



**Broadband Forum Liaison To:**

Glen Kramer, Chair, IEEE 1904 Access Networks Working Group <gkramer@broadcom.com >

**From:**

Lincoln Lavoie  
Broadband Forum Technical Committee Chair <lylavoie@iol.unh.edu>

**Liaison Communicated By:**

Marta Seda, Fiber Access Networks Working Area Director <marta.seda@calix.com>

**Date:** December 12, 2018

**Subject:** Reply to Liaison on SIEPON YANG model

Thank you for informing us of the status of YANG development within IEEE 1904 Working group. In your liaison to BBF, you requested to share EPON YANG development work to date and to provide clarification on the service and device YANG models being used (or planned to be used). Your liaison requested that BBF provide service and device clarification relative to IEEE 1904.1 Table 4-1 Packages.

BBF has created the WT-431 IEEE PON YANG Modules working text to describe the IEEE PON YANG management model and the WT-385 ITU-T PON YANG Modules working text to describe the ITU-T PON YANG management model. WT-385 is going to be published as TR-385 in the first quarter 2019.

WT-431 is in an early stage. The desired direction is to reuse applicable BBF/IEEE 802/IETF YANG models. Any missing YANG constructs would be part of WT-431.

With respect to IEEE 1904.1 Table 4-1, the following YANG module reuse is envisioned:

IEEE 1904.1 Table 4-1 Feature	Possible YANG model to consider for reuse	Comment
OLT VLAN modes	TR-383	Any features not supported by TR-383 will be covered either by WT-431 or extensions to TR-383.
ONU VLAN modes		
MAC aging		
OLT tunneling modes		
ONU tunneling modes		
Multicast connectivity co-existence	IEEE 803.2 draft YANG	Features above and beyond IEEE 802.3 are covered by WT-431.

IEEE 1904.1 Table 4-1 Feature	Possible YANG model to consider for reuse	Comment
Multicast connectivity		
Queue service discipline		
Report queue length calculation		
Report MPCP Format		
Discovery and configuration of queue parameters		
Performance monitoring	RFC8343 Interface YANG	Any features not supported by RFC 8343 would need to be covered by WT-431
ONU transceiver status monitoring	BBF is working on a draft of transceiver YANG model on WT-383.	WT-385 diagnostics to be developed could be reused. Any feature not supported by WT-385 would be covered by WT-431
OLT transceiver status monitoring		
UNI port loop detection	WT-431	WT-431 currently under development
Port Selective loopback		
Events	IETF is working on alarm YANG. BBF is discussing ITU-T PON YANG alarms and events.	It would be recommended not to define notifications until IETF and BBF completes its work.
Optical link protection trunk type	WT-431	WT-431 currently under development
Remote ONU transmitter power supply control	WT-431	WT-431 currently under development
Power saving	WT-385	Any feature not supported by WT-385 would need to be part of WT-431
Data encryption		
ONU authentication	WT-431 and TR-383	WT-431 currently under development
Management		
Device and capability discovery		
Software update		
Management entites		
EPON Data Path		

We look forward to continued communications with IEEE 1904 Access Networks Working Group on IEEE PON YANG model.

Sincerely,

Lincoln Lavoie  
Broadband Forum Technical Committee Chair

**CC:**

Liaisons at BBF <[liaisons@broadband-forum.org](mailto:liaisons@broadband-forum.org)>  
Lincoln Lavoie, Broadband Forum Technical Committee Chair <[lylavoie@iol.unh.edu](mailto:lylavoie@iol.unh.edu)>  
Robin Mersh, Broadband Forum CEO <[rmersh@broadband-forum.org](mailto:rmersh@broadband-forum.org)>  
April Nowicki, Broadband Forum Member Support Manager <[anowicki@broadband-forum.org](mailto:anowicki@broadband-forum.org)>  
David Law, IEEE 802.3 Working Group Chair <[dlaw@hpe.com](mailto:dlaw@hpe.com)>  
Wei Lin, Fiber Access Networks Working Area Director <[wei.linwei@huawei.com](mailto:wei.linwei@huawei.com)>  
Marta Seda, Fiber Access Network Working Area Director <[marta.seda@calix.com](mailto:marta.seda@calix.com)>

**Broadband Forum Reference:**

LIAISE-258

**In Response To Incoming Liaison:**

LIAISE-216 / IEEE 1904

**Date of Upcoming Broadband Forum Meetings**

Upcoming meetings - <https://www.broadband-forum.org/upcoming-bbf-meetings>

Please see the BBF Contact Us webpage below for liaison reply information.

<https://www.broadband-forum.org/contact-us>

**Attachments:**

None