

Network Working Group  
Request for Comments: 3099  
Category: Informational

S. Ginoza  
ISI  
November 2001

## Request for Comments Summary

RFC Numbers 3000-3099

### Status of This Memo

This RFC is a slightly annotated list of the 100 RFCs from RFC 3000 through RFCs 3099. 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

Copyright (C) The Internet Society (2001). All Rights Reserved.

### 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 -----
3099	Ginoza	Nov 2001	Request for Comments Summary

This memo.

3098      Gavin                      Apr 2001              How to Advertise Responsibly  
Using E-Mail and Newsgroups or  
- how NOT to \$\$\$\$\$\$ MAKE  
ENEMIES FAST!    \$\$\$\$\$\$

This memo offers useful suggestions for responsible advertising techniques that can be used via the internet in an environment where the advertiser, recipients, and the Internet Community can coexist in a productive and mutually respectful fashion. This memo provides information for the Internet community.

3097      Braden                     Apr 2001              RSVP Cryptographic  
Authentication -- Updated  
Message Type Value

This memo resolves a duplication in the assignment of RSVP Message Types, by changing the Message Types assigned by RFC 2747 to Challenge and Integrity Response messages. [STANDARDS TRACK]

3096      Degermark                  Jul 2001              Requirements for robust  
IP/UDP/RTP header compression

This document contains requirements for robust IP/UDP/RTP (Internet Protocol/User Datagram Protocol/Real-Time Transport Protocol) header compression to be developed by the ROHC (Robust Header Compression) WG. It is based on the ROHC charter, discussions in the WG, the 3GPP document "3GPP TR 23.922", version 1.0.0 of October 1999, as well as contributions from 3G.IP. This memo provides information for the Internet community.

3095      Bormann                     Jul 2001              Robust Header Compression  
(ROHC): Framework and four  
profiles: RTP, UDP, ESP, and  
uncompressed

This document specifies a highly robust and efficient header compression scheme for RTP/UDP/IP (Real-Time Transport Protocol, User Datagram Protocol, Internet Protocol), UDP/IP, and ESP/IP (Encapsulating Security Payload) headers. [STANDARDS TRACK]

3094      Sprague                      Apr 2001                      Tekelec's Transport Adapter  
Layer Interface

This document proposes the interfaces of a Signaling Gateway, which provides interworking between the Switched Circuit Network (SCN) and an IP network. This memo provides information for the Internet community.

3093      Gaynor                      1 Apr 2001                      Firewall Enhancement Protocol  
(FEP)

Internet Transparency via the end-to-end architecture of the Internet has allowed vast innovation of new technologies and services [1]. However, recent developments in Firewall technology have altered this model and have been shown to inhibit innovation. We propose the Firewall Enhancement Protocol (FEP) to allow innovation, without violating the security model of a Firewall. This memo provides information for the Internet community.

3092      Eastlake                      1 Apr 2001                      Etymology of "Foo"

Approximately 212 RFCs so far, starting with RFC 269, contain the terms 'foo', 'bar', or 'foobar' as metasyntactic variables without any proper explanation or definition. This document rectifies that deficiency. This memo provides information for the Internet community.

3091      Kennedy                      1 Apr 2001                      Pi Digit Generation Protocol

This memo defines a protocol to provide the Pi digit generation service (PIgen) used between clients and servers on host computers. This memo provides information for the Internet community.

3090      Lewis                      Mar 2001                      DNS Security Extension  
Clarification on Zone Status

The definition of a secured zone is presented, clarifying and updating sections of RFC 2535. RFC 2535 defines a zone to be secured based on a per algorithm basis, e.g., a zone can be secured with RSA keys, and not secured with DSA keys. This document changes this to define a zone to be secured or not secured regardless of the key algorithm used (or not used). To further simplify the determination of a zone's status, "experimentally secure" status is deprecated. [STANDARDS TRACK]

3089      Kitamura              Apr 2001              A SOCKS-based IPv6/IPv4  
Gateway Mechanism

This document describes a SOCKS-based IPv6/IPv4 gateway mechanism that enables smooth heterogeneous communications between the IPv6 nodes and IPv4 nodes. This memo provides information for the Internet community.

