                IANA Registry for P-Multicast Service Interface (PMSI)
                         Tunnel Type Code Points

Abstract

   RFC 6514 created a space of Tunnel Type code points for a new BGP
   attribute called the "P-Multicast Service Interface Tunnel (PMSI
   Tunnel) attribute". However, the RFC did not create a corresponding
   IANA registry.

   There now is need to make further code point allocations from this
   name space. This document serves to update RFC 6514 in that it
   creates an IANA registry for that purpose.

Status of This Memo

   This is an Internet Standards Track document.

   This document is a product of the Internet Engineering Task Force
   (IETF). It represents the consensus of the IETF community. It has
   received public review and has been approved for publication by the
   Internet Engineering Steering Group (IESG). Further information on
   Internet Standards is available in Section 2 of RFC 5741.

   Information about the current status of this document, any errata,
   and how to provide feedback on it may be obtained at
   http://www.rfc-editor.org/info/rfc7385.

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1. Introduction

   In 'BGP Encodings and Procedures for Multicast in MPLS/BGP IP VPNs'
   [RFC6514], an optional transitive BGP attribute called the
   "P-Multicast Service Interface Tunnel (PMSI Tunnel) attribute" is
   specified. This BGP attribute uses an octet field to specify the
   PMSI tunnel type. RFC 6514 allocates the values 0-7.

   There is now a need to make further code point allocations from this
   name space. In particular, "Inter-Area P2MP Segmented LSPs"
   [SEAMLESS-MCAST] needs to make such an allocation. However, the RFC
   did not create an IANA registry for these code points.

   This document creates a new IANA registry called "P-Multicast Service
   Interface Tunnel (PMSI Tunnel) Tunnel Types" for these code points.
   The registry is created in the "Border Gateway Protocol (BGP)
   Parameters" registry.

   Creating this registry is an update of RFC 6514 [RFC6514].

2. Security Considerations

   This document simply creates an IANA registry from a table in RFC
   6514. Thus, there are no security concerns.

3. IANA Considerations

   IANA has created a new registry called "P-Multicast Service Interface
   Tunnel (PMSI Tunnel) Tunnel Types" in the "Border Gateway Protocol
   (BGP) Parameters" registry.

   The allocation policy for values 0x00 to 0xFA is IETF Review
   [RFC5226]. Values 0xFB to 0xFE are experimental and are not to be
   assigned. 0xFF is reserved, the status of 0xFF may only be changed
   through Standards Action [RFC5226].

   The initial registry should appear as:

      Value   Meaning   Reference

      0x00   no tunnel information present [RFC6514]
      0x01   RSVP-TE P2MP LSP   [RFC6514]
      0x02   mLDP P2MP LSP   [RFC6514]
      0x03   PIM-SSM Tree   [RFC6514]
      0x04   PIM-SM Tree   [RFC6514]
      0x05   BIDIR-PIM Tree   [RFC6514]
      0x06   Ingress Replication   [RFC6514]
      0x07   mLDP MP2MP LSP   [RFC6514]
      0x08 - 0xFA   Unassigned
      0xFB - 0xFE   Experimental   [RFC7385]
      0xFF   Reserved   [RFC7385]

                                Figure 1

4. References

4.1. Normative References

   [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an
              IANA Considerations Section in RFCs", BCP 26, RFC 5226,
              May 2008, <http://www.rfc-editor.org/info/rfc5226>.

   [RFC6514] Aggarwal, R., Rosen, E., Morin, T., and Y. Rekhter, "BGP
              Encodings and Procedures for Multicast in MPLS/BGP IP
              VPNs", RFC 6514, February 2012,
              <http://www.rfc-editor.org/info/rfc6514>.

4.2. Informative References

   [SEAMLESS-MCAST]
             Rekhter, Y. and R. Aggarwal, "Inter-Area P2MP Segmented
             LSPs", Work in Progress, draft-ietf-mpls-seamless-
             mcast-14, July 2014.

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