

Network Working Group  
Request for Comments: 2199  
Category: Informational

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ISI  
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## Request for Comments Summary

RFC Numbers 2100-2199

### Status of This Memo

This RFC is a slightly annotated list of the 100 RFCs from RFC 2100 through RFCs 2199. This is a status report on these RFCs. This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

### Copyright Notice

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### Note

Many RFCs, but not all, are Proposed Standards, Draft Standards, or Standards. Since the status of these RFCs may change during the standards processing, we note here only that they are on the standards track. Please see the latest edition of "Internet Official Protocol Standards" for the current state and status of these RFCs. In the following, RFCs on the standards track are marked [STANDARDS-TRACK].

RFC ---	Author -----	Date ----	Title -----
2199	Ramos	Jan 98	Request for Comments Summary

This memo.

2198	Perkins	Sep 97	RTP Payload for Redundant Audio Data
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This document describes a payload format for use with the real-time transport protocol (RTP), version 2, for encoding redundant audio data. [STANDARDS-TRACK]

2197      Freed                      Sep 97   SMTP Service Extension  
   for Command Pipelining

This memo defines an extension to the SMTP service whereby a server can indicate the extent of its ability to accept multiple commands in a single TCP send operation. [STANDARDS-TRACK]

2196      Fraser                    Sep 97   Site Security Handbook

This handbook is a guide to developing computer security policies and procedures for sites that have systems on the Internet. The purpose of this handbook is to provide practical guidance to administrators trying to secure their information and services. The subjects covered include policy content and formation, a broad range of technical system and network security topics, and security incident response. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2195      Klensin                   Sep 97   IMAP/POP AUTHorize Extension for Simple  
   Challenge/Response

This specification provides a simple challenge-response authentication protocol that is suitable for use with IMAP4. [STANDARDS TRACK]

2194      Aboba                     Sep 97   Review of Roaming Implementations

This document reviews the design and functionality of existing roaming implementations. Examples of cases where roaming capability might be required include ISP "confederations" and ISP-provided corporate network access support. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2193      Gahrns                    Sep 97   IMAP4 Mailbox Referrals

Mailbox referrals allow clients to seamlessly access mailboxes that are distributed across several IMAP4 servers. [STANDARDS-TRACK]

2192      Newman                    Sep 97   IMAP URL Scheme

This document defines a URL scheme for referencing objects on an IMAP server. [STANDARDS-TRACK]

2191      Armitage                  Sep 97    VENUS - Very Extensive Non-Unicast Service

This document focuses exclusively on the problems associated with extending the MARS model to cover multiple clusters or clusters spanning more than one subnet. It describes a hypothetical solution, dubbed "Very Extensive NonUnicast Service" (VENUS), and shows how complex such a service would be. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2190      Zhu                        Sep 97    RTP Payload Format for H.263 Video Streams

This document specifies the payload format for encapsulating an H.263 bitstream in the Real-Time Transport Protocol (RTP). [STANDARDS TRACK]

2189      Ballardie                Sep 97    Core Based Trees (CBT version 2)  
   Multicast Routing

This document describes the Core Based Tree (CBT version 2) network layer multicast routing protocol. CBT builds a shared multicast distribution tree per group, and is suited to inter- and intra-domain multicast routing. This memo defines an Experimental Protocol for the Internet community.

2188      Banan                     Sep 97    AT&T/Neda's Efficient Short Remote  
   Operations (ESRO) Protocol  
   Specification Version 1.2

This document specifies the service model, the notation and protocol for Efficient Short Remote Operations (ESRO). This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2187      Wessels                  Sep 97    Application of Internet Cache Protocol  
   (ICP), version 2

This document describes the application of ICPv2 (Internet Cache Protocol version 2, RFC2186) to Web caching. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2186	Wessels	Sep 97	Internet Cache Protocol (ICP), version 2
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This document describes version 2 of the Internet Cache Protocol (ICPv2) as currently implemented in two World-Wide Web proxy cache packages. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2185	Callon	Sep 97	Routing Aspects Of IPv6 Transition
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This document gives an overview of the routing aspects of the IPv6 transition. It is based on the protocols defined in the document "Transition Mechanisms for IPv6 Hosts and Routers." Readers should be familiar with the transition mechanisms before reading this document. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2184	Freed	Aug 97	MIME Parameter Value and Encoded Word Extensions:Character Sets, Languages, and Continuations
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This memo defines extensions to the RFC 2045 media type and RFC 2183 disposition parameter value mechanisms. [STANDARDS-TRACK]