3088      Zeilenga              Apr 2001              OpenLDAP Root Service An  
experimental LDAP referral  
service

The OpenLDAP Project is operating an experimental LDAP (Lightweight Directory Access Protocol) referral service known as the "OpenLDAP Root Service". The automated system generates referrals based upon service location information published in DNS SRV RRs (Domain Name System location of services resource records). This document describes this service. This memo defines an Experimental Protocol for the Internet community.

3087      Campbell              Apr 2001              Control of Service Context  
using SIP Request-URI

This memo describes a useful way to conceptualize the use of the standard SIP (Session Initiation Protocol) Request-URI (Uniform Resource Identifier) that the authors and many members of the SIP community think is suitable as a convention. It does not define any new protocol with respect to RFC 2543. This memo provides information for the Internet community.

3086      Nichols              Apr 2001              Definition of Differentiated  
Services Per Domain Behaviors  
and Rules for their Specification

This document defines and discusses Per-Domain Behaviors in detail and lays out the format and required content for contributions to the Diffserv WG on PDBs and the procedure that will be applied for individual PDB specifications to advance as WG products. This format is specified to expedite working group review of PDB submissions. This memo provides information for the Internet community.

3085      Coates                      Mar 2001                      URN Namespace for NewsML  
Resources

This document describes a URN (Uniform Resource Name) namespace for identifying NewsML NewsItems. This memo provides information for the Internet community.

3084      Chan                        Mar 2001                      COPS Usage for Policy  
Provisioning (COPS-PR)

This document describes the use of the Common Open Policy Service (COPS) protocol for support of policy provisioning (COPS-PR). [STANDARDS TRACK]

3083      Woundy                      Mar 2001                      Baseline Privacy Interface  
Management Information Base  
for DOCSIS Compliant Cable  
Modems and Cable Modem  
Termination Systems

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 basic set of managed objects for SNMP-based (Simple Network Management Protocol) management of the Baseline Privacy Interface (BPI), which provides data privacy for DOCSIS 1.0 (Data-Over-Cable Service Interface Specifications) compliant Cable Modems and Cable Modem Termination Systems. This MIB is defined as an extension to the DOCSIS Radio Frequency Interface MIB, RFC 2670. This memo provides information for the Internet community.

3082      Kempf                        Mar 2001                      Notification and Subscription  
for SLP

The Service Location Protocol (SLP) provides mechanisms whereby service agent clients can advertise and user agent clients can query for services. The design is very much demand-driven, so that user agents only obtain service information when they specifically ask for it. There exists another class of user agent applications, however, that requires notification when a new service appears or disappears. In the RFC 2608 design, these applications are forced to poll the network to catch changes. In this document, we describe a protocol for allowing such clients to be notified when a change occurs, removing the need for polling. This memo defines an Experimental Protocol for the Internet community.

3081      Rose                      Mar 2001              Mapping the BEEP Core onto TCP

This memo describes how a BEEP (Blocks Extensible Exchange Protocol) session is mapped onto a single TCP (Transmission Control Protocol) connection. [STANDARDS TRACK]

3080      Rose                      Mar 2001              The Blocks Extensible Exchange Protocol Core

This memo describes a generic application protocol kernel for connection-oriented, asynchronous interactions called the BEEP (Blocks Extensible Exchange Protocol) core. [STANDARDS TRACK]

3079      Zorn                      Mar 2001              Deriving Keys for use with Microsoft Point-to-Point Encryption (MPPE)

This document describes the method used to derive initial MPPE session keys from a variety of credential types. It is expected that this memo will be updated whenever Microsoft defines a new key derivation method for MPPE, since its primary purpose is to provide an open, easily accessible reference for third-parties wishing to interoperate with Microsoft products. This memo provides information for the Internet community.

3078      Pall                      Mar 2001              Microsoft Point-To-Point Encryption (MPPE) Protocol

This document describes the use of the Microsoft Point to Point Encryption (MPPE) to enhance the confidentiality of PPP-encapsulated packets. This memo provides information for the Internet community.

