00-59
             time-minute
                             = 2DIGIT
380:
                             = ("+" / "-") time-hour ":" time-minute
381:
             utc-offset
2digit found at line 380:
378:
                                            ;00-23
                           = 2DIGIT
379:
             time-hour
                           = ZDIGIT
             time-minute
                                            ;00-59
380:
                            = ("+" / "-") time-hour ":" time-minute
             utc-offset
381:
382:
2digit found at line 2051:
2049:
         utc-offset-value = ("+" / "-") time-hour ":" time-minute
2050:
         time-hour = 2DIGIT
                                             ;00-23
2051:
         time-minute = 2DIGIT
2052:
                                             :00-59
2053:
2digit found at line 2052:
         utc-offset-value = ("+" / "-") time-hour ":" time-minute
205Ö:
                     = 2DIGIT
                                             ;00-23
2051:
         time-hour
2052:
         time-minute = 2DIGIT
                                             :00-59
2053:
     5. Differences From vCard v2.1
2054:
+=+=+=+= File rfc2440.txt +=+=+=+=
2000 found at line 3227:
3225:
         Encryption Standard. This algorithm will work with (at least)
                                128,
3225(continued):
         192, and 256-bit keys. We expect that this algorithm will be
3226:
3226(continued):
                               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 2288: 2286: ordmoday = 1DIGIT / 2DIGIT ;1
                                         ;1 to 31
```

```
2287:
            byyrdaylist = yeardaynum / ( yeardaynum *("," yeardaynum) )
2288:
2288(continued):
2289:
2290:
            yeardaynum = ([plus] ordyrday) / (minus ordyrday)
'yy' on a line without 'yyyy' found at line 2388:
2386:
          the month.
2387:
          The BYYEARDAY rule part specifies a COMMA character (US-ASCII
2388:
2388(continued):
                                  decimal
          44) separated list of days of the year. Valid values are 1 to
2389(continued):
                                  366 or
          -366 to -1. For example, -1 represents the last day of the ye
2390:
2390(continued):
                                 ar
'yy' on a line without 'yyyy' found at line 2461:
2459:
          specified FREQ and INTERVAL rule parts, the BYxxx rule parts
2459(continued):
                                 are
          applied to the current set of evaluated occurrences in the fo
2460:
2460(continued):
                                 llowina
          order: BYMONTH, BYWEEKNO, BYYEARDAY, BYMONTHDAY, BYDAY, BYHOU
2461:
2461(continued):
                                 R,
          BYMINUTE, BYSECOND and BYSETPOS: then COUNT and UNTIL are eva
2462(continued):
                                 luated.
2463:
'yy' on a line without 'yyyy' found at line 6804:
                (2000 9:00 AM EDT)June 10; July 10
6802:
6803:
                (2001 9:00 AM EDT)June 10; July 10
            Note: Since none of the BYDAY, BYMONTHDAY or BYYEARDAY comp
6804:
6804(continued):
                                 onents
            are specified, the day is gotten from DTSTART
6805:
6806:
'yy' on a line without 'yyyy' found at line 6820:
6818:
            DTSTART:TZID=US-Eastern:19970101T090000
6819:
6820:
            RRULE: FREQ=YEARLY; INTERVAL=3; COUNT=10; BYYEARDAY=1, 100, 200
6821:
            ==> (1997 9:00 AM EST) January 1
6822:
two-digit found at line 1919:
          of values. The format for the value type is expressed as the
1917:
1917(continued):
                                 [ISO
          8601] complete representation, basic format for a calendar da
1918:
1918(continued):
                                 te. The
1919:
          textual format specifies a four-digit year, two-digit month,
```

```
1919(continued):
                                 and
1920:
          two-digit day of the month. There are no separator characters
1920(continued):
                                  between
          the year, month and day component text.
1921:
two-digit found at line 1920:
          8601] complete representation, basic format for a calendar da
1918:
1918(continued):
                                 te. The
1919:
          textual format specifies a four-digit year, two-digit month,
1919(continued):
          two-digit day of the month. There are no separator characters
1920(continued):
                                  between
1921:
          the year, month and day component text.
1922:
two-digit found at line 2610:
          of day. The format is based on the [ISO 8601] complete
2608:
2609:
          representation, basic format for a time of day. The text form
2609(continued):
                                 at
          consists of a two-digit 24-hour of the day (i.e., values 0-23
2610:
          nued):
digit minute in the hour (i.e., values 0-59), and two-digit s
2610(continued):
2611:
2611(continued):
                                 econds
          in the minute (i.e., values 0-60). The seconds value of 60 MU
2612(continued):
                                 ST only
two-digit found at line 2611:
          representation, basic format for a time of day. The text form
2609:
2609(continued):
                                 at
          consists of a two-digit 24-hour of the day (i.e., values 0-23
2610:
                                 ), two-
2610(continued):
          digit minute in the hour (i.e., values 0-59), and two-digit s
2611:
2611(continued):
                                 econds
          in the minute (i.e., values 0-60). The seconds value of 60 MU
2612:
2612(continued):
                                 ST only
          to be used to account for "leap" seconds. Fractions of a seco
2613:
2613(continued):
                                 nd are
two-digit found at line 4583:
          Values for latitude and longitude shall be expressed as decim
4581:
4581(continued):
                                 al
          fractions of degrees. Whole degrees of latitude shall be repr
4582:
4582(continued):
                                 esented
```