2183	Troost	Aug 97	Communicating Presentation Information in Internet Messages: The Content- Disposition Header Field
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This memo provides a mechanism whereby messages conforming to the MIME specifications [RFC 2045, RFC 2046, RFC 2047, RFC 2048, RFC 2049] can convey presentational information. It specifies the "Content-Disposition" header field, which is optional and valid for any MIME entity ("message" or "body part"). [STANDARDS-TRACK]

2182	Elz	Jul 97	Selection and Operation of Secondary DNS Servers
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This document discusses the selection of secondary servers for DNS zones. The number of servers appropriate for a zone is also discussed, and some general secondary server maintenance issues considered. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2181      Elz                      Jul 97   Clarifications to the DNS Specification

This document considers some areas that have been identified as problems with the specification of the Domain Name System, and proposes remedies for the defects identified. [STANDARDS TRACK]

2180      Gahrns                  Jul 97   IMAP4 Multi-Accessed Mailbox Practice

The behavior described in this document reflects the practice of some existing servers or behavior that the consensus of the IMAP mailing list has deemed to be reasonable. The behavior described within this document is believed to be [RFC-2060] compliant. However, this document is not meant to define IMAP4 compliance, nor is it an exhaustive list of valid IMAP4 behavior. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2179      Gwinn                    Jul 97   Network Security For Trade Shows

This document is designed to assist vendors and other participants in trade shows, such as Networld+Interop, in designing effective protection against network and system attacks by unauthorized individuals. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2178      Moy                        Jul 97   OSPF Version 2

This document considers some areas that have been identified as problems with the specification of the Domain Name System, and proposes remedies for the defects identified. [STANDARDS TRACK]

2177      Leiba                    Jun 97   IMAP4 IDLE command

This document specifies the syntax of an IDLE command, which will allow a client to tell the server that it's ready to accept such real-time updates. [STANDARDS-TRACK]

2176      Murakami              Jun 97    IPv4 over MAPOS Version 1

This memo documents a mechanism for supporting Version 4 of the Internet Protocol (IPv4) on Version 1 of the Multiple Access Protocol over SONET/SDH. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2175      Murakami              Jun 97    SONET/SDH with 16 Bit Addressing

This memo documents MAPOS 16, a multiple access protocol for transmission of network-protocol datagrams, encapsulated in HDLC frames with 16 bit addressing, over SONET/SDH. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2174      Murakami              Jun 97    A MAPOS version 1 Extension -  
Switch-Switch Protocol

This memo documents a MAPOS (Multiple Access Protocol over SONET/SDH) version 1 extension, Switch Switch Protocol which provides dynamic routing for unicast, broadcast, and multicast. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2173      Murakami              Jun 97    A MAPOS version 1 Extension - Node  
Switch Protocol

This document describes a MAPOS extension, Node Switch Protocol, for automatic node address assignment. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2172      Maruyama              Jun 97    MAPOS Version 1 Assigned Numbers

This memo documents the parameters used in the Multiple Access Protocol over SONET/SDH Version 1. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2171      Murakami            Jun 97    MAPOS - Multiple Access Protocol over  
    SONET/SDH   Version 1

This memo documents a multiple access protocol for transmission of network-protocol datagrams, encapsulated in High-Level Data Link Control (HDLC) frames, over SONET/SDH. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2170      Almesberger        Jul 97    Application REQuested IP over ATM  
    (AREQUIPA)

This document specifies a method for allowing ATM-attached hosts that have direct ATM connectivity to set up end-to-end IP over ATM connections within the reachable ATM cloud, on request from applications, and for the exclusive use by the requesting applications. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2169      Daniel               Jun 97    A Trivial Convention for using HTTP in  
    URN Resolution

This document specifies the "THTTP" resolution protocol - a trivial convention for encoding resolution service requests and responses as HTTP 1.0 or 1.1 requests and responses. This memo defines an Experimental Protocol for the Internet community. This memo does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2168      Daniel               Jun 97    Resolution of Uniform Resource  
    Identifiers using the Domain Name System

The requirements document for URN resolution systems defines the concept of a "resolver discovery service". This document describes the first, experimental, RDS. It is implemented by a new DNS Resource Record, NAPTR (Naming Authority PointeR), that provides rules for mapping parts of URIs to domain names. This memo defines an Experimental Protocol for the Internet community.

