

Network Working Group  
Request for Comments: 2399  
Category: Informational

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ISI  
January 1999

## Request for Comments Summary

RFC Numbers 2300-2399

### Status of This Memo

This RFC is a slightly annotated list of the 100 RFCs from RFC 2300 through RFCs 2399. 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.

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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 -----
2399	Ramos	Jan 1999	Request for Comments Summary

This memo.

2398	Parker	Aug 1998	Some Testing Tools for TCP Implementors
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This document lists only tools which can evaluate one or more TCP implementations, or which can provide some specific results which describe or evaluate the TCP being tested. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.



2392      Levinson              Aug 1998              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]

2391      Srisuresh              Aug 1998              Load Sharing using IP Network  
Address Translation (LSNAT)

In this document, we extend the use of NATs to offer Load share feature, where session load can be distributed across a pool of servers, instead of directing to a single server. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2390      Bradley                Sep 1998              Inverse Address Resolution  
Protocol

This memo describes additions to ARP that will allow a station to request a protocol address corresponding to a given hardware address. [STANDARDS-TRACK]

2389      Hethmon                Aug 1998              Feature negotiation mechanism  
for the File Transfer Protocol

This document provides a mechanism by which clients of the FTP protocol can discover which new features are supported by a particular FTP server. [STANDARDS-TRACK]

2388      Masinter                Aug 1998              Returning Values from Forms:  
multipart/form-data

This specification defines an Internet Media Type, multipart/form-data, which can be used by a wide variety of applications and transported by a wide variety of protocols as a way of returning a set of values as the result of a user filling out a form. [STANDARDS-TRACK]

2387      Levinson              Aug 1998              The MIME Multipart/Related  
Content-type

This document defines the Multipart/Related content-type and provides examples of its use. [STANDARDS-TRACK]

2386      Crawley              Aug 1998              A Framework for QoS-based  
Routing in the Internet

This document describes some of the QoS-based routing issues and requirements, and proposes a framework for QoS-based routing in the Internet. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2385      Heffernan              Aug 1998              Protection of BGP Sessions via  
the TCP MD5 Signature Option

This memo describes a TCP extension to enhance security for BGP.  
[STANDARDS-TRACK]

2384      Gellens              Aug 1998              POP URL Scheme

This memo defines a URL scheme for referencing a POP mailbox.  
[STANDARDS-TRACK]

2383      Suzuki              Aug 1998              ST2+ over ATM Protocol  
Specification - UNI 3.1 Version

This document specifies an ATM-based protocol for communication between ST2+ agents. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2382      Crawley              Aug 1998              A Framework for Integrated  
Services and RSVP over ATM

This document outlines the issues and framework related to providing IP Integrated Services with RSVP over ATM. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.



in a hierarchical directory. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2376      Whitehead              Jul 1998              XML Media Types

This document proposes two new media subtypes, text/xml and application/xml, for use in exchanging network entities which are conforming Extensible Markup Language (XML). This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2375      Hinden                  Jul 1998              IPv6 Multicast Address  
   Assignments

This document defines the initial assignment of IPv6 multicast addresses. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2374      Hinden                  Jul 1998              An IPv6 Aggregatable Global  
   Unicast Address Format

This document defines an IPv6 aggregatable global unicast address format for use in the Internet. [STANDARDS-TRACK]

2373      Hinden                  Jul 1998              IP Version 6 Addressing  
   Architecture

This specification defines the addressing architecture of the IP Version 6 protocol [IPV6]. [STANDARDS-TRACK]

2372      Evans                      Jul 1998              Transaction Internet Protocol  
   - Requirements and  
   Supplemental Information

This document describes the purpose (usage scenarios), and requirements for the Transaction Internet Protocol. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.



2367 McDonald Jul 1998 PF\_KEY Key Management API,  
Version 2

A generic key management API that can be used not only for IP Security but also for other network security services is presented in this document. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2366 Chung Jul 1998 Definitions of Managed Objects  
for Multicast over UNI 3.0/3.1  
based ATM Networks

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 for IP hosts and routers that use a Multicast Address Resolution Server (MARS) to support IP multicast over ATM, as described in 'Support for Multicast over UNI 3.0/3.1 based ATM Networks'. [STANDARDS-TRACK]

