

IEEE 802.1 YANG Update

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1. 802.1Xck — Port-Based Network Access Control Amendment: YANG Data Model

- Project Scope:

This amendment specifies a YANG data model that allows configuration and status reporting for port-based network access control in the scenarios described in Clause 7 of this standard and Clause 11 of IEEE Std 802.1AE, using the information model already specified in clause 12.9 of IEEE Std 802.1X. This amendment will also resolve any maintenance items that have been submitted on IEEE Std 802.1X.

2. 802.1Qcp — Bridges and Bridged Networks Amendment: YANG Data Model

- Project Scope:

This amendment specifies a Unified Modeling Language (UML) based information model and a YANG data model that allows configuration and status reporting for bridges and bridge components including Media Access Control (MAC) Bridges, Two-Port MAC Relays (TPMRs), Customer Virtual Local Area Network (VLAN) Bridges, and Provider Bridges (as specified by this standard) with the capabilities currently specified in clauses 12.4-12.8, 12.10, 12.13, and 12.19 of this standard. It further defines the relationship between the information and data model and models for the other management capabilities specified in this standard and for IEEE Std 802.1AX and IEEE Std 802.1X.