```
by a two-digit decimal number ranging from 0 through 90. Whol
4583:
4583(continued):
4584:
          degrees of longitude shall be represented by a decimal number
4584(continued):
                                  ranging
          from 0 through 180. When a decimal fraction of a degree is sp
4585:
4585(continued):
                                 ecified,
2digit found at line 1911:
1909:
1910:
                                = 2DIGIT
1911:
            date-month
                                                 :01-12
                                                 ;01-28, 01-29, 01-30, 01
            date-mday
                                = 2DIGIT
1912:
1912(continued):
                                 -31
1913:
                                                 ;based on month/year
2digit found at line 1912:
1910:
            date-month
                                = 2DIGIT
1911:
                                                 :01-12
            date-mday
                                = 2DIGIT
                                                 ;01-28, 01-29, 01-30, 01
1912:
1912(continued):
                                 -31
                                                 ;based on month/year
1913:
1914:
2digit found at line 2258:
2256:
            byseclist = seconds / ( seconds *("," seconds) )
2257:
2258:
                        = 1DIGIT / 2DIGIT
                                                 :0 to 59
            seconds
2259:
2260:
            byminlist = minutes / ( minutes *("," minutes) )
2digit found at line 2262:
            byminlist = minutes / ( minutes *("," minutes) )
2260:
2261:
2262:
            minutes
                        = 1DIGIT / 2DIGIT
                                                 :0 to 59
2263:
2264:
                        = hour / ( hour *("," hour) )
            bvhrlist
2digit found at line 2266:
2264:
            bvhrlist
                       = hour / ( hour *("," hour) )
2265:
                        = 1DIGIT / 2DIGIT
2266:
                                                 ;0 to 23
            hour
2267:
            bywdaylist = weekdaynum / ( weekdaynum *("," weekdaynum) )
2268:
2digit found at line 2276:
2274:
            minus
2275:
2276:
            ordwk
                        = 1DIGIT / 2DIGIT
                                                 :1 to 53
```

= 2DIGIT

= 2DIGIT

= 2DIGIT

;The "60" value is used to account for "leap" seconds.

e-utcl

= 2DIGIT

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monthdaynum = ([plus] ordmoday) / (minus ordmoday)

yeardaynum = ([plus] ordyrday) / (minus ordyrday)

bywknolist = weeknum / ( weeknum \*("," weeknum) )

ordyrday = 1DIGIT / 2DIGIT / 3DIGIT

= 1DIGIT / 2DIGIT

byyrdaylist = yeardaynum / ( yeardaynum \*("," yeardaynum) )

= monthnum / ( monthnum \*("," monthnum) )

= setposday / ( setposday \*("," setposday) )

ordmodav = 1DIGIT / 2DIGIT

= "SU" / "MO" / "TU" / "WE" / "TH" / "FR" / "SA"

;1 to 31

;1 to 12

= time-hour time-minute time-second [time-

;00-23

:00-23

:00-59

00 - 60

:1 to 366

2277:

2278:

2284: 2285:

2286: 2287:

2288:

2290: 2291: 2292:

2293:

2294:

2305:

2306: 2307:

2308: 2309:

2593:

2594: 2595:

2595:

2596:

2597:

2598: 2599:

2278(continued):

2288(continued):

weekday

2digit found at line 2286:

2digit found at line 2292:

2digit found at line 2307:

2digit found at line 2595:

2digit found at line 2597:

time-hour

time-minute

time-second

2593(continued):

time

bvmolist

monthnum

bvsplist

time-hour

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```
1900 found at line 2988:
            DTSTAMP: 19970901T1300Z
2986:
2987:
            DTSTART: 19970903T163000Z
            DTEND: 19970903T190000Z
2988:
            SUMMARY: Annual Employee Review
2989:
2990:
            CLASS: PRIVATE
2000 found at line 1716:
          The following are examples of this property parameter:
1714:
1715:
            DTSTART; TZID=US-Eastern: 19980119T020000
1716:
1717:
1718:
            DTEND; TZID=US-Eastern: 19980119T030000
2000 found at line 2029:
2027:
          New York on Januarry 19, 1998:
2028:
2029:
                 DTSTART: TZID=US-Eastern: 19980119T020000
2030:
          Example: The following represents July 14, 1997, at 1:30 PM i
2031:
2031(continued):
                                 n New
2000 found at line 2822:
          Property names, parameter names and enumerated parameter valu
2820:
2820(continued):
                                 es are
          case insensitive. For example, the property name "DUE" is the
2821:
2821(continued):
                                  same as
          "due" and "Due", DTSTART;TZID=US-Eastern:19980714T120000 is t
2822:
2822(continued):
                                 he same
2823:
          as DtStart;TzID=US-Eastern:19980714T120000.
2824:
2000 found at line 2823:
          case insensitive. For example, the property name "DUE" is the
2821:
2821(continued):
                                  same as
          "due" and "Due", DTSTART;TZID=US-Eastern:19980714T120000 is t
2822:
2822(continued):
                                 he same
2823:
          as DtStart;TzID=US-Eastern:19980714T120000.
2824:
2825:
      4.6 Calendar Components
2000 found at line 3566:
          Time took effect in Fall 1967 for New York City:
3564:
3565:
            DTSTART: 19671029T020000
3566:
3567:
            TZOFFSETFROM: -0400
3568:
```

```
2000 found at line 3631:
            LAST-MODIFIED: 19870101T000000Z
3629:
3630:
            BEGIN: STANDARD
            DTSTART: 19971026T020000
3631:
3632:
            RDATE: 19971026T020000
3633:
            TZOFFSETFROM: -0400
2000 found at line 3632:
            BEGIN: STANDARD
3630:
            DTSTART: 19971026T020000
3631:
            RDATE: 19971026T020000
3632:
3633:
            TZOFFSETFROM: -0400
            TZOFFSETTO: -0500
3634:
2000 found at line 3638:
3636:
            END:STANDARD
            BEGIN: DAYLIGHT
3637:
            DTSTART: 19971026T020000
3638:
3639:
3640:
2000 found at line 3647:
3645:
3646:
3647:
            RDATE: 19970406T020000
            TZOFFSETFROM: -0500
3648:
            TZOFFSETTO: -0400
3649:
2000 found at line 3665:
            TZURL:http://zones.stds_r_us.net/tz/US-Eastern
3663:
3664:
            BEGIN:STANDARD
3665:
            DTSTART: 19671029T020000
            RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=10
3666:
            TZOFFSETFROM: -0400
3667:
2000 found at line 3672:
            END:STANDARD
3670:
3671:
            BEGIN: DAYLIGHT
3672:
            DTSTART: 19870405T020000
3673:
            RRULE: FREQ=YEARLY; BYDAY=1SU; BYMONTH=4
            TZOFFSETFROM: -0500
3674:
2000 found at line 3688:
3686:
            LAST-MODIFIED: 19870101T000000Z
3687:
            BEGIN:STANDARD
3688:
            DTSTART: 19671029T020000
3689:
            RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=10
            TZOFFSETFROM: -0400
3690:
```