2365 Meyer Jul 1998 Administratively Scoped IP  
Multicast

This document defines the "administratively scoped IPv4 multicast space" to be the range 239.0.0.0 to 239.255.255.255. In addition, it describes a simple set of semantics for the implementation of Administratively Scoped IP Multicast. Finally, it provides a mapping between the IPv6 multicast address classes [RFC1884] and IPv4 multicast address classes. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2364 Gross Jul 1998 PPP Over AAL5

This document describes the use of ATM Adaptation Layer 5 (AAL5) for framing PPP encapsulated packets. [STANDARDS-TRACK]

2363 Gross Jul 1998 PPP Over FUNI

This document describes the use of ATM Frame User Network Interface (FUNI) for framing PPP encapsulated packets. [STANDARDS-TRACK]



2362      Estrin                  Jun 1998                  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. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2361      Fleischman              Jun 1998                  WAVE and AVI Codec Registries

The purpose of this paper is to establish a mechanism by which codecs registered within Microsoft's WAVE and AVI Registries may be referenced within the IANA Namespace by Internet applications. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2360      Scott                    Jun 1998                  Guide for Internet Standards  
   Writers

This document is a guide for Internet standard writers. It defines those characteristics that make standards coherent, unambiguous, and easy to interpret. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2359      Myers                    Jun 1998                  IMAP4 UIDPLUS extension

The UIDPLUS extension of the Internet Message Access Protocol [IMAP4] provides a set of features intended to reduce the amount of time and resources used by some client operations. [STANDARDS-TRACK]

2358      Flick                      Jun 1998                  Definitions of Managed Objects  
   for the Ethernet-like  
   Interface Types

This memo defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. This memo obsoletes RFC 1650 "Definitions of Managed Objects for the Ethernet-like Interface Types using SMIV2". This memo extends that specification by including management information useful for the management of 100 Mb/s Ethernet interfaces. [STANDARDS-TRACK]

2357      Mankin                  Jun 1998                  IETF Criteria for Evaluating  
Reliable Multicast Transport  
and Application Protocols

This memo describes the procedures and criteria for reviewing reliable multicast protocols within the Transport Area (TSV) of the IETF. Within today's Internet, important applications exist for a reliable multicast service. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2356      Montenegro              Jun 1998                  Sun's SKIP Firewall Traversal  
for Mobile IP

The Mobile IP specification establishes the mechanisms that enable a mobile host to maintain and use the same IP address as it changes its point of attachment to the network. The mechanisms described in this document allow a mobile node out on a public sector of the internet to negotiate access past a SKIP firewall, and construct a secure channel into its home network. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2355      Kelly                      Jun 1998                  TN3270 Enhancements

This document describes a protocol that more fully supports 3270 devices than do traditional tn3270 practices. [STANDARDS-TRACK]

2354      Perkins                    Jun 1998                  Options for Repair of  
Streaming Media

This document summarizes a range of possible techniques for the repair of continuous media streams subject to packet loss. This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind.

2353      Dudley                      May 1998                  APPN/HPR in IP Networks  
APPN Implementers' Workshop  
Closed Pages Document

This memo defines a method with which HPR nodes can use IP networks for communication, and the enhancements to APPN required by this method. This memo also describes an option set that allows the use of the APPN connection network model to allow HPR nodes to use IP

networks for communication without having to predefine link connections. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2352      Vaughan                      May 1998                      A Convention For Using Legal  
Names as Domain Names

The purpose of this memo is to focus discussion on the particular problems with the exhaustion of the top level domain space in the Internet and the possible conflicts that can occur when multiple organisations are vying for the same name. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2351      Robert                      May 1998                      Mapping of Airline  
Reservation, Ticketing,  
and Messaging Traffic over IP

This memo specifies a protocol for the encapsulation of the airline specific protocol over IP. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2250      Brownlee                      Jun 1998                      Expectations for Computer  
Security Incident Response

The purpose of this document is to express the general Internet community's expectations of Computer Security Incident Response Teams (CSIRTs). It is not possible to define a set of requirements that would be appropriate for all teams, but it is possible and helpful to list and describe the general set of topics and issues which are of concern and interest to constituent communities. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2349      Malkin                      May 1998                      TFTP Timeout Interval and  
Transfer Size Options

The Trivial File Transfer Protocol is a simple, lock-step, file transfer protocol which allows a client to get or put a file onto a remote host. This document describes two TFTP options. [STANDARDS-TRACK]