3077      Duros                      Mar 2001              A Link-Layer Tunneling Mechanism for Unidirectional Links

This document describes a mechanism to emulate full bidirectional connectivity between all nodes that are directly connected by a unidirectional link. [STANDARDS TRACK]

3076      Boyer                      Mar 2001              Canonical XML Version 1.0

This specification describes a method for generating a physical representation, the canonical form, of an XML document that accounts for the permissible changes. This memo provides information for the Internet community.

3075      Eastlake                  Mar 2001              XML-Signature Syntax and Processing

This document specifies XML (Extensible Markup Language) digital signature processing rules and syntax. [STANDARDS TRACK]

3074      Volz                        Feb 2001              DHC Load Balancing Algorithm

This document proposes a method of algorithmic load balancing. [STANDARDS TRACK]

3073      Collins                      Mar 2001              Portable Font Resource (PFR) - application/font-tdpfr MIME Sub-type Registration

This document describes the registration of the Multipurpose Internet Mail Extensions (MIME) sub-type application/font-tdpfr. The encoding is defined by the PFR Specification. This memo provides information for the Internet community.

3072      Wildgrube                    Mar 2001              Structured Data Exchange Format (SDXF)

This specification describes an all-purpose interchange format for use as a file format or for net-working. This memo provides information for the Internet community.

3071	Klensin	Feb 2001	Reflections on the DNS, RFC 1591, and Categories of Domains
------	---------	----------	---

This document is being published primarily for historical context and comparative purposes, essentially to document some thoughts about how 1591 might have been interpreted and adjusted by the Internet Assigned Numbers Authority (IANA) and ICANN to better reflect today's world while retaining characteristics and policies that have proven to be effective in supporting Internet growth and stability. This memo provides information for the Internet community.

3070	Rawat	Feb 2001	Layer Two Tunneling Protocol (L2TP) over Frame Relay
------	-------	----------	--

This document describes how L2TP is implemented over Frame Relay Permanent Virtual Circuits (PVCs) and Switched Virtual Circuits (SVCs).  
[STANDARDS TRACK]

3069	McPherson	Feb 2001	VLAN Aggregation for Efficient IP Address Allocation
------	-----------	----------	---

This document introduces the concept of Virtual Local Area Network (VLAN) aggregation as it relates to IPv4 address allocation. This memo provides information for the Internet community.

3068	Huitema	Jun 2001	An Anycast Prefix for 6to4 Relay Routers
------	---------	----------	--

This memo introduces a "6to4 anycast address" in order to simplify the configuration of 6to4 routers. It also defines how this address will be used by 6to4 relay routers, how the corresponding "6to4 anycast prefix" will be advertised in the IGP and in the EGP. The memo documents the reservation by IANA (Internet Assigned Numbers Authority) of the "6to4 relay anycast prefix." [STANDARDS TRACK]

3067      Arvidsson      Feb 2001      TERENA's Incident Object  
Description and Exchange  
Format Requirements

The purpose of the Incident Object Description and Exchange Format is to define a common data format for the description, archiving and exchange of information about incidents between CSIRTs (Computer Security Incident Response Teams) (including alert, incident in investigation, archiving, statistics, reporting, etc.). This document describes the high-level requirements for such a description and exchange format, including the reasons for those requirements. This memo provides information for the Internet community.

3066      Alvestrand      Jan 2001      Tags for the Identification of  
Languages

This document describes a language tag for use in cases where it is desired to indicate the language used in an information object, how to register values for use in this language tag, and a construct for matching such language tags. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

3065      Traina      Feb 2001      Autonomous System  
Confederations for BGP

This document describes an extension to BGP which may be used to create a confederation of autonomous systems that is represented as a single autonomous system to BGP peers external to the confederation, thereby removing the "full mesh" requirement. The intention of this extension is to aid in policy administration and reduce the management complexity of maintaining a large autonomous system. [STANDARDS TRACK]

3064      Foster      Feb 2001      MGCP CAS Packages

This document contains a collection of media gateway Channel Associated Signaling (CAS) packages for R1 CAS, North American CAS, CAS PBX interconnect as well as basic FXO support. This memo provides information for the Internet community.

3063      Ohba                      Feb 2001              MPLS Loop Prevention Mechanism

This paper presents a simple mechanism, based on "threads", which can be used to prevent Multiprotocol Label Switching (MPLS) from setting up label switched path (LSPs) which have loops. This memo defines an Experimental Protocol for the Internet community.

