Internet Engineering Task Force (IETF)

Request for Comments: 7319 BCP: 191

Category: Best Current Practice

ISSN: 2070-1721

IANA Considerations for Connectivity Fault Management (CFM) Code Points

D. Eastlake 3rd

Huawei

July 2014

Abstract

IEEE 802.1 has specified Connectivity Fault Management (CFM) Operations, Administration, and Maintenance (OAM) facilities. CFM messages are structured with an OpCode field and have provision for the inclusion of TLV-structured information. IEEE 802.1 has allocated blocks of CFM OpCodes and TLV Types to the IETF. This document specifies the IANA considerations for the assignment of values from these blocks.

Status of This Memo

This memo documents an Internet Best Current Practice.

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 BCPs 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/rfc7319.

Copyright Notice

Copyright (c) 2014 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Introduction	2
	1.1. Terminology	2
2.	IANA Considerations	2
3.	Security Considerations	3
	References	
	4.1. Normative References	3
	4.2. Informative References	3
aga	pendix A. IEEE 802.1 WG Liaison	6

1. Introduction

The IEEE 802.1 Working Group has specified Connectivity Fault Management (CFM) [802.1Q] OAM [RFC6291] facilities. CFM messages are structured with an OpCode field and have provision for the inclusion of TLV-structured information.

IEEE 802.1 has allocated the block of 32 CFM OpCodes from 64 through 95 and the block of 32 CFM TLV Types from 64 through 95 to the IETF (see Appendix A). This document specifies the IANA considerations for the assignment of values from these two blocks.

IEEE 802.1 previously allocated similar blocks of values from 32 through 63 to ITU-T [Y.1731].

1.1. Terminology

Capitalized IANA terms such as "Standards Action" are to be interpreted as described in [RFC5226].

2. IANA Considerations

IANA has created the "Connectivity Fault Management (CFM) OAM IETF Parameters registry with the following two subregistries:

Registry Name: CFM OAM IETF OpCodes

Registration Procedures: Standards Action

Reference: [802.1Q] [RFC7319]

Note: This parameter originates with the IEEE 802.1 Working Group that has allocated the block of values from 64 to 95 to the IETF.

Value Assignment ===== ======= 64-95 Unassigned

Eastlake

Best Current Practice

[Page 2]

Registry Name: CFM OAM IETF TLV Types

Registration Procedures: Standards Action

Reference: [802.1Q] [RFC7319]

Note: This parameter originates with the IEEE 802.1 Working Group that has allocated the block of values from 64 to 95 to the IETF.

Value Assignment ======== ===== 64-95 Unassigned

3. Security Considerations

This document is concerned with assignment of values from the blocks of IEEE 802.1 CFM OpCodes and TLV Types that the IEEE 802.1 Working Group has allocated to the IETF. It is not directly concerned with security.

4. References

4.1. Normative References

- [802.1Q] IEEE, "IEEE Standard for Local and metropolitan area networks -- Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks", IEEE Std 802.1Q, 2011.
- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 5226, May 2008.

4.2. Informative References

- [RFC6291] Andersson, L., van Helvoort, H., Bonica, R., Romascanu, D., and S. Mansfield, "Guidelines for the Use of the "OAM" Acronym in the IETF", BCP 161, RFC 6291, June 2011.
- [Y.1731] ITU-T, "OAM Functions and Mechanisms for Ethernet-based Networks", Recommendation G.8013/Y.1731, November 2013.

Appendix A. IEEE 802.1 WG Liaison

Jari Arkko, IETF chair

Stephen J. Trowbridge, ITU-T SG15 chair, cc:

Donald Eastlake, Erik Nordmark, IETF TRILL WG,

Eric Gray, IETF/IEEE liaison

Tony Jeffree, IEEE 802.1 WG Chair From:

Date: Thursday, 06 March 2014

Reference: 24 September 2013 Liaison from TRILL WG

After considering the referenced liaison from the TRILL WG, IEEE 802.1 has voted to approve the allocation of code points from the Connectivity Fault Management protocol of IEEE Std 802.1Q(TM)-2011 for use by IETF. The expectation of IEEE 802.1 is that these code points will be allocated through IANA only on the basis of IETF standards actions. Specifically, the allocation includes:

- + 32 CFM OpCode Field values. Reference IEEE Std 802.1Q-2011 Clause 21.4.3, Table 21-4. The OpCode Field values 64-95 10 are allocated to the IETF.
- + 32 TLV Type Field values. Reference IEEE Std 802.10-2011 Clause 21.5.1.1, Table 21-6. The Type Field values 64-9510 are allocated to the IETF.

IEEE Std 802.1Q will be revised at some future date to document this allocation. In the meantime, the allocation will be recorded through the IEEE 802.1 maintenance process.

Regards,

Tony Jeffree IEEE 802.1 Working Group Chair

Author's Address

Donald Eastlake 3rd Huawei 155 Beaver Street Milford, MA 01757 USA

Phone: +1-508-333-2270 EMail: d3e3e3@gmail.com

Eastlake

Best Current Practice

[Page 5]