



**Broadband Forum Liaison To:**

Glenn Parsons, Chair, IEEE 802.1 Working Group <glenn.parsons@ericsson.com>

John Messenger, Vice-Chair, IEEE 802.1 Working Group <jmessenger@advaoptical.com>

**From:**

Michael Fargano

Broadband Forum Technical Committee Chair <michael.fargano@centurylink.com>

**Liaison Communicated By:**

Robin Mersh

Broadband Forum CEO

<rmersh@broadband-forum.org>

**Date:** September 14, 2017

**Subject:** For Action: YANG model for CFM OAM

Thank you for your liaison informing us of the scope of the new IEEE 802.1 project 802.1Qcx "YANG Data Model for Connectivity Fault Management".

The development of such a YANG information model is very important to the Broadband Forum and we are glad to see IEEE taking the lead on this activity, notably on the OpCode values 0-31 and 96-255.

We kindly request that IEEE would provide us with a first draft CFM OAM YANG model at its earliest convenience. In this way, the Broadband Forum intends to ensure that the YANG models that it has under development remain maximally aligned with the work done in 802.1Qcx.

Prior to the 802.1Qcx project having started within IEEE, the Broadband Forum had created a draft CFM OAM YANG model. We intend to publish this model unless the IEEE work is completed soon and fits relatively cleanly into the rest of the TR-383a1 models.

We are sending you the draft CFM OAM model we developed. The draft model is attached for your convenience.

Below is a short description of the collection of modules defined for Connectivity Fault Management (CFM) as specified in IEEE 802.1ag. In addition we attach to this liaison the YANG tree generated for these modules.

We look forward to hearing from you.

Sincerely,

Michael Fargano,  
Broadband Forum Technical Committee Chair

**CC:**

Liaisons@BBF <liaisons@broadband-forum.org>  
Michael Fargano, Broadband Forum Technical Committee Chair  
<michael.fargano@centurylink.com>  
Robin Merish, Broadband Forum CEO <rmerish@broadband-forum.org>  
Gabrielle Bond, Broadband Forum Secretariat <gbond@broadband-forum.org>  
William Lupton, Common YANG Project Stream <wlupton@broadband-forum.org>  
Sven Ooghe, Common YANG Project Stream <sven.ooghe@nokia.com>

**Broadband Forum Reference: LIAISE-84**

**In Response To Incoming Liaison: LIAISE-28**

## **Date of Upcoming Broadband Forum Meetings**

A list of upcoming meetings can be found at <https://www.broadband-forum.org/what-s-happening/meetings-events-webinars/upcoming-bbf-meetings>

**Attachments:**

Generated YANG tree (.tree file)

YANG source code (.zip file)

Short description of the YANG modules and sub-modules:

- **bbf-oam-ethernet-cfm**: This module contains a collection of YANG definitions for supporting the Broadband Forum requirements on management of Connectivity Fault Management, as applicable to access network equipment. As such, this module is specific to access network equipment (e.g., BBF-specified Access Nodes and FTTdp DPUs).
- **bbf-oam-ethernet-cfm-base**: This submodule contains a collection of YANG definitions that define the top-level configuration for Connectivity Fault Management.
- **bbf-oam-ethernet-cfm-cc**: This submodule contains a collection of YANG definitions for the management of the Continuity Check (CC) protocol of a MEP.
- **bbf-oam-ethernet-cfm-cc-body**: This submodule contains a collection YANG data types and grouping definitions for the management of the Continuity Check (CC) protocol of a MEP.
- **bbf-oam-ethernet-cfm-lb**: This submodule contains a collection of YANG definitions for the management of the loopback (LB) protocol of a MEP.
- **bbf-oam-ethernet-cfm-lb-body**: This submodule contains a collection YANG data types and grouping definitions for the management of the loopback (LB) protocol of a MEP.
- **bbf-oam-ethernet-cfm-lt**: This submodule contains a collection of YANG definitions for the management of the linktrace (LT) protocol of a MEP.
- **bbf-oam-ethernet-cfm-lt-body**: This submodule contains a collection YANG data types and grouping definitions for the management of the linktrace (LT) protocol of a MEP.

- **bbf-oam-ethernet-cfm-ma**: This submodule contains a collection of YANG definitions for the management of Maintenance Associations (MA).
- **bbf-oam-ethernet-cfm-ma-body**: This submodule contains a collection YANG data types and grouping definitions for the management of Maintenance Associations (MA).
- **bbf-oam-ethernet-cfm-md**: This submodule contains a collection of YANG definitions for the management of Ethernet Service Layer OAM Maintenance Domains (MD).
- **bbf-oam-ethernet-cfm-md-body**: This module contains a collection YANG data types and grouping definitions for the management of Ethernet Service Layer OAM Maintenance Domains (MD).
- **bbf-oam-ethernet-cfm-mep**: This submodule contains a collection of YANG definitions for the management of Maintenance Association End Points (MEP).
- **bbf-oam-ethernet-cfm-mep-body**: This submodule contains a collection YANG data types and grouping definitions for the management of Maintenance Association End Points (MEP).
- **bbf-oam-ethernet-cfm-mip**: This submodule contains a collection of YANG definitions for the management of Maintenance Domain Intermediate Points (MIP).
- **bbf-oam-ethernet-cfm-mip-body**: This submodule contains a collection YANG data types and grouping definitions for the management of Maintenance Domain Intermediate Points (MIP).
- **bbf-oam-ethernet-cfm-mp-body**: This submodule contains a collection YANG data types and grouping definitions for the management of maintenance points (MP).
- **bbf-oam-ethernet-cfm-types**: This submodule contains a collection of common YANG type definitions.

In addition to the above modules, the following three modules enable linking the CFM OAM objects to the Broadband Forum forwarding/interfaces:

- **bbf-oam-cfm-ma-to-forwarder.yang**
- **bbf-oam-cfm-mep-to-interface.yang**
- **bbf-oam-cfm-mip-to-interface.yang**