3062      Zeilenga                  Feb 2001              LDAP Password Modify Extended Operation

This document describes an LDAP extended operation to allow modification of user passwords which is not dependent upon the form of the authentication identity nor the password storage mechanism used. [STANDARDS TRACK]

3061      Mealling                  Feb 2001              A URN Namespace of Object Identifiers

This document describes a Uniform Resource Name (URN) namespace that contains Object Identifiers (OIDs). This memo provides information for the Internet community.

3060      Moore                      Feb 2001              Policy Core Information Model  
-- Version 1 Specification

This document presents the object-oriented information model for representing policy information developed jointly in the IETF Policy Framework WG and as extensions to the Common Information Model (CIM) activity in the Distributed Management Task Force (DMTF). [STANDARDS TRACK]

3059      Guttman                      Feb 2001              Attribute List Extension for  
the Service Location Protocol

This document specifies a SLPv2 extension which allows a User Agent (UA) to request a service's attributes be included as an extension to Service Reply messages. This will eliminate the need for multiple round trip messages for a UA to acquire all service information. [STANDARDS TRACK]

3058      Teiwes                      Feb 2001                      Use of the IDEA Encryption  
Algorithm in CMS

This memo specifies how to incorporate International Data Encryption Algorithm (IDEA) into CMS or S/MIME as an additional strong algorithm for symmetric encryption. This memo provides information for the Internet community.

3057      Morneault                  Feb 2001                      ISDN Q.921-User Adaptation  
Layer

This document defines a protocol for backhauling of ISDN Q.921 User messages over IP using the Stream Control Transmission Protocol (SCTP). This protocol would be used between a Signaling Gateway (SG) and Media Gateway Controller (MGC). [STANDARDS TRACK]

3056      Carpenter                  Feb 2001                      Connection of IPv6 Domains via  
IPv4 Clouds

This memo specifies an optional interim mechanism for IPv6 sites to communicate with each other over the IPv4 network without explicit tunnel setup, and for them to communicate with native IPv6 domains via relay routers. [STANDARDS TRACK]

3055      Krishnaswamy              Feb 2001                      Management Information Base  
for the PINT Services  
Architecture

This memo describes a proposed Management Information Base (MIB) for the PSTN/Internet Interworking (PINT) Services Architecture. [STANDARDS TRACK]

3054      Blatherwick                  Jan 2001                      Megaco IP Phone Media Gateway  
Application Profile

This document specifies a particular application of the Megaco/H.248 Protocol for control of Internet telephones and similar appliances: the Megaco IP Phone Media Gateway. This memo provides information for the Internet community.

3053      Durand                      Jan 2001                      IPv6 Tunnel Broker

The motivation for the development of the tunnel broker model is to help early IPv6 adopters to hook up to an existing IPv6 network (e.g., the 6bone) and to get stable, permanent IPv6 addresses and DNS names. The concept of the tunnel broker was first presented at Orlando's IETF in December 1998. Two implementations were demonstrated during the Grenoble IPng & NGtrans interim meeting in February 1999. This memo provides information for the Internet community.

3052      Eder                          Jan 2001                      Service Management  
Architectures Issues and  
Review

The purpose of this document is to explore the problems of defining a Service management framework and to examine some of the issues that still need to be resolved. This memo provides information for the Internet community.

3051      Heath                          Jan 2001                      IP Payload Compression Using  
ITU-T V.44 Packet Method

This document describes a compression method based on the data compression algorithm described in International Telecommunication Union (ITU-T) Recommendation V.44. This document defines the application of V.44 Packet Method to the Internet Protocol (IP) Payload Compression Protocol (RFC 2393). This memo provides information for the Internet community.

3050      Lennox                          Jan 2001                      Common Gateway Interface for  
SIP

This document defines a SIP CGI interface for providing SIP services on a SIP server. This memo provides information for the Internet community.

