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RFC 9184
BGP Extended Community Registries Update

Abstract

This document updates several BGP Extended Community registries in order to replace the "Experimental Use" registration procedure in some entries, since their use is clearly not experimental and is thus misleading.

This document updates RFCs 7153 and 8955.

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 7841.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at https://www.rfc-editor.org/info/rfc9184.

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1. Introduction

The IANA registries for the type values and sub-type values of the BGP Extended Communities attribute were reorganized by [RFC7153]. As a result, IANA maintains a registry entitled "BGP Transitive Extended Community Types", which includes a range of type values (0x80-0x8F) reserved for Experimental Use [RFC8126]. Out of this experimental range, types 0x80, 0x81, and 0x82 have been used in [RFC5575] and [RFC7674] (both documents were rendered obsolete by [RFC8955]). The primary use for those types and the sub-type registries is non-experimental.

Section 2 describes updates to the registry to reflect the actual use of those code points by changing the registration procedure from "Experimental Use" to "First Come First Served" [RFC8126] for the types 0x80-0x82 (and removing "Experimental Use" from the sub-type registry names), thereby updating [RFC7153] and [RFC8955].

2. IANA Considerations

2.1. Registry: BGP Transitive Extended Community Types

IANA maintains a registry entitled "BGP Transitive Extended Community Types". IANA has added RFC 9184 to the reference of this registry. They have also updated the name of the type values according to Table 1 and added RFC 9184 as a reference for the existing entries.

Type Value	Name	Reference
0x80	Generic Transitive Extended Community (Sub-Types are defined in the "Generic Transitive Extended Community Sub-Types" registry)	RFC 9184
0x81	Generic Transitive Extended Community Part 2 (Sub-Types are defined in the "Generic Transitive Extended Community Part 2 Sub-Types" registry)	RFC 9184
0x82	Generic Transitive Extended Community Part 3 (Sub-Types are defined in the "Generic Transitive Extended Community Part 3 Sub-Types" registry)	RFC 9184

Table 1: Registry: BGP Transitive Extended Community Types

Furthermore, IANA has changed the registration procedures of this registry for type values 0x80 through 0x82 to First Come First Served [RFC8126]. The resulting registration procedures should read as in Table 2.

Range	Registration Procedures
0x00-0x3f	First Come First Served
0x80-0x82	First Come First Served (see RFC 9184)
0x83-0x8f	Reserved for Experimental Use (see [RFC3692])
0x90-0xbf	Standards Action

Table 2: Registration Procedures: BGP Transitive Extended Community Types

2.2. Registry: Generic Transitive Experimental Use Extended Community Sub-Types

IANA maintains a registry entitled "Generic Transitive Experimental Use Extended Community Sub-Types". IANA has added RFC 9184 to the reference of this registry and updated the registry title to:

> "Generic Transitive Extended Community Sub-Types"

2.3. Registry: Generic Transitive Experimental Use Extended Community Part 2 Sub-Types

IANA maintains a registry entitled "Generic Transitive Experimental Use Extended Community Part 2 Sub-Types". IANA has added RFC 9184 to the reference of this registry and updated the registry title to:

> "Generic Transitive Extended Community Part 2 Sub-Types"

2.4. Registry: Generic Transitive Experimental Use Extended Community Part 3 Sub-Types

IANA maintains a registry entitled "Generic Transitive Experimental Use Extended Community Part 3 Sub-Types". IANA has added RFC 9184 to the reference of this registry and updated the registry title to:

> "Generic Transitive Extended Community Part 3 Sub-Types"

3. Security Considerations

There are no direct security considerations arising from this document.

4. References

4.1. Normative References

[RFC7153] Rosen, E. and Y. Rekhter, "IANA Registries for BGP Extended Communities", RFC 7153, DOI 10.17487/RFC7153, March 2014, <https://www.rfc-editor.org/info/rfc7153>.

[RFC8126] Cotton, M., Leiba, B., and T. Narten, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 8126, DOI 10.17487/RFC8126, June 2017, <https://www.rfc-editor.org/info/rfc8126>.

4.2. Informative References

[RFC3692] Narten, T., "Assigning Experimental and Testing Numbers Considered Useful", BCP 82, RFC 3692, DOI 10.17487/RFC3692, January 2004, <https://www.rfc-editor.org/info/rfc3692>.

[RFC5575] Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of Flow Specification Rules", RFC 5575, DOI 10.17487/RFC5575, August 2009, <https://www.rfc-editor.org/info/rfc5575>.

[RFC7674] Haas, J., Ed., "Clarification of the Flowspec Redirect Extended Community", RFC 7674, DOI 10.17487/RFC7674, October 2015, <https://www.rfc-editor.org/info/rfc7674>.

[RFC8955] Loibl, C., Hares, S., Raszuk, R., McPherson, D., and M. Bacher, "Dissemination of Flow Specification Rules", RFC 8955, DOI 10.17487/RFC8955, December 2020, <https://www.rfc-editor.org/info/rfc8955>.

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