

DRAFT YANG 802.1ABCu

IEEE 802.1 Plenary Vienna

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Introduction

- Draft model follows IEEE Std 802.1AB-2016
- First Task Group Ballot Completed
- Review of Sections and work to be done in the document
- UML Diagrams
- Work to be done



Draft ABcu

- Draft 0.6: <http://www.ieee802.org/1/files/private/abcu-drafts/d0/802-1ABcu-d0-6.pdf>
- Comment disposition: <http://www.ieee802.org/1/files/private/abcu-drafts/d0/802-1ABcu-d0-6-dis-v01.pdf>
 - 16 comments
 - 14 TR, 1 T, 1 E
 - All comments have been Closed
- Working on implementing the changes (see later slides)

- YANG files:
 - <https://github.com/YangModels/yang/blob/master/standard/ieee/draft/802.1/ABcu/ieee802-dot1ab-lldp.yang>
 - <https://github.com/YangModels/yang/blob/master/standard/ieee/draft/802.1/ABcu/ieee802-dot1ab-types.yang>

Draft ABcu Clauses



- Usual front matter: Clause 1 – 5
- Clause 6 Principles of Operations
 - changes to include YANG
- Clause 7 LLDPDU transmission, reception, and addressing
 - no changes expected
- Clause 8 LLDPDU and TLV formats
 - Based on understanding of the LLDP standard and the use of SNMP OIDs, it is possible to write the YANG module so that the OIDs from SNMP can be mapped. So neither the base LLDP-2016 standard (other than the updates adding the YANG module) nor the .1Q-2018 standard need to change.