3049      Naugle                      Jan 2001                      TN3270E Service Location and  
Session Balancing

This document discusses the implementation of Service Location Protocol (SLP) and session balancing with a TN3270E emulator in a client server implementation with a TN3270E server. [STANDARDS TRACK]

3048      Whetten                    Jan 2001                    Reliable Multicast Transport  
Building Blocks for  
One-to-Many Bulk-Data Transfer

This document describes a framework for the standardization of bulk-data reliable multicast transport. This memo provides information for the Internet community.

3047      Luthi                        Jan 2001                    RTP Payload Format for ITU-T  
Recommendation G.722.1

This document describes the payload format for including G.722.1 generated bit streams within an RTP packet. Also included here are the necessary details for the use of G.722.1 with MIME and SDP. [STANDARDS TRACK]

3046      Patrick                      Jan 2001                    DHCP Relay Agent Information  
Option

Newer high-speed public Internet access technologies call for a high-speed modem to have a local area network (LAN) attachment to one or more customer premise hosts. It is advantageous to use the Dynamic Host Configuration Protocol (DHCP) as defined in RFC 2131 to assign customer premise host IP addresses in this environment. However, a number of security and scaling problems arise with such "public" DHCP use. This document describes a new DHCP option to address these issues. This option extends the set of DHCP options as defined in RFC 2132. [STANDARDS TRACK]

3045      Meredith                        Jan 2001                    Storing Vendor Information in  
the LDAP root DSE

This document specifies two Lightweight Directory Access Protocol (LDAP) attributes, vendorName and vendorVersion that MAY be included in the root DSA-specific Entry (DSE) to advertise vendor-specific information. This memo provides information for the Internet community.

3044	Rozenfeld	Jan 2001	Using The ISSN (International Serial Standard Number) as URN (Uniform Resource Names) within an ISSN-URN Namespace
------	-----------	----------	---

This document presents how the ISSN - International Standard Serial Number - which is a persistent number for unique identification of serials widely recognised and used in the bibliographic world, can be supported within the Uniform Resource Name (URN) framework as a specific URN namespace identifier. This memo provides information for the Internet community.

3043	Mealling	Jan 2001	The Network Solutions Personal Internet Name (PIN): A URN Namespace for People and Organizations
------	----------	----------	---

This document describes a Uniform Resource Name (URN) namespace that is engineered by Network Solutions, Inc. for naming people and organizations. This memo provides information for the Internet community.

3042	Allman	Jan 2001	Enhancing TCP's Loss Recovery Using Limited Transmit
------	--------	----------	---

This document proposes a new Transmission Control Protocol (TCP) mechanism that can be used to more effectively recover lost segments when a connection's congestion window is small, or when a large number of segments are lost in a single transmission window. [STANDARDS TRACK]

3041	Narten	Jan 2001	Privacy Extensions for Stateless Address Autoconfiguration in IPv6
------	--------	----------	--

This document describes an extension to IPv6 stateless address autoconfiguration for interfaces whose interface identifier is derived from an IEEE identifier. [STANDARDS TRACK]

3040	Cooper	Jan 2001	Internet Web Replication and Caching Taxonomy
------	--------	----------	--

This memo specifies standard terminology and the taxonomy of web replication and caching infrastructure as deployed today. It introduces standard concepts, and protocols used today within this application domain. This memo provides information for the Internet community.

3039	Santesson	Jan 2001	Internet X.509 Public Key Infrastructure Qualified Certificates Profile
------	-----------	----------	---

This document forms a certificate profile for Qualified Certificates, based on RFC 2459, for use in the Internet. The goal of this document is to define a general syntax independent of local legal requirements. [STANDARDS TRACK]

3038	Nagami	Jan 2001	VCID Notification over ATM link for LDP
------	--------	----------	---

This document specifies the procedures for the communication of VCID values between neighboring ATM-LSRs that must occur in order to ensure this property. [STANDARDS TRACK]

3037	Thomas	Jan 2001	LDP Applicability
------	--------	----------	-------------------

A fundamental concept in MPLS is that two Label Switching Routers (LSRs) must agree on the meaning of the labels used to forward traffic between and through them. This common understanding is achieved by using a set of procedures, called a label distribution protocol, by which one LSR informs another of label bindings it has made. This document describes the applicability of a set of such procedures called LDP (for Label Distribution Protocol) by which LSRs distribute labels to support MPLS forwarding along normally routed paths. This memo provides information for the Internet community.

3036      Andersson              Jan 2001              LDP Specification

A fundamental concept in MPLS is that two Label Switching Routers (LSRs) must agree on the meaning of the labels used to forward traffic between and through them. This common understanding is achieved by using a set of procedures, called a label distribution protocol, by which one LSR informs another of label bindings it has made. This document defines a set of such procedures called LDP (for Label Distribution Protocol) by which LSRs distribute labels to support MPLS forwarding along normally routed paths. [STANDARDS TRACK]

3035      Davie                      Jan 2001              MPLS using LDP and ATM VC Switching

This document extends and clarifies the relevant portions of RFC 3031 and RFC 3036 by specifying in more detail the procedures which to be used when distributing labels to or from ATM-LSRs, when those labels represent Forwarding Equivalence Classes (FECs, see RFC 3031) for which the routes are determined on a hop-by-hop basis by network layer routing algorithms. [STANDARDS TRACK]

3034      Conta                      Jan 2001              Use of Label Switching on Frame Relay Networks Specification

This document defines the model and generic mechanisms for Multiprotocol Label Switching on Frame Relay networks. [STANDARDS TRACK]

3033      Suzuki                      Jan 2001              The Assignment of the Information Field and Protocol Identifier in the Q.2941 Generic Identifier and Q.2957 User-to-user Signaling for the Internet Protocol

The purpose of this document is to specify the assignment of the information field and protocol identifier in the Q.2941 Generic Identifier and Q.2957 User-to-user Signaling for the Internet protocol. [STANDARDS TRACK]

3032      Rosen                      Jan 2001                      MPLS Label Stack Encoding

This document specifies the encoding to be used by an LSR in order to transmit labeled packets on Point-to-Point Protocol (PPP) data links, on LAN data links, and possibly on other data links as well. This document also specifies rules and procedures for processing the various fields of the label stack encoding. [STANDARDS TRACK]

3031      Rosen                      Jan 2001                      Multiprotocol Label Switching  
Architecture

This document specifies the architecture for Multiprotocol Label Switching (MPLS). [STANDARDS TRACK]

3030      Vaudreuil                  Dec 2000                      SMTP Service Extensions for  
Transmission of Large and  
Binary MIME Messages

This memo defines two extensions to the SMTP (Simple Mail Transfer Protocol) service. [STANDARDS TRACK]

3029      Adams                      Feb 2001                      Internet X.509 Public Key  
Infrastructure Data Validation  
and Certification Server  
Protocols

This document describes a general Data Validation and Certification Server (DVCS) and the protocols to be used when communicating with it. This memo defines an Experimental Protocol for the Internet community.

3028      Showalter                  Jan 2001                      Sieve: A Mail Filtering  
Language

This document describes a language for filtering e-mail messages at time of final delivery. [STANDARDS TRACK]

3027      Holdrege              Jan 2001              Protocol Complications with  
the IP Network Address  
Translator

The purpose of this document is to identify the protocols and applications that break with NAT enroute. The document also attempts to identify any known workarounds. This document attempts to capture as much information as possible, but is by no means a comprehensive coverage. This memo provides information for the Internet community.

3026      Blane                  Jan 2001              Liaison to IETF/ISOC on ENUM

Working Party 1/2, of the International Telecommunication Union Telecommunication Standardization Sector (ITU-T) held a meeting of its collaborators in Berlin Germany 19-26 October 2000. This liaison from WP1/2 to the IETF/ISOC conveys the understandings of the WP1/2 collaborators resulting from the discussions. This memo provides information for the Internet community.

3025      Dommety                  Feb 2001              Mobile IP  
Vendor/Organization-Specific  
Extensions

This document defines two new extensions to Mobile IP. These extensions will facilitate equipment vendors and organizations to make specific use of these extensions as they see fit for research or deployment purposes. [STANDARDS TRACK]

3024      Montenegro              Jan 2001              Reverse Tunneling for Mobile  
IP, revised

This document proposes backwards-compatible extensions to Mobile IP to support topologically correct reverse tunnels. This document does not attempt to solve the problems posed by firewalls located between the home agent and the mobile node's care-of address. [STANDARDS TRACK]

3023      Murata                      Jan 2001                      XML Media Types

This document standardizes five new media types -- text/xml, application/xml, text/xml-external-parsed-entity, application/xml-external-parsed-entity, and application/xml-dtd -- for use in exchanging network entities that are related to the Extensible Markup Language (XML). This document also standardizes a convention (using the suffix '+xml') for naming media types outside of these five types when those media types represent XML MIME (Multipurpose Internet Mail Extensions) entities. [STANDARDS TRACK]

3022      Srisuresh                    Jan 2001                    Traditional IP Network Address Translator (Traditional NAT)

The NAT operation described in this document extends address translation introduced in RFC 1631 and includes a new type of network address and TCP/UDP port translation. In addition, this document corrects the Checksum adjustment algorithm published in RFC 1631 and attempts to discuss NAT operation and limitations in detail. This memo provides information for the Internet community.

3021      Retana                        Dec 2000                    Using 31-Bit Prefixes on IPv4 Point-to-Point Links

With ever-increasing pressure to conserve IP address space on the Internet, it makes sense to consider where relatively minor changes can be made to fielded practice to improve numbering efficiency. One such change, proposed by this document, is to halve the amount of address space assigned to point-to-point links (common throughout the Internet infrastructure) by allowing the use of 31-bit subnet masks in a very limited way. [STANDARDS TRACK]

3020      Pate                            Dec 2000                    Definitions of Managed Objects for Monitoring and Controlling the UNI/NNI Multilink Frame Relay Function

This memo defines a Management Information Base (MIB) for monitoring and controlling a UNI/NNI Multilink Frame Relay Function as defined in Frame Relay Forum FRF.16. [STANDARDS TRACK]

3019	Haberman	Jan 2001	IP Version 6 Management Information Base for The Multicast Listener Discovery Protocol
------	----------	----------	---

This document defines a portion of the Management Information Base (MIB) for use with network management protocols in Internet Protocol Version 6 internets. Specifically, this document is the MIB module that defines managed objects for implementations of the Multicast Listener Discovery Protocol [RFC2710]. [STANDARDS TRACK]

3018	Bogdanov	Dec 2000	Unified Memory Space Protocol Specification
------	----------	----------	--

This document specifies Unified Memory Space Protocol (UMSP), which gives a capability of immediate access to memory of the remote nodes. This memo defines an Experimental Protocol for the Internet community.

3017	Riegel	Dec 2000	XML DTD for Roaming Access Phone Book
------	--------	----------	--

This document defines the syntax as well as the semantics of the information to be included in the phone book for roaming applications. [STANDARDS TRACK]

3016	Kikuchi	Nov 2000	RTP Payload Format for MPEG-4 Audio/Visual Streams
------	---------	----------	---

This document describes Real-Time Transport Protocol (RTP) payload formats for carrying each of MPEG-4 Audio and MPEG-4 Visual bitstreams without using MPEG-4 Systems. [STANDARDS TRACK]

3015	Cuervo	Nov 2000	Megaco Protocol Version 1.0
------	--------	----------	-----------------------------

This document defines the protocol used between elements of a physically decomposed multimedia gateway, i.e. a Media Gateway and a Media Gateway Controller. [STANDARDS TRACK]

3014      Kavasseri              Nov 2000              Notification Log MIB

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 logging Simple Network Management Protocol (SNMP) Notifications. [STANDARDS TRACK]

3013      Killalea              Nov 2000              Recommended Internet Service  
Provider Security Services and  
Procedures

The purpose of this document is to express what the engineering community as represented by the IETF expects of Internet Service Providers (ISPs) with respect to security. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

3012      Perkins              Nov 2000              Mobile IPv4 Challenge/Response  
Extensions

In this specification, we define extensions for the Mobile IP Agent Advertisements and the Registration Request that allow a foreign agent to use a challenge/response mechanism to authenticate the mobile node. [STANDARDS TRACK]

3011      Waters              Nov 2000              The IPv4 Subnet Selection  
Option for DHCP

This memo defines a new Dynamic Host Configuration Protocol (DHCP) option for selecting the subnet on which to allocate an address. [STANDARDS TRACK]

3010      Shepler              Dec 2000              NFS version 4 Protocol

NFS (Network File System) version 4 is a distributed file system protocol which owes heritage to NFS protocol versions 2 [RFC1094] and 3 [RFC1813]. Unlike earlier versions, the NFS version 4 protocol supports traditional file access while integrating support for file locking and the mount protocol. In addition, support for strong security (and its negotiation), compound operations, client caching, and internationalization have been added. Of course, attention has been applied to making NFS version 4 operate well in an Internet environment. [STANDARDS TRACK]

3009      Rosenberg              Nov 2000              Registration of parityfec MIME types

The RTP (Real-time Transport Protocol) payload format for generic forward error correction allows RTP participants to improve loss resiliency through the use of traditional parity-based channel codes. This payload format requires four new MIME types, audio/parityfec, video/parityfec, text/parityfec and application/parityfec. This document serves as the MIME type registration for those formats. [STANDARDS TRACK]

3008      Wellington              Nov 2000              Domain Name System Security (DNSSEC) Signing Authority

This document proposes a revised model of Domain Name System Security (DNSSEC) Signing Authority. The revised model is designed to clarify earlier documents and add additional restrictions to simplify the secure resolution process. Specifically, this affects the authorization of keys to sign sets of records. [STANDARDS TRACK]

3007      Wellington              Nov 2000              Secure Domain Name System (DNS) Dynamic Update

This document proposes a method for performing secure Domain Name System (DNS) dynamic updates. [STANDARDS TRACK]

3006      Davie                      Nov 2000              Integrated Services in the Presence of Compressible Flows

This specification describes an extension to the TSpec which enables a sender of potentially compressible data to provide hints to int-serv routers about the compressibility they may obtain. [STANDARDS TRACK]

3005 Harris Nov 2000 IETF Discussion List Charter

The Internet Engineering Task Force (IETF) discussion mailing list furthers the development and specification of Internet technology through discussion of technical issues, and hosts discussions of IETF direction, policy, meetings, and procedures. As this is the most general IETF mailing list, considerable latitude is allowed. Advertising, whether to solicit business or promote employment opportunities, falls well outside the range of acceptable topics, as do discussions of a personal nature. This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements.

3004 Stump Nov 2000 The User Class Option for DHCP

This option is used by a Dynamic Host Configuration Protocol (DHCP) client to optionally identify the type or category of user or applications it represents. The information contained in this option is an opaque field that represents the user class of which the client is a member. Based on this class, a DHCP server selects the appropriate address pool to assign an address to the client and the appropriate configuration parameters. This option should be configurable by a user. [STANDARDS TRACK]

3003 Nilsson Nov 2000 The audio/mpeg Media Type

The audio layers of the MPEG-1 and MPEG-2 standards are in frequent use on the internet, but there is no uniform Multipurpose Internet Mail Extension (MIME) type for these files. The intention of this document is to define the media type audio/mpeg to refer to this kind of contents. [STANDARDS TRACK]

3002 Mitzel Dec 2000 Overview of 2000 IAB Wireless Internetworking Workshop

This document provides an overview of a workshop held by the Internet Architecture Board (IAB) on wireless internetworking. This memo provides information for the Internet community.

3001      Mealling                      Nov 2000                      A URN Namespace of Object  
Identifiers

This document describes a Uniform Resource Names (URN) namespace that contains Object Identifiers (OIDs). This memo provides information for the Internet community.

3000      Reynolds                      Nov 2001                      Internet Official Protocol  
Standards

This memo contains a snapshot of the state of standardization of protocols used in the Internet as of October 25, 2001. It lists official protocol standards and Best Current Practice RFCs; it is not a complete index to the RFC series. The latest version of this memo is designated STD 1. [STANDARDS TRACK]

#### Security Considerations

Security issues are not discussed in this memo.

#### Author's Address

Sandy Ginoza  
University of Southern California  
Information Sciences Institute  
4676 Admiralty Way  
Marina del Rey, CA 90292

Phone: (310) 822-1511

EMail: ginoza@isi.edu

## Full Copyright Statement

Copyright (C) The Internet Society (2001). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## Acknowledgement

Funding for the RFC Editor function is currently provided by the Internet Society.