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```
2000 found at line 3704:
3702:
3703:
             BEGIN: DAYLIGHT
3704:
             DTSTART: 19870405T020000
             RRULE: FREQ=YEARLY; BYDAY=1SU; BYMONTH=4; UNTIL=19980404T070000
3705:
3705(continued):
                                  Z
             TZOFFSETFROM: -0500
3706:
2000 found at line 3721:
            LAST-MODIFIED: 19870101T000000Z
3719:
3720:
            BEGIN:STANDARD
3721:
            DTSTART: 19671029T020000
3722:
            RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=10
3723:
             TZOFFSETFROM: -0400
2000 found at line 3728:
            END:STANDARD
3726:
3727:
             BEGIN: DAYLIGHT
3728:
            DTSTART: 19870405T020000
3729:
            RRULE: FREQ=YEARLY; BYDAY=1SU; BYMONTH=4; UNTIL=19980404T070000
3729(continued):
             TZOFFSETFROM: -0500
3730:
2000 found at line 3735:
3733:
            END:DAYLIGHT
3734:
            BEGIN: DAYLIGHT
            DTSTART: 19990424T020000
3735:
3736:
             RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=4
3737:
             TZOFFSETFROM: -0500
2000 found at line 5352:
             FREEBUSY; FBTYPE=BUSY-UNAVAILABLE: 19970308T160000Z/PT8H30M
5350:
5351:
5352:
             FREEBUSY; FBTYPE=FREE: 19970308T160000Z/PT3H, 19970308T200000Z
                                  /PT1H
5352(continued):
5353:
             FREEBUSY; FBTYPE=FREE: 19970308T160000Z/PT3H, 19970308T200000Z
5354:
5354(continued):
                                  /PT1H,
2000 found at line 5354:
             FREEBUSY; FBTYPE=FREE: 19970308T160000Z/PT3H, 19970308T200000Z
5352:
5352(continued):
                                  /PT1H
5353:
5354:
             FREEBUSY; FBTYPE=FREE: 19970308T160000Z/PT3H, 19970308T200000Z
5354(continued):
                                  /PT1H.
              19970308T230000Z/19970309T000000Z
5355:
5356:
```