Draft ABcu Clauses continued

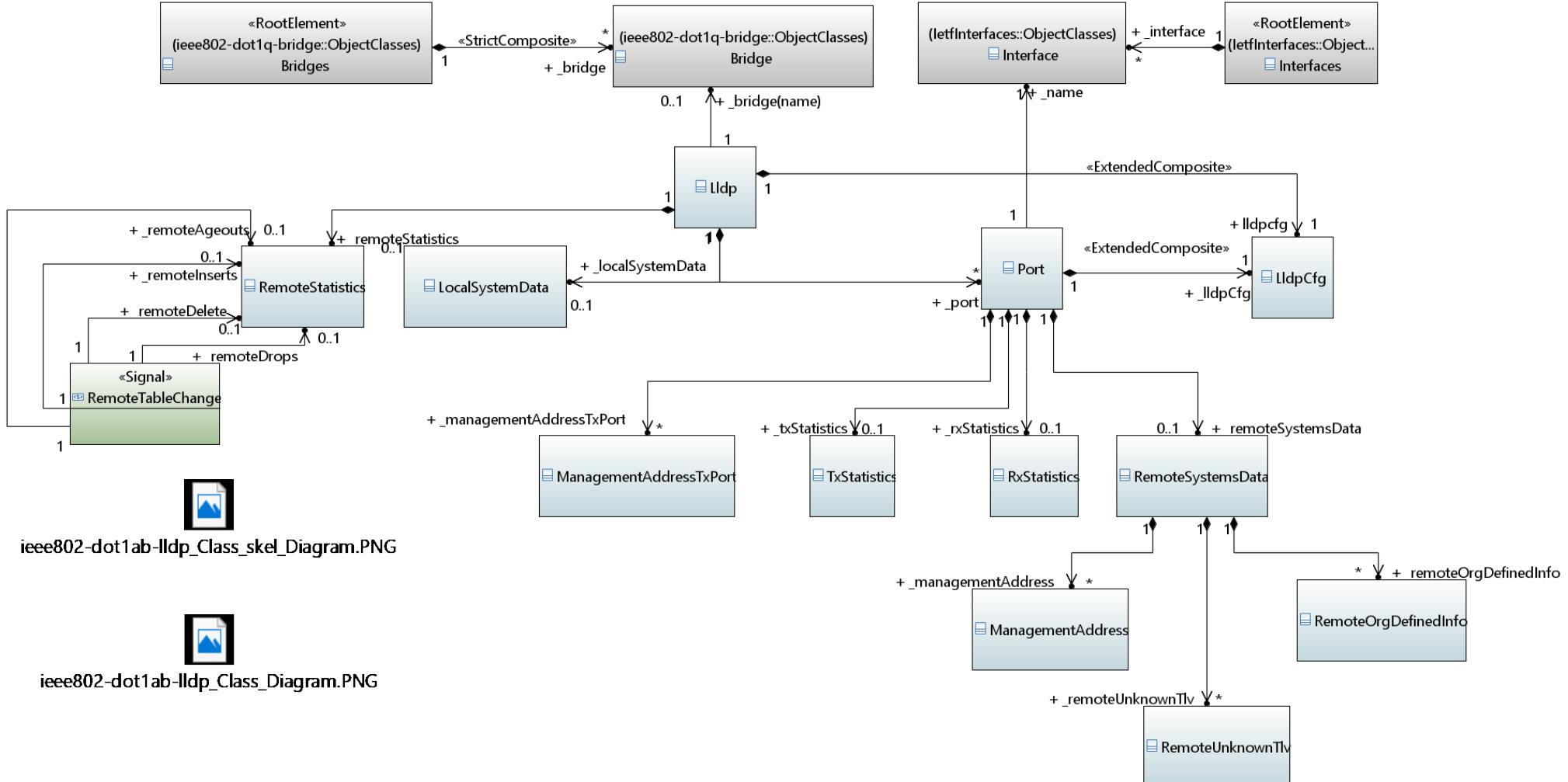


- Clause 9 LLDP agent operation
 - No changes
- Clause 10 LLDP management
 - No changes
- Clause 11 LLDP MIB definitions
 - No changes
- Clause 12 LLDP YANG definitions
 - New Clause for YANG



Example High Level Diagram

- Utilizing UML to help explain structure of the LLDP YANG
- Using Eclipse Papyrus