2167 Williamson Jun 97 Referral Whois (RWhois) Protocol V1.5

This memo describes Version 1.5 of the client/server interaction of RWhois. RWhois provides a distributed system for the discovery, retrieval, and maintenance of directory information. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2166 Bryant Jun 97 APPN Implementer's Workshop  
Closed Pages Document

This document specifies a set of extensions to RFC 1795 designed to improve the scalability of DLSw clarifications to RFC 1795 in the light of the implementation experience to-date. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2165 Veizades Jun 97 Service Location Protocol

The Service Location Protocol provides a scalable framework for the discovery and selection of network services. Using this protocol, computers using the Internet no longer need so much static configuration of network services for network based applications. This is especially important as computers become more portable, and users less tolerant or able to fulfill the demands of network system administration.  
[STANDARDS-TRACK]

2164 Kille Jan 98 Use of an X.500/LDAP directory to  
support MIXER address mapping

This specification defines how to represent and maintain these mappings (MIXER Conformant Global Address Mappings of MCGAMs) in an X.500 or LDAP directory. [STANDARDS-TRACK]

2163 Allocchio Jan 98 Using the Internet DNS to Distribute  
MIXER Conformant Global Address  
Mapping (MCGAM)

This memo is the complete technical specification to store in the Internet Domain Name System (DNS) the mapping information (MCGAM) needed by MIXER conformant e-mail gateways and other tools to map RFC822 domain names into X.400 O/R names and vice versa. [STANDARDS-TRACK]

2162 Allocchio Jan 98 MaXIM-11 - Mapping between X.400 /  
Internet mail and Mail-11 mail

The standard referred shortly into this document as "X.400" relates to the ISO/IEC 10021 - CCITT 1984, 1988 and 1992 X.400 Series Recommendations covering the Message Oriented Text Interchange Service (MOTIS). This document covers the Inter Personal Messaging System (IPMS) only. This memo defines an Experimental Protocol for the Internet community.

2161 Alvestrand Jan 98 A MIME Body Part for ODA

This document contains the definitions, originally contained in RFC 1495 and RFC 1341, on how to carry ODA in MIME, and how to translate it to its X.400 representation. This memo defines an Experimental Protocol for the Internet community.

2160 Alvestrand Jan 98 Carrying PostScript in X.400 and MIME

This document describes methods for carrying PostScript information in the two standard mail systems MIME and X.400, and the conversion between them. [STANDARDS-TRACK]

2159 Alvestrand Jan 98 A MIME Body Part for FAX

This document contains the definitions, originally contained in RFC 1494, on how to carry CCITT G3Fax in MIME, and how to translate it to its X.400 representation. [STANDARDS-TRACK]

2158 Alvestrand Jan 98 X.400 Image Body Parts

This document contains the body parts defined in RFC 1495 for carrying image formats that were originally defined in MIME through an X.400 system. [STANDARDS-TRACK]

2157 Alvestrand Jan 98 Mapping between X.400 and RFC-822/MIME  
Message Bodies

This document defines how to map body parts of X.400 messages into MIME entities and vice versa, including the handling of multipart messages and forwarded messages. [STANDARDS-TRACK]

2156 Kille Jan 98 MIXER (Mime Internet X.400 Enhanced Relay): Mapping between X.400 and RFC 822/MIME

This document relates primarily to the ITU-T 1988 and 1992 X.400 Series Recommendations / ISO IEC 10021 International Standard. This ISO/ITU-T standard is referred to in this document as "X.400", which is a convenient shorthand. [STANDARDS-TRACK]

2155 Clouston Jun 97 Definitions of Managed Objects for APPN using SMIv2

This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it defines objects for monitoring and controlling network devices with APPN (Advanced Peer-to-Peer Networking) capabilities. This memo identifies managed objects for the APPN protocol. [STANDARDS-TRACK]

2154 Murphy Jun 97 OSPF with Digital Signatures

This memo describes the extensions to OSPF required to add digital signature authentication to Link State data, and to provide a certification mechanism for router data. Added LSA processing and key management is detailed. A method for migration from, or co-existence with, standard OSPF V2 is described. This memo defines an Experimental Protocol for the Internet community.

