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IANA Considerations for Internet Group Management Protocols

Abstract

This document specifies revised IANA Considerations for the Internet Group Management Protocol and the Multicast Listener Discovery protocol. This document specifies the guidance provided to IANA to manage values associated with various fields within the protocol headers of the group management protocols.

This document obsoletes RFC 3228 and updates RFC 4443.

Status of This Memo

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1. Introduction

The following sections describe the allocation guidelines associated with the specified fields within the Internet Group Management Protocol (IGMP) [[I-D.ietf-pim-3376bis](#)] and the Multicast Listener Discovery (MLD) [[I-D.ietf-pim-3810bis](#)] headers. Some of these registries were created previously, while others are created by this document.

This document obsoletes [[RFC3228](#)] and updates [[RFC4443](#)].

The capitalized key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

2. IANA Considerations

The registration procedures used in this document are defined in [[RFC8126](#)].

2.1. Type and Code Fields

2.1.1. Internet Group Management Protocol

The IGMP header 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.

[[RFC3228](#)] created an IANA registry for the IGMP Type field. This document updates that registry in two ways:

The registration procedure is changed to Standards Action.

The reference for the registry is changed to this document.

[[RFC3228](#)] created an IANA registry for Code values for existing IGMP Type fields. The registration procedure for the existing registries is changed to Standards Action. The policy for assigning Code values for new IGMP Types MUST be defined in the document defining the new Type value.

2.1.2. Multicast Listener Discovery

As with IGMP, the MLD header also contains Type and Code fields. Assignment of those fields within the MLD header is defined in [[RFC4443](#)].

2.2. Query Message Flags

The IANA is requested to create a single registry for the bits in the Flags field of the Multicast Listener Query Message [[I-D.ietf-pim-3810bis](#)] and the IGMPv3 Query Message [[I-D.ietf-pim-3376bis](#)]. The format for the registry is:

Resv Bit	Short Name	Description	Reference
0			
1			
2			
3			

The assignment of new bit flags within the Flags field requires Standards Action.

2.3. Report Message Flags

The IANA is requested to create a single registry for the bits in the Flags field of the Multicast Listener Report Message and the IGMPv3 Report Message. The format for the registry is:

Flags Bit	Short Name	Description	Reference
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

The assignment of new bit flags within the Flags field require Standards Action.

3. Security Considerations

This document only defines IANA registry actions and there are no associated security issues.

4. Contributors

Bill Fenner was the author of RFC 3228, which forms a portion of the content contained herein.

5. Acknowledgments

6. References

6.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC3228] Fenner, B., "IANA Considerations for IPv4 Internet Group Management Protocol (IGMP)", BCP 57, RFC 3228, DOI 10.17487/RFC3228, February 2002, <<https://www.rfc-editor.org/info/rfc3228>>.

[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>>.

6.2. Informative References

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[RFC4443]

Conta, A., Deering, S., and M. Gupta, Ed., "Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification", STD 89, RFC 4443, DOI 10.17487/RFC4443, March 2006, <<https://www.rfc-editor.org/info/rfc4443>>.

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