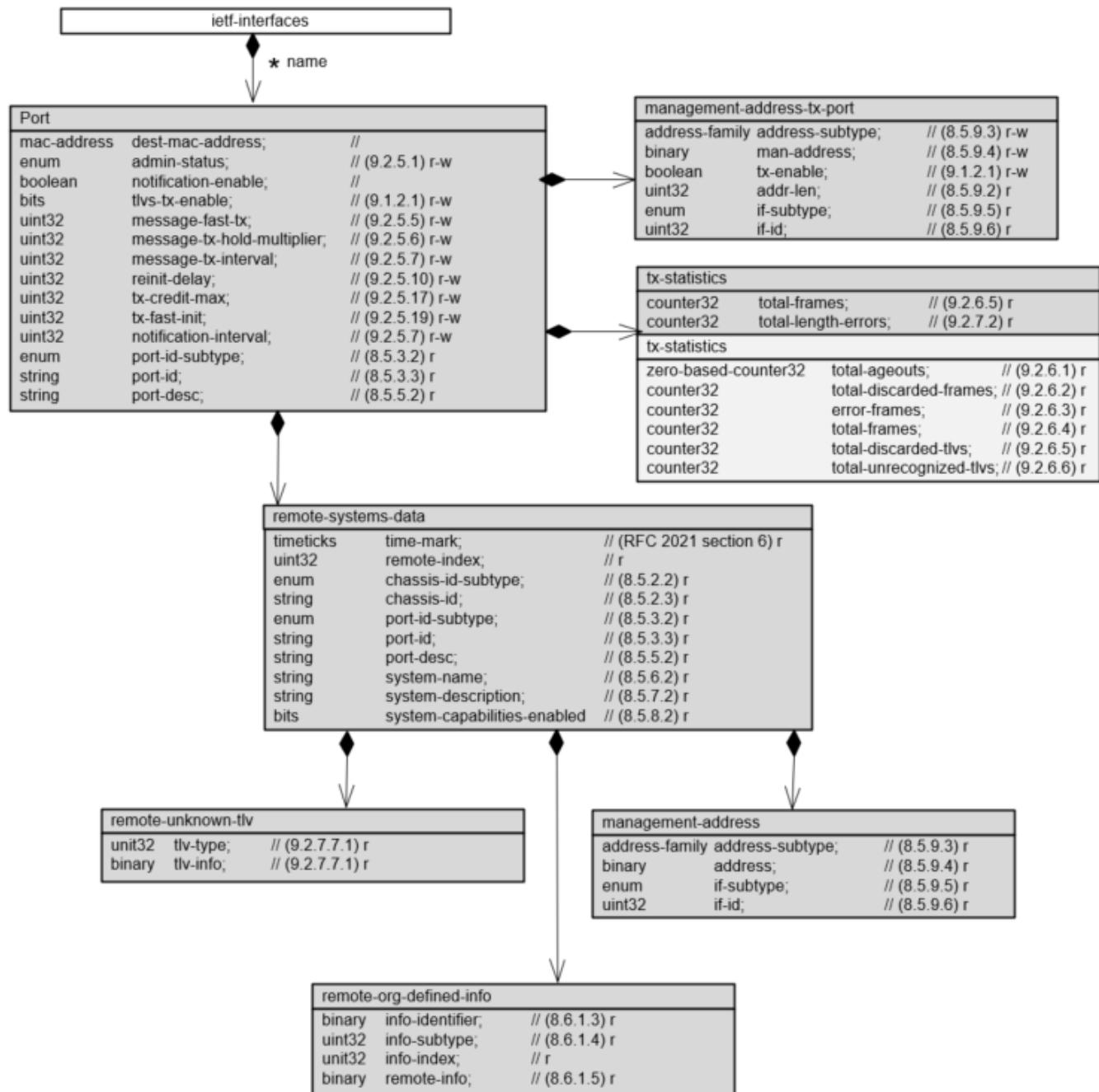
ieee802-dot1ab-lldp_Class_skel_Diagram.PNG

ieee802-dot1ab-lldp_Class_Diagram.PNG

Detailed Diagrams



* bridge	
string name; // (12.4) r-w	
macAddress address; // (12.4) r-w	
enum type; // r-w	
int ports; // (12.4) r	
counter32 up-time; // (12.4) r	
int components; // r	
* name	
lldp-cfg	
uint32 message-fast-tx; // (9.2.5.5) r-w	
uint32 message-tx-hold-multiplier; // (9.2.5.6) r-w	
uint32 message-tx-interval; // (9.2.5.7) r-w	
uint32 reinit-delay; // (9.2.5.10) r-w	
uint32 tx-credit-max; // (9.2.5.17) r-w	
uint32 tx-fast-init; // (9.2.5.19) r-w	
uint32 notification-interval; // (9.2.5.7) r-w	
remote-statistics	
timestamp last-change-time; // r	
zero-based-counter32 remote-inserts; // r	
zero-based-counter32 remote-deletes; // r	
zero-based-counter32 remote-drops; // r	
zero-based-counter32 remote-ageouts; // r	
local-system-data	
enum chassis-id-subtype; // (8.5.2.2) r	
string chassis-id; // (8.5.2.3) r	
string system-name; // (8.5.6.2) r	
string system-description; // (8.5.7.2) r	
bits system-capabilities-supported // (8.5.8.1) r	
bits system-capabilities-enabled // (8.5.8.2) r	





Work to be done...

- Finish work on comments
 - Align NETCONF terminology with .1Qcp and .1Qcx (comment #1)
 - Parameter modeling (comment #3)
 - Review and reorganize types (comment #4)
 - Implement change to discuss MIB and YANG as was done in .1Qcx (comment #9)
 - YANG description updates (comments #10, #11, #12, and #14)
 - Review what was done in .1cx for man-addr-if-subtype (comment #13)