2153 Simpson May 97 PPP Vendor Extensions

The Point-to-Point Protocol (PPP) provides a standard method for transporting multi-protocol datagrams over point-to-point links. PPP defines an extensible Link Control Protocol (LCP) for establishing, configuring, and testing the data-link connection; and a family of Network Control Protocols (NCPs) for establishing and configuring different network-layer protocols. This document provides information for the Internet community. It does not specify an Internet standard of any kind.

2152 Goldsmith May 97 A Mail-Safe Transformation Format  
of Unicode

This document describes a transformation format of Unicode that contains only 7-bit ASCII octets and is intended to be readable by humans in the limiting case that the document consists of characters from the US-ASCII repertoire. It also specifies how this transformation format is used in the context of MIME and RFC 1641, "Using Unicode with MIME". This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2151 Kessler Jun 97 A Primer On Internet and TCP/IP Tools  
and Utilities

This memo is an introductory guide to many of the most commonly-available TCP/IP and Internet tools and utilities. It also describes discussion lists accessible from the Internet, ways to obtain Internet and TCP/IP documents, and some resources that help users weave their way through the Internet. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2150 Max Oct 97 Humanities and Arts: Sharing Center  
Stage on the Internet

The purpose of this document is to provide members of the Arts and Humanities communities with an introduction to the Internet as a valuable tool, resource, and medium for the creation, presentation, and preservation of Arts and Humanities-based content. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2149 Talpade May 97 Multicast Server Architectures for  
MARS-based ATM multicasting

This memo provides details on the design and implementation of an MCS, building on the core mechanisms defined in RFC 2022. It also provides a mechanism for using multiple MCSs per group for providing fault tolerance. This approach can be used with RFC 2022 based MARS server and clients, without needing any change in their functionality. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2148      Alvestrand            Sep 97    Deployment of the Internet White Pages Service

This document describes the way in which the Internet White Pages Service is best exploited using today's experience, today's protocols, today's products and today's procedures. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2147      Borman                May 97    TCP and UDP over IPv6 Jumbograms

IPv6 supports datagrams larger than 65535 bytes long, often referred to as jumbograms, through use of the Jumbo Payload hop-by-hop option. The UDP protocol has a 16-bit length field that keeps it from being able to make use of jumbograms, and though TCP does not have a length field, both the MSS option and the Urgent field are constrained by 16-bits. This document describes some simple changes that can be made to allow TCP and UDP to make use of IPv6 jumbograms. [STANDARDS-TRACK]

2146      FNC                    May 97    U.S. Government Internet Domain Names

This memo provides an update and clarification to RFC 1816. This document describes the registration policies for the top-level domain ".GOV". The purpose of the domain is to provide naming conventions that identify US Federal government agencies in order to facilitate access to their electronic resources. This memo provides guidance for registrations by Federal Agencies that avoids name duplication and facilitates responsiveness to the public. It restricts registrations to coincide with the approved structure of the US government and the advice of its Chief Information Officers. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2145      Mogul                    May 97    Use and Interpretation of HTTP Version Numbers

HTTP request and response messages include an HTTP protocol version number. Some confusion exists concerning the proper use and interpretation of HTTP version numbers, and concerning interoperability of HTTP implementations of different protocol versions. This document is an attempt to clarify the situation. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2144 Adams May 97 The CAST-128 Encryption Algorithm

There is a need in the Internet community for an unencumbered encryption algorithm with a range of key sizes that can provide security for a variety of cryptographic applications and protocols. This document describes an existing algorithm that can be used to satisfy this requirement. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2143 Elliston May 97 Encapsulating IP with the Small  
Computer System Interface

This document outlines a protocol for connecting hosts running the TCP/IP protocol suite over a Small Computer System Interface (SCSI) bus. This memo defines an Experimental Protocol for the Internet community. This memo does not specify an Internet standard of any kind.

