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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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