2348      Malkin                      May 1998                      TFTP Blocksize Option

The Trivial File Transfer Protocol is a simple, lock-step, file transfer protocol which allows a client to get or put a file onto a remote host. This document describes a TFTP option which allows the client and server to negotiate a blocksize more applicable to the network medium. [STANDARDS-TRACK]

2347      Malkin                      May 1998                      TFTP Option Extension

The Trivial File Transfer Protocol is a simple, lock-step, file transfer protocol which allows a client to get or put a file onto a remote host. This document describes a simple extension to TFTP to allow option negotiation prior to the file transfer. [STANDARDS-TRACK]

2346      Palme                        May 1998                      Making Postscript and PDF  
International

Certain text formats, for example Postscript (MIME-Type: application/postscript; file extension .ps) and Portable Document Format (MIME-Type: application/pdf; file extension .pdf) specify exactly the page layout of the printed document. The commonly used paper format is different in North America and the rest of the world. North America uses the 'Letter' format, while the rest of the world mostly uses the ISO-standard 'A4' format. This means that documents formatted on one continent may not be easily printable on another continent. This memo gives advice on how to produce documents which are equally well printable with the Letter and the A4 formats. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2345      Klensin                        May 1998                      Domain Names and Company Name  
Retrieval

This document proposes a company name to URL mapping service based on the oldest and least complex of Internet directory protocols, whois, in order to explore whether an extremely simple and widely-deployed protocol can succeed where more complex and powerful options have failed or been excessively delayed. This memo defines an Experimental Protocol for the Internet community. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2344      Montenegro      May 1998      Reverse Tunneling for Mobile IP

This document proposes backwards-compatible extensions to Mobile IP in order to support topologically correct reverse tunnels. [STANDARDS-TRACK]

2343      Civanlar      May 1998      RTP Payload Format for Bundled  
MPEG

This document describes a payload type for bundled, MPEG-2 encoded video and audio data that may be used with RTP, version 2. 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.

2342      Gahrns      May 1998      IMAP4 Namespace

This document defines a NAMESPACE command that allows a client to discover the prefixes of namespaces used by a server for personal mailboxes, other users' mailboxes, and shared mailboxes. [STANDARDS-TRACK]

2341      Valencia      May 1998      Cisco Layer Two Forwarding  
(Protocol) "L2F"

This document describes the Layer Two Forwarding protocol (L2F) which permits the tunneling of the link layer (i.e., HDLC, async HDLC, or SLIP frames) of higher level protocols. This memo describes a historic protocol for the Internet community. It does not specify an Internet standard of any kind.

2340      Jamoussi      May 1998      Nortel's Virtual Network  
Switching (VNS) Overview

This document provides an overview of Virtual Network Switching (VNS). This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2339	ISOC	May 1998	An Agreement Between the Internet Society, the IETF, and Sun Microsystems, Inc. in the matter of NFS V.4 Protocols
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This Request for Comments records an agreement between Sun Microsystems, Inc. and the Internet Society to permit the flow of Sun's Network File System specifications into the Internet Standards process conducted by the Internet Engineering Task Force. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2338	Knight	Apr 1998	Virtual Router Redundancy Protocol
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This memo defines the Virtual Router Redundancy Protocol (VRRP). VRRP specifies an election protocol that dynamically assigns responsibility for a virtual router to one of the VRRP routers on a LAN. [STANDARDS-TRACK]

2337	Farinacci	Apr 1998	Intra-LIS IP multicast among routers over ATM using Sparse Mode PIM
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This document describes how intra-LIS IP multicast can be efficiently supported among routers over ATM without using the Multicast Address Resolution Server (MARS). This memo defines an Experimental Protocol for the Internet community. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2336	Luciani	Jul 1998	Classical IP and ARP over ATM to NHRP Transition
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This document describes methods and procedures for the graceful transition from an ATMARP LIS to an NHRP LIS network model over ATM. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2335	Luciani	Apr 1998	A Distributed NHRP Service Using SCSF
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This document describes a method for distributing an NHRP service within a LIS. [STANDARDS-TRACK]



2329 Moy Apr 1998 OSPF Standardization Report

This memo documents how the requirements for advancing a routing protocol to Full Standard have been met for OSPFv2. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2328 Moy Apr 1998 OSPF Version 2

This memo documents version 2 of the OSPF protocol. OSPF is a link-state routing protocol. [STANDARDS-TRACK]