```
2000 found at line 6069:
            RECURRENCE-ID; VALUE=DATE: 19960401
6067:
6068:
6069:
            RECURRENCE-ID; RANGE=THISANDFUTURE: 19960120T120000Z
6070:
       4.8.4.5 Related To
6071:
2000 found at line 6507:
6505:
            RDATE; TZID=US-EASTERN: 19970714T083000
6506:
            RDATE; VALUE=PERIOD: 19960403T020000Z/19960403T040000Z,
6507:
              19960404T010000Z/PT3H
6508:
6509:
2000 found at line 6623:
6621:
            DTSTART: TZID=US-Eastern: 19980101T090000
6622:
            RRULE: FREQ=YEARLY; UNTIL=20000131T090000Z;
6623:
6624:
             BYMONTH=1; BYDAY=SU, MO, TU, WE, TH, FR, SA
6625:
            or
2000 found at line 6626:
              BYMONTH=1; BYDAY=SU, MO, TU, WE, TH, FR, SA
6624:
6625:
6626:
            RRULE: FREQ=DAILY; UNTIL=20000131T090000Z; BYMONTH=1
6627:
            ==> (1998 9:00 AM EDT)January 1-31
6628:
2000 found at line 6630:
            ==> (1998 9:00 AM EDT)January 1-31
6628:
                 (1999 9:00 AM EDT) January 1-31
6629:
6630:
                 (2000 9:00 AM EDT) January 1-31
6631:
6632:
          Weekly for 10 occurrences
2000 found at line 6802:
                 (1998 9:00 AM EDT)June 10; July 10
6800:
                 (1999 9:00 AM EDT)June 10; July 10
6801:
6802:
                 (2000 9:00 AM EDT)June 10; July 10
                 (2001 9:00 AM EDT)June 10; July 10
6803:
            Note: Since none of the BYDAY, BYMONTHDAY or BYYEARDAY comp
6804:
6804(continued):
                                  onents
2000 found at line 6824:
6822:
            ==> (1997 9:00 AM EST) January 1
6823:
                 (1997 9:00 AM EDT)April 10; July 19
```

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2000 found at line 7640:

TZID: US-Eastern

DTSTART: 19981025T020000

RDATE: 19981025T020000 TZOFFSETFROM: -0400

**BEGIN:STANDARD** 

7638:

7639:

7640:

7641:

```
2000 found at line 7641:
7639:
            BEGIN: STANDARD
7640:
            DTSTART: 19981025T020000
            RDATE: 19981025T020000
7641:
7642:
            TZOFFSETFROM: -0400
7643:
            TZ0FFSETT0:-0500
2000 found at line 7647:
            END:STANDARD
7645:
            BEGIN: DAYLIGHT
7646:
            DTSTART: 19990404T020000
7647:
7648:
            RDATE: 19990404T020000
            TZOFFSETFROM: -0500
7649:
2000 found at line 7648:
7646:
            BEGIN: DAYLIGHT
            DTSTART: 19990404T020000
7647:
7648:
            RDATE: 19990404T020000
7649:
            TZOFFSETFROM: -0500
7650:
            TZOFFSETTO: -0400
2000 found at line 7740:
7738:
            BEGIN: VALARM
7739:
            ACTION: AUDIO
7740:
            TRIGGER: 19980403T120000
            ATTACH; FMTTYPE=audio/basic:http://host.com/pub/audio-
7741:
7742:
             files/ssbanner.aud
2000 found at line 7755:
7753:
            PRODID:-//ABC Corporation//NONSGML My Product//EN
            BEGIN: VJOURNAL
7754:
            DTSTAMP: 19970324T120000Z
7755:
7756:
            UID:uid5@host1.com
7757:
            ORGANIZER: MAILTO: ismith@host.com
+=+=+=+= File rfc2446.txt +=+=+=+=
1900 found at line 3347:
3345:
          ORGANIZER: mailto:a@example.com
          DTSTART: 19970701T200000Z
3346:
          DTSTAMP: 19970611T190000Z
3347:
          SUMMARY:ST. PAUL SAINTS -VS- DULUTH-SUPERIOR DUKES
3348:
          UID:0981234-1234234-23@example.com
3349:
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
          END: VCALENDAR
3412:
1900 found at line 3461:
          DTEND; TZID=America-Chicago: 19970701T180000
3459:
          DTSTART; TZID=America-Chicago: 19970702T160000
3460:
          DTSTAMP: 19970614T190000Z
3461:
3462:
          STATUS: CONFIRMED
3463:
          LOCATION; VALUE=URI: http://www.midwaystadium.com/
1900 found at line 3505:
          BEGIN: VEVENT
3503:
          ORGANIZER: mailto: a@example.com
3504:
          DTSTAMP: 19970614T190000Z
3505:
3506:
          UID:0981234-1234234-23@example.com
3507:
          DTSTART; VALUE=DATE: 19970714
1900 found at line 3594:
          ATTENDEE; RSVP=FALSE; TYPE=ROOM: conf_Big@example.com
3592:
3593:
          ATTENDEE: ROLE=NON-PARTICIPANT: RSVP=FALSE: Mailto: E@example.com
3593(continued):
3594:
          DTSTAMP: 19970611T190000Z
3595:
          DTSTART: 19970701T200000Z
          DTEND: 19970701T2000000Z
3596:
1900 found at line 3618:
3616:
          SEQUENCE: 0
          REQUEST-STATUS: 2.0; Success
3617:
          DTSTAMP: 19970612T190000Z
3618:
3619:
          END: VEVENT
          END: VCALENDAR
3620:
1900 found at line 3655:
         ATTENDEE; ROLE=NON-PARTICIPANT; RSVP=FALSE: Mailto: E@example.com
3653:
3653(continued):
          DTSTART: 19970701T180000Z
3654:
3655:
          DTEND: 19970701T190000Z
          SUMMARY: Phone Conference
3656:
```

UID:calsrv.example.com-873970198738777@example.com

```
1900 found at line 3659:
          UID:calsrv.example.com-873970198738777@example.com
3657:
3658:
          SEQUENCE: 1
3659:
          DTSTAMP: 19970613T190000Z
3660:
          STATUS: CONFIRMED
3661:
          END: VEVENT
1900 found at line 3680:
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: Mailto: B@example.com
3678:
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: Mailto: C@example.com
3679:
          DTSTART: 19970701T190000Z
3680:
3681:
          DTEND: 19970701T200000Z
          SUMMARY: Discuss the Merits of the election results
3682:
1900 found at line 3686:
3684:
          UID:calsrv.example.com-873970198738777a@example.com
3685:
          SEQUENCE: 0
          DTSTAMP: 19970611T190000Z
3686:
3687:
          STATUS: CONFIRMED
3688:
          END: VEVENT
1900 found at line 3713:
3711:
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: Mailto: C@example.com
          DTSTART: 19970701T160000Z
3712:
3713:
          DTEND: 19970701T190000Z
3714:
          DTSTAMP: 19970612T190000Z
          SUMMARY: Discuss the Merits of the election results
3715:
1900 found at line 3714:
3712:
          DTSTART: 19970701T160000Z
          DTEND: 19970701T190000Z
3713:
          DTSTAMP: 19970612T190000Z
3714:
          SUMMARY: Discuss the Merits of the election results
3715:
3716:
          LOCATION: Green Conference Room
1900 found at line 3721:
3719:
          UID:calsrv.example.com-873970198738777a@example.com
3720:
          SEQUENCE: 0
          DTSTAMP: 19970611T190000Z
3721:
3722:
          END: VEVENT
3723:
          END: VCALENDAR
1900 found at line 3738:
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: Mailto: B@example.com
3736:
          ATTENDEE: RSVP=TRUE: TYPE=INDIVIDUAL: Mailto: C@example.com
3737:
3738:
          DTSTAMP: 19970613T190000Z
3739:
          DTSTART: 19970701T160000Z
          DTEND: 19970701T190000Z
3740:
```

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```
1900 found at line 3740:
3738:
          DTSTAMP: 19970613T190000Z
3739:
          DTSTART: 19970701T160000Z
          DTEND: 19970701T190000Z
3740:
          SUMMARY: Discuss the Merits of the election results - changed
3741:
3741(continued):
                                  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
          END: VEVENT
3770:
          END: VCALENDAR
3771:
1900 found at line 3884:
          SEQUENCE: 0
3882:
          REQUEST-STATUS: 2.0; Success
3883:
          DTSTAMP: 19970611T190000Z
3884:
3885:
          END: VEVENT
          END: VCALENDAR
3886:
1900 found at line 3906:
3904:
          SEQUENCE: 0
3905:
          STATUS: CONFIRMED
3906:
          DTSTAMP: 19970611T190000Z
3907:
          END: VEVENT
          END: VCALENDAR
3908:
1900 found at line 3936:
3934:
          SEQUENCE: 0
3935:
          REQUEST-STATUS: 2.0; Success
          DTSTAMP: 19970614T190000Z
3936:
3937:
          END: VEVENT
          END: VCALENDAR
3938:
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:
          SEOUENCE: 1
4071:
          STATUS: CANCELLED
          DTSTAMP: 19970613T190000Z
4072:
```

