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D. Eastlake 3rd  
Huawei  
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## IANA Considerations for Connectivity Fault Management (CFM) Code Points

### 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>.

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## 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

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**

**To:** Jari Arkko, IETF chair  
**cc:** Stephen J. Trowbridge, ITU-T SG15 chair,  
Donald Eastlake, Erik Nordmark, IETF TRILL WG,  
Eric Gray, IETF/IEEE liaison

**From:** Tony Jeffree, IEEE 802.1 WG Chair

**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<sub>10</sub>  
are allocated to the IETF.

- + 32 TLV Type Field values. Reference IEEE Std 802.1Q-2011  
Clause 21.5.1.1, Table 21-6. The Type Field values 64-95<sub>10</sub>  
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**