2327 Handley Apr 1998 SDP: Session Description Protocol

This document defines the Session Description Protocol, SDP. SDP is intended for describing multimedia sessions for the purposes of session announcement, session invitation, and other forms of multimedia session initiation. [STANDARDS-TRACK]

2326 Schulzrinne Apr 1998 Real Time Streaming Protocol (RTSP)

The Real Time Streaming Protocol, or RTSP, is an application-level protocol for control over the delivery of data with real-time properties. RTSP provides an extensible framework to enable controlled, on-demand delivery of real-time data, such as audio and video. [STANDARDS-TRACK]

2325 Slavitch 1 Apr 1998 Definitions of Managed Objects for Drip-Type Heated Beverage Hardware Devices using SMIV2

This memo defines an extension to the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it defines objects for the management of coffee-brewing and maintenance devices. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.





2319      KOI8-U WG              Apr 1998              Ukrainian Character Set KOI8-U

This document provides information about character encoding KOI8-U (KOI8 Ukrainian) which is a de-facto standard in Ukrainian Internet community. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2318      Lie                      Mar 1998              The text/css Media Type

This memo provides information about the text/css Media Type. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2317      Eidnes                   Mar 1998              Classless IN-ADDR.ARPA delegation

This document describes a way to do IN-ADDR.ARPA delegation on non-octet boundaries for address spaces covering fewer than 256 addresses. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

2316      Bellovin                   Apr 1998              Report of the IAB Security  
Architecture Workshop

On 3-5 March 1997, the IAB held a security architecture workshop at Bell Labs in Murray Hill, NJ. We identified the core security components of the architecture, and specified several documents that need to be written. Most importantly, we agreed that security was not optional, and that it needed to be designed in from the beginning. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2315      Kaliski                      Mar 1998              PKCS #7: Cryptographic Message  
Syntax Version 1.5

This document describes a general syntax for data that may have cryptography applied to it, such as digital signatures and digital envelopes. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2314      Kaliski              Mar 1998              PKCS #10: Certification  
Request Syntax Version 1.5

This document describes a syntax for certification requests. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2313      Kaliski              Mar 1998              PKCS #1: RSA Encryption  
Version 1.5

This document describes a method for encrypting data using the RSA public-key cryptosystem. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2312      Dusse                  Mar 1998              S/MIME Version 2 Certificate  
Handling

This memo describes the mechanisms S/MIME uses to create and validate keys using certificates. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2311      Dusse                  Mar 1998              S/MIME Version 2 Message  
Specification

This document describes a protocol for adding cryptographic signature and encryption services to MIME data. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2310      Holtman              Apr 1998              The Safe Response Header Field

This document defines a HTTP response header field called Safe, which can be used to indicate that repeating a HTTP request is safe. This memo defines an Experimental Protocol for the Internet community. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2309 Braden Apr 1998 Recommendations on Queue  
Management and Congestion Avoidance  
in the Internet

This memo presents two recommendations to the Internet community concerning measures to improve and preserve Internet performance. It presents a strong recommendation for testing, standardization, and widespread deployment of active queue management in routers, to improve the performance of today's Internet. It also urges a concerted effort of research, measurement, and ultimate deployment of router mechanisms to protect the Internet from flows that are not sufficiently responsive to congestion notification. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.

2308 Andrews Mar 1998 Negative Caching of DNS  
Queries (DNS NCACHE)

RFC1034 provided a description of how to cache negative responses. It however had a fundamental flaw in that it did not allow a name server to hand out those cached responses to other resolvers, thereby greatly reducing the effect of the caching. This document addresses issues raised in the light of experience and replaces RFC1034 Section 4.3.4. [STANDARDS-TRACK]

2307 Howard Mar 1998 An Approach for Using LDAP as  
a Network Information Service

This document describes an experimental mechanism for mapping entities related to TCP/IP and the UNIX system into X.500 entries so that they may be resolved with the Lightweight Directory Access Protocol [RFC2251]. This memo defines an Experimental Protocol for the Internet community. It does not specify an Internet standard of any kind. Discussion and suggestions for improvement are requested.

2306 Parsons Mar 1998 Tag Image File Format (TIFF) -  
F Profile for Facsimile

This document describes in detail the definition of TIFF-F that is used to store facsimile images. This memo provides information for the Internet community. It does not specify an Internet standard of any kind.



#### Security Considerations

There are no security issues in this Informational RFC.

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