2142 Crocker May 97 MAILBOX NAMES FOR  
COMMON SERVICES, ROLES AND FUNCTIONS

This specification enumerates and describes Internet mail addresses (mailbox name @ host reference) to be used when contacting personnel at an organization. [STANDARDS-TRACK]

2141 Moats May 97 URN Syntax

Uniform Resource Names (URNs) are intended to serve as persistent, location-independent, resource identifiers. This document sets forward the canonical syntax for URNs. [STANDARDS-TRACK]

2140 Touch Apr 97 TCP Control Block Interdependence

This memo makes the case for interdependent TCP control blocks, where part of the TCP state is shared among similar concurrent connections, or across similar connection instances. TCP state includes a combination of parameters, such as connection state, current round-trip time estimates, congestion control information, and process information. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2139 Rigney Apr 97 RADIUS Accounting

This document describes a protocol for carrying accounting information between a Network Access Server and a shared Accounting Server. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2138 Rigney Apr 97 Remote Authentication Dial In User Service (RADIUS)

This document describes a protocol for carrying authentication, authorization, and configuration information between a Network Access Server which desires to authenticate its links and a shared Authentication Server. [STANDARDS-TRACK]

2137 Eastlake 3rd Apr 97 Secure Domain Name System Dynamic Update

This memo describes how to use DNSSEC digital signatures covering requests and data to secure updates and restrict updates to those authorized to perform them as indicated by the updater's possession of cryptographic keys. [STANDARDS-TRACK]

2136 Vixie Apr 97 Dynamic Updates in the Domain Name System (DNS UPDATE)

Using this specification of the UPDATE opcode, it is possible to add or delete RRs or RRsets from a specified zone. Prerequisites are specified separately from update operations, and can specify a dependency upon either the previous existence or nonexistence of an RRset, or the existence of a single RR. [STANDARDS-TRACK]

2135 ISOC BOT Apr 97 Internet Society By-Laws

These are the by-laws of the Internet Society, as amended, as of June 1996. They are published for the information of the IETF community at the request of the poisson working group. Please refer to the ISOC web page ([www.isoc.org](http://www.isoc.org)) for the current version of the by-laws. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2134      ISOC BOT                      Apr 97   ARTICLES OF INCORPORATION  
   OF INTERNET SOCIETY

These are the articles of incorporation of the Internet Society. They are published for the information of the IETF community at the request of the poisson working group. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2133      Gilligan                      Apr 97   Basic Socket Interface Extensions  
   for IPv6

This memo defines a set of extensions to the socket interface to support the larger address size and new features of IPv6. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2132      Alexander                    Mar 97   DHCP Options and BOOTP Vendor  
   Extensions

This document specifies the current set of DHCP options. Future options will be specified in separate RFCs. The current list of valid options is also available in <ftp://ftp.isi.edu/in-notes/iana/assignments>.  
[STANDARDS-TRACK]

2131      Droms                          Mar 97   Dynamic Host Configuration Protocol

The Dynamic Host Configuration Protocol (DHCP) provides a framework for passing configuration information to hosts on a TCPIP network. DHCP is based on the Bootstrap Protocol (BOOTP), adding the capability of automatic allocation of reusable network addresses and additional configuration options. [STANDARDS-TRACK]

2130      Weider                        Apr 97   The Report of the IAB Character Set  
   Workshop held 29 February - 1 March,  
   1996

This report details the conclusions of an IAB-sponsored invitational workshop held 29 February - 1 March, 1996, to discuss the use of character sets on the Internet. It motivates the need to have character set handling in Internet protocols which transmit text, provides a conceptual framework for specifying character sets, recommends the use of MIME tagging for transmitted text, recommends a default character set \*without\* stating that there is no need for other character sets, and

makes a series of recommendations to the IAB, IANA, and the IESG for furthering the integration of the character set framework into text transmission protocols. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2129	Nagami	Apr 97	Toshiba's Flow Attribute Notification Protocol (FANP) Specification
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This memo discusses Flow Attribute Notification Protocol (FANP), which is a protocol between neighbor nodes for the management of cut-through packet forwarding functionalities. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2128	Roeck	Mar 97	Dial Control Management Information Base using SMiv2
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This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it describes managed objects used for managing demand access circuits, including ISDN. [STANDARDS-TRACK]

