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Subject: Information on the strategy chosen by the BBF to bind the IEEE 802.1Qcx CFM YANG model to the IETF RFC 8632 Alarm Management YANG model to support BBF access node requirements

Dear colleagues,

In relation to your previous liaison from November 10, 2020 informing the Broadband Forum of the publication of the IEEE Std. 802.1Qcx-2020 *YANG Data Model for Connectivity Fault Management*, the Broadband Forum would like to inform IEEE 802.1 Working Group that during our 2021 Q2 Virtual Meeting held in June 2021 the Common YANG Work Area (WA) agreed on the strategy to bind the CFM YANG data model defined in IEEE 802.1Qcx to the standardized alarm interface for network devices defined in IETF RFC 8632 *A YANG Data Model for Alarm Management*. This strategy is intended to support the Broadband Forum requirements on the management of alarms as applicable to access network equipment as defined in the Broadband Forum Technical Report TR-383 Amendment 4 *Common YANG Modules for Access Networks*.

We specifically wish to inform the IEEE 802.1 Working Group that the Broadband Forum chose a strategy that is contrary to the requirement of clause 20.1.2 of IEEE 802.1Qcx.

The WA agreed that to best leverage the advantages of the IETF YANG Data Model for Alarm Management and to maximize the benefit to operators, it would be more valuable to define and manage a separate alarm type for each individual defect that can be detected by a MEP within its Maintenance Association rather than to define a single fault alarm type that reports the highest priority defect as defined by clause 20.1.2.

Defining an alarm type for each defect results in the following important advantages:

- provides an operator with the flexibility to override the system-default severity levels of each alarm type (defect) individually as defined in ITU-T Y.733, ITU.T M3100 and ITU-T M.3160 (Alarm Severity Assignment Profile);
- enables operators to be able to shelve specific alarm types;
- enables operators to suppress alarm state change notifications based on the severity of the alarm type;
- the network device can provide alarm information adapted for each alarm type to aid diagnosis, specifically 'probable cause' and 'proposed repair actions' as defined by ITU-T X.733.

An additional motivation informing this decision is that for many operators the craft person processing the reported alarms may not have access to the network devices originating those alarms and as a consequence may not be able to directly inspect the reporting MEP on those devices to further diagnose the fault when receiving a single MEP Fault Alarm. However, when the occurrence of a defect raises a corresponding alarm, diagnostic information can be provided as part of the alarm information of each reported alarm as discussed above.

The goal of the WA is to publish the associated YANG modules that implement this strategy as part of TR-383 Amendment 5, which is currently expected to be published towards the end of Q4/2021.

The Common YANG WA would be happy to answer any questions or comments for clarification that you may have regarding this decision.

We look forward to continued collaboration between our organizations.

Sincerely,

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Broadband Forum Technical Committee Chair

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Date of Upcoming Broadband Forum Meetings: See https://www.broadband-forum.org/category_meetings_and_events/upcoming-meetings

Attachments: None.