                          IANA Considerations for
              IPv4 Internet Group Management Protocol (IGMP)

Status of this Memo

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Abstract

   This memo requests that the IANA create a registry for fields in the
   IGMP (Internet Group Management Protocol) protocol header, and
   provides guidance for the IANA to use in assigning parameters for
   those fields.

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1. Introduction

   This memo requests that the IANA create a registry for fields in the
   IGMP protocol header.

   The terms "Specification Required", "Expert Review", "IESG Approval",
   "IETF Consensus", and "Standards Action", are used in this memo to
   refer to the processes described in [2].

2. IANA Considerations for fields in the IPv4 IGMP header

   The IPv4 IGMP header [1] contains the following fields that carry
   values assigned from IANA-managed name spaces: Type and Code. Code
   field values are defined relative to a specific Type value.

   Values for the IPv4 IGMP Type fields are allocated using an IESG
   Approval or Standards Action processes. Code Values for existing
   IPv4 IGMP Type fields are allocated using IESG Approval or Standards
   Action processes. The policy for assigning Code values for new IPv4
   IGMP Types should be defined in the document defining the new Type
   value.

3. Assignments for testing and experimentation

   Instead of suggesting temporary assignments as in [3], this document
   follows the lead of [4] and assigns a range of values for
   experimental use. The IGMP Code values 240-255 inclusive (0xf0 -
   0xff) are reserved for protocol testing and experimentation.

   Systems should silently ignore IGMP messages with unknown Code
   values.

4. Security Considerations

   Security analyzers such as firewalls and network intrusion detection
   monitors often rely on unambiguous interpretations of the fields
   described in this memo. As new values for the fields are assigned,
   existing security analyzers that do not understand the new values may
   fail, resulting in either loss of connectivity if the analyzer
   declines to forward the unrecognized traffic, or loss of security if
   it does forward the traffic and the new values are used as part of an
   attack. This vulnerability argues for high visibility (which the
   Standards Action and IETF Consensus processes ensure) for the
   assignments whenever possible.

5. Normative References

   [1]   Fenner, W., "Internet Group Management Protocol, Version 2",
         RFC 2236, November 1997.

   [2]   Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA
         Considerations Section in RFCs", BCP 26, RFC 2434, October
         1998.

6. Informative References

   [3]   Bradner, S. and V. Paxson, "IANA Allocation Guidelines For
         Values In the Internet Protocol and Related Headers", BCP 37,
         RFC 2780, March 2000.

   [4]   Narten, T., "Assigning Experimental and Testing Numbers
         Considered Useful", Work in Progress.

7. Author's Address

         Bill Fenner
         AT&T Labs -- Research
         75 Willow Rd
         Menlo Park, CA 94025
         USA

         EMail: fenner@research.att.com

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