2127	Roeck	Mar 97	ISDN Management Information Base using SMIv2
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This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it defines a minimal set of managed objects for SNMP-based management of ISDN terminal interfaces. [STANDARDS-TRACK]

2126	Pouffary	Mar 97	ISO Transport Service on top of TCP (ITOT)
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This document is a revision to STD35, RFC1006. This document describes the mechanism to allow ISO Transport Services to run over TCP over IPv4 or IPv6. It also defines a number of new features, which are not provided in RFC1006. [STANDARDS-TRACK]

- 2125 Richards Mar 97 The PPP Bandwidth Allocation Protocol (BAP), The PPP Bandwidth Allocation Control Protocol (BACP)

This document proposes a method to manage the dynamic bandwidth allocation of implementations supporting the PPP multilink protocol. This is done by defining the Bandwidth Allocation Protocol (BAP), as well as its associated control protocol, the Bandwidth Allocation Control Protocol (BACP). [STANDARDS-TRACK]

- 2124 Amsden Mar 97 Cabletron's Light-weight Flow Admission Protocol Specification

This document specifies the protocol between the switch Connection Control Entity (CCE) and the external FAS. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

- 2123 Brownlee Mar 97 Traffic Flow Measurement: Experiences with NeTraMet

This memo records experiences in implementing and using the Traffic Flow Measurement Architecture and Meter MIB. It discusses the implementation of NeTraMet (a traffic meter) and NeMaC (a combined manager and meter reader), considers the writing of meter rule sets and gives some guidance on setting up a traffic flow measurement system using NeTraMet. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

- 2122 Mavrakis Mar 97 VEMMI URL Specification

A new URL scheme, "vemmi" is defined. VEMMI is a new international standard for on-line multimedia services, that is both an ITU-T (International Telecommunications Union, ex. CCITT) International Standard (T.107) and an European Standard (ETSI European Telecommunications Standard Institute) standard (ETS 300 382, obsoleted by ETS 300 709). [STANDARDS-TRACK]

- 2121 Armitage Mar 97 Issues affecting MARS Cluster Size

This document provides a qualitative look at the issues constraining a MARS Cluster's size, including the impact of VC limits in switches and NICs, geographical distribution of cluster members, and the use of VC

Mesh or MCS modes to support multicast groups. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2120 Chadwick Mar 97 Managing the X.500 Root Naming Context

This document describes the use of 1993 ISO X.500 Standard protocols for managing the root context. Whilst the ASN.1 is compatible with that of the X.500 Standard, the actual settings of the parameters are supplementary to that of the X.500 Standard. This memo defines an Experimental Protocol for the Internet community.

2119 Bradner Mar 97 Key words for use in RFCs to Indicate Requirement Levels

In many standards track documents several words are used to signify the requirements in the specification. These words are often capitalized. This document defines these words as they should be interpreted in IETF documents. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2118 Pall Mar 97 Microsoft Point-To-Point Compression (MPPC) Protocol

This document describes the use of the Microsoft Point to Point Compression protocol (also referred to as MPPC in this document) for compressing PPP encapsulated packets. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2117 Estrin Jun 97 Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification

This document describes a protocol for efficiently routing to multicast groups that may span wide-area (and inter-domain) internets. This memo defines an Experimental Protocol for the Internet community.

2116	Apple	Apr 97	X.500 Implementations Catalog-96
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This document is a revision to [RFC 1632]: A Revised Catalog of Available X.500 Implementations and is based on the results of data collection via a WWW home page that enabled implementors to submit new or updated descriptions of currently available implementations of X.500, including commercial products and openly available offerings. [RFC 1632] is a revision of [RFC 1292]. This document contains detailed description of 31 X.500 implementations - DSAs, DUAs, and DUA interfaces. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2115	Brown	Sep 97	Management Information Base for Frame Relay DTEs Using SMIV2
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This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in TCP/IP- based internets. In particular, it defines objects for managing Frame Relay interfaces on DTEs. [STANDARDS-TRACK]