4073:

**END: VEVENT** 

```
4074:
          END: VCALENDAR
1900 found at line 4157:
          ATTENDEE; ROLE=NON-PARTICIPANT;
4155:
4156:
           RSVP=FALSE: Mailto: E@example.com
4157:
          DTSTAMP: 19970611T190000Z
4158:
          DTSTART: 19970701T200000Z
          DTEND: 19970701T203000Z
4159:
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:
          DTSTART: 19980101T124200Z
4230:
4231:
          DTEND: 19980107T124200Z
4232:
          FREEBUSY: 19980101T180000Z/19980101T190000Z
          FREEBUSY: 19980103T020000Z/19980103T050000Z
4233:
4234:
          FREEBUSY: 19980107T020000Z/19980107T050000Z
1900 found at line 4236:
4234:
          FREEBUSY: 19980107T020000Z/19980107T050000Z
4235:
          FREEBUSY: 19980113T000000Z/19980113T010000Z
4236:
          FREEBUSY: 19980115T190000Z/19980115T200000Z
          FREEBUSY: 19980115T220000Z/19980115T230000Z
4237:
4238:
          FREEBUSY: 19980116T013000Z/19980116T043000Z
1900 found at line 4288:
          ATTENDEE: Mailto: B@example.com
4286:
4287:
          ATTENDEE: Mailto: C@example.com
          DTSTAMP: 19970613T190000Z
4288:
          DTSTART: 19970701T080000Z
4289:
4290:
          DTEND: 19970701T200000
1900 found at line 4319:
4317:
4318:
4319:
          DTSTAMP: 19970613T190030Z
4320:
          END: VFREEBUSY
          END: VCALENDAR
4321:
1900 found at line 4359:
4357:
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: B@example.fr
          ATTENDEE; RSVP=TRUE; TYPE=INDIVIDUAL: c@example.jp
4358:
```

DTSTAMP: 19970613T190030Z

```
DTSTART; TZID=America-SanJose: 19970701T140000
4360:
4361:
          DTEND; TZID=America-SanJose: 19970701T150000
1900 found at line 5193:
5191:
          to each of the start of each recurring instance. Hence, if th
5191(continued):
          initial "VTODO" calendar component specifies a "DTSTART" prop
5192:
                                 erty
5192(continued):
          value of "19970701T190000Ž" and a "DUE" property value of
5193:
          "19970801T190000Z" the interval of one day which is applied t
5194:
5194(continued):
                                 o each
          recurring instance of the "VTODO" calendar component to deter
5195:
                                 mine the
5195(continued):
1900 found at line 5194:
          initial "VTODO" calendar component specifies a "DTSTART" prop
5192:
5192(continued):
                                 erty
          value of "19970701T190000Ž" and a "DUE" property value of
5193:
          "19970801T190000Z" the interval of one day which is applied t
5194:
5194(continued):
                                 o each
          recurring instance of the "VTODO" calendar component to deter
5195:
5195(continued):
                                 mine the
5196:
          "DUE" date of the instance.
2000 found at line 3346:
          BEGIN: VEVENT
3344:
3345:
          ORGANIZER: mailto:a@example.com
          DTSTART: 19970701T200000Z
3346:
3347:
          DTSTAMP: 19970611T190000Z
          SUMMARY:ST. PAUL SAINTS -VS- DULUTH-SUPERIOR DUKES
3348:
2000 found at line 3437:
3435:
          TZURL:http://zones.stds r us.net/tz/America-Chicago
3436:
          BEGIN: STANDARD
          DTSTART: 19671029T020000
3437:
          RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=10
3438:
3439:
          TZOFFSETFROM: -0500
2000 found at line 3444:
3442:
          END: STANDARD
3443:
          BEGIN: DAYLIGHT
3444:
          DTSTART: 19870405T020000
          RRULE: FREQ=YEARLY: BYDAY=1SU: BYMONTH=4
3445:
3446:
          TZOFFSETFROM: -0600
2000 found at line 3595:
          ATTENDEE; ROLE=NON-PARTICIPANT; RSVP=FALSE: Mailto: E@example.com
3593:
3593(continued):
```