2114	Chiang	Feb 97	Data Link Switching Client Access Protocol
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This memo describes the Data Link Switching Client Access Protocol that is used between workstations and routers to transport SNA/ NetBIOS traffic over TCP sessions. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2113 Katz Feb 97 IP Router Alert Option

This memo describes a new IP Option type that alerts transit routers to more closely examine the contents of an IP packet. [STANDARDS-TRACK]

2112	Levinson	Mar 97	The MIME Multipart/Related Content-type
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The Multipart/Related content-type provides a common mechanism for representing objects that are aggregates of related MIME body parts. This document defines the Multipart/Related content-type and provides examples of its use. [STANDARDS-TRACK]

2111      Levinson                      Mar 97    Content-ID and Message-ID Uniform  
Resource Locators

The Uniform Resource Locator (URL) schemes, "cid:" and "mid:" allow references to messages and the body parts of messages. For example, within a single multipart message, one HTML body part might include embedded references to other parts of the same message. [STANDARDS-TRACK]

2110      Palme                          Mar 97    MIME E-mail Encapsulation of Aggregate  
Documents, such as HTML (MHTML)

This document describes a set of guidelines that will allow conforming mail user agents to be able to send, deliver and display these objects, such as HTML objects, that can contain links represented by URIs. [STANDARDS-TRACK]

2109      Kristol                        Feb 97    HTTP State Management Mechanism

This document specifies a way to create a stateful session with HTTP requests and responses. It describes two new headers, Cookie and Set-Cookie, which carry state information between participating origin servers and user agents. The method described here differs from Netscape's Cookie proposal, but it can interoperate with HTTP/1.0 user agents that use Netscape's method. [STANDARDS-TRACK]

2108      de Graaf                        Feb 97    Definitions of Managed Objects  
for IEEE 802.3 Repeater Device  
using SMIPv2

This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it defines objects for managing IEEE 802.3 10 and 100 Mb/second baseband repeaters based on IEEE Std 802.3 Section 30, "10 & 100 Mb/s Management," October 26, 1995. [STANDARDS-TRACK]

2107      Hamzeh                           Feb 97    Ascend Tunnel Management Protocol - ATMP

This document specifies a generic tunnel management protocol that allows remote dial-in users to access their home network as if they were directly attached to the home network. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2106 Chiang Feb 97 Data Link Switching Remote Access  
Protocol

This memo describes the Data Link Switching Remote Access Protocol that is used between workstations and routers to transport SNA/ NetBIOS traffic over TCP sessions. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2105 Rekhter Feb 97 Cisco Systems' Tag Switching  
Architecture Overview

This document provides an overview of a novel approach to network layer packet forwarding, called tag switching. The two main components of the tag switching architecture - forwarding and control - are described. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2104 Krawczyk Feb 97 HMAC: Keyed-Hashing for Message  
Authentication

This document describes HMAC, a mechanism for message authentication using cryptographic hash functions. HMAC can be used with any iterative cryptographic hash function, e.g., MD5, SHA-1, in combination with a secret shared key. The cryptographic strength of HMAC depends on the properties of the underlying hash function. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind

2103 Ramanathan Feb 97 Mobility Support for Nimrod :  
Challenges and Solution Approaches

We discuss the issue of mobility in Nimrod. While a mobility solution is not part of the Nimrod architecture, Nimrod does require that the solution have certain characteristics. We identify the requirements that Nimrod has of any solution for mobility support. We also classify and compare existing approaches for supporting mobility within an internetwork and discuss their advantages and disadvantages. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2102      Ramanathan          Feb 97    Multicast Support for Nimrod :  
                                 Challenges and Solution Approaches

Nimrod does not specify a particular solution for multicasting. Rather, Nimrod may use any of a number of emerging multicast techniques. We identify the requirements that Nimrod has of a solution for multicast support. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2101      Carpenter          Feb 97    IPv4 Address Behaviour Today

The main purpose of this note is to clarify the current interpretation of the 32-bit IP version 4 address space, whose significance has changed substantially since it was originally defined. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2100      Ashworth            Apr 97    The Naming of Hosts

This RFC is a commentary on the difficulty of deciding upon an acceptably distinctive hostname for one's computer, a problem which grows in direct proportion to the logarithmically increasing size of the Internet. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

#### Security Considerations

Security issues are not discussed in this memo.

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