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

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```
2000 found at line 4194:
4192:
          ATTENDEE; TYPE=INDIVIDUAL: Mailto: D@example.com
4193:
          DTSTAMP: 19970611T190000Z
4194:
          DTSTART: 19970701T200000Z
4195:
          DTEND: 19970701T203000Z
4196:
          RRULE: FREO=WEEKLY
2000 found at line 4233:
          DTEND: 19980107T124200Z
4231:
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
          FREEBUSY: 19970701T090000Z/PT1H, 19970701T140000Z/PT30M
4310:
```

```
2000 found at line 4340:
4338:
          TZURL:http://zones.stds r us.net/tz/America-SanJose
4339:
          BEGIN: STANDARD
          DTSTART: 19671029T020000
4340:
4341:
          RRULE: FREQ=YEARLY; BYDAY=-1SU; BYMONTH=10
4342:
          TZOFFSETFROM: -0700
2000 found at line 4347:
          END: STANDARD
4345:
          BEGIN: DAYLIGHT
4346:
          DTSTART: 19870405T020000
4347:
          RRULE: FREQ=YEARLY; BYDAY=1SU; BYMONTH=4
4348:
          TZOFFSETFROM: -0800
4349:
2000 found at line 4446:
4444:
          SUMMARY: IETF Calendaring Working Group Meeting
          DTSTART: 19970601T210000Ž
4445:
          DTEND: 19970601T220000Z
4446:
4447:
          LOCATION: Conference Call
4448:
          DTSTAMP: 19970526T083000Z
2000 found at line 4473:
4471:
          SUMMARY: IETF Calendaring Working Group Meeting
          DTSTART: 19970703T210000Ž
4472:
4473:
          DTEND: 19970703T220000Z
4474:
          LOCATION: Conference Call
          DTSTAMP: 19970626T093000Z
4475:
2000 found at line 4565:
4563:
          SUMMARY: IETF Calendaring Working Group Meeting
          DTSTART: 19970901T210000Z
4564:
4565:
          DTEND: 19970901T220000Z
          LOCATION: Building 32, Microsoft, Seattle, WA
4566:
          DTSTAMP: 19970526T083000Z
4567:
2000 found at line 4601:
4599:
          SUMMARY: IETF Calendaring Working Group Meeting
          DTSTART: 19970715T210000Ž
4600:
4601:
          DTEND: 19970715T220000Z
4602:
          LOCATION: Conference Call
          DTSTAMP: 19970629T093000Z
4603:
2000 found at line 4631:
4629:
          SUMMARY: Review Accounts
4630:
          DTSTART: 19980303T210000Z
4631:
          DTEND: 19980303T220000Z
4632:
          LOCATION: The White Room
          DTSTAMP: 19980301T093000Z
4633:
```

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```
2000 found at line 4664:
4662:
          SUMMARY: Review Accounts
4663:
          DTSTART: 19980303T210000Z
          DTEND: 19980303T220000Z
4664:
          DTSTAMP: 19980303T193000Z
4665:
4666:
          LOCATION: The Usual conference room
2000 found at line 4690:
          SUMMARY: Review Accounts
4688:
          DTSTART: 19980303T210000Z
4689:
          DTEND: 19980303T220000Z
4690:
4691:
          DTSTAMP: 19980303T193000Z
          LOCATION: The White Room
4692:
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
          DTSTART: 19980315T180000Z
4780:
4781:
          DTEND: 19980315T200000Z
4782:
          DTSTAMP: 19980307T193000Z
          LOCATION: Conference Room A
4783:
2000 found at line 4811:
4809:
          SUMMARY: Review Accounts
          DTSTART: 19980304T180000Z
4810:
4811:
          DTEND: 19980304T200000Z
          DTSTAMP: 19980303T193000Z
4812:
          LOCATION: Conference Room A
4813:
2000 found at line 4863:
4861:
          CLASS: PUBLIC
          SUMMARY: IETF Calendaring Working Group Meeting
4862:
4863:
          DTSTART: 19970715T220000Z
4864:
          DTEND: 19970715T230000Z
          LOCATION: Conference Call
4865:
2000 found at line 4903:
4901:
          SUMMARY: IETF Calendaring Working Group Meeting
4902:
          DTSTART: 19970601T210000Z
4903:
          DTEND: 19970601T220000Z
4904:
          DTSTAMP: 19970602T094000Z
```

LOCATION: Conference Call

```
2000 found at line 5018:
          UID:calsrv.example.com-873970198738777-00@example.com
5016:
5017:
          SEQUENCE: 0
          DTSTAMP: 19970717T200000Z
5018:
5019:
          STATUS: Needs Action
5020:
          END: VTODO
2000 found at line 5179:
          UID:calsrv.example.com-873970198738777-00@example.com
5177:
5178:
          SEQUENCE: 0
          DTSTAMP: 19970717T200000Z
5179:
5180:
          STATUS: NEEDS ACTION
          PRIORITY:1
5181:
2000 found at line 5236:
5234:
          VERSION: 2.0
5235:
          BEGIN: VJOURNAL
          DTSTART: 19971002T200000Z
5236:
5237:
          ORGANIZER: MAILTO: A@Example.com
5238:
          SUMMARY: Phone conference minutes
2000 found at line 5358:
5356:
          SEQUENCE:3
5357:
          RRULE: FREO=WEEKLY
5358:
          RDATE: VALUE=PERIOD: 19970819T210000Z/199700819T220000Z
5359:
          ORGANIZER: Mailto: A@example.com
          ATTENDEE; ROLE=CHAIR; PARTSTAT=ACCEPTED: Mailto: A@example.com
5360:
2000 found at line 5365:
          SUMMARY: IETF Calendaring Working Group Meeting
5363:
          DTSTART: 19970801T210000Z
5364:
5365:
          DTEND: 19970801T220000Z
          RECURRENCE-ID: 19970809T210000Z
5366:
          DTSTAMP: 19970726T083000
5367:
+=+=+=+= File rfc2447.txt +=+=+=+=
1900 found at line 421:
419:
         ATTENDEE; ROLE=CHAIR; ATTSTAT=ACCEPTED: mailto: sman@netscape.com
419(continued):
         ATTENDEE; RSVP=YES: mailto: stevesil@microsoft.com
420:
421:
         DTSTAMP: 19970611T190000Z
422:
         DTSTART: 19970701T210000Z
```

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
         DTSTAMP: 19970611T190000Z
475:
476:
         DTSTART: 19970701T170000Z
         DTEND: 19970701T173000Z
477:
1900 found at line 523:
         ATTENDEE; ROLE=CHAIR; ATTSTAT=ACCEPTED: mailto: foo1@example.com
521:
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: F001@EXAMPLE.COM
         DTSTAMP: 19970611T190000Z
584:
585:
         DTSTART: 19970715T150000Z
586:
         DTEND: 19970715T230000Z
1900 found at line 631:
         ATTENDEE; ROLE=CHAIR; ATTSTAT=ACCEPTED: mailto: foo1@example.com
629:
         ATTENDEE: RSVP=YES: TYPE=INDIVIDUAL: mailto: foo2@example.com
630:
631:
         DTSTAMP: 19970611T190000Z
632:
         DTSTART: 19970701T210000Z
         DTEND: 19970701T230000Z
633:
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: 199706211T173000Z
+=+=+=+= File rfc2455.txt +=+=+=+=
2-digit found at line 7166:
7164:
7165:
                  Since this object incorporates the Year 2000-unfriendl
7165(continued):
                  2-digit year specified in SMI for the LAST-UPDATED fie
7166:
7166(continued):
                                  ld, and
7167:
7168:
2000 found at line 7165:
                  determining the level of the MIB supported by an agent
7163:
7163(continued):
```

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```
7164:
7165:
                 Since this object incorporates the Year 2000-unfriendl
7165(continued):
                 2-digit year specified in SMI for the LAST-UPDATED fie
7166(continued):
                                 ld, and
7167:
+=+=+=+= File rfc2461.txt +=+=+=+=
2000 found at line 2347:
                                         consecutive advertisements.
2345:
2346:
2347:
                                     Default: 2592000 seconds (30 days),
2347(continued):
                                  fixed
                                     (i.e., stays the same in consecutiv
2348:
2348(continued):
                                 e
2349:
                                     advertisements).
+=+=+=+= File rfc2470.txt +=+=+=+=
2000 found at line 65:
63: rely on manual configuration or router advertisements [DISC] 63(continued): to
        determine actual MTU sizes. Common default values include
64:
65:
        approximately 2000, 4000, and 8000 octets.
66:
67:
        In the absence of any other information, an implementation sh
67(continued):
                         ould 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.

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Section 19.3 of the RFC2068 says this:

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:

# can be in the future **Expires:** 

If-Modified-Since: # required to be in the past # required to be in the past Last-Modified:

# can be in the future, also takes
# relative time - number of second Retry-After:

#### 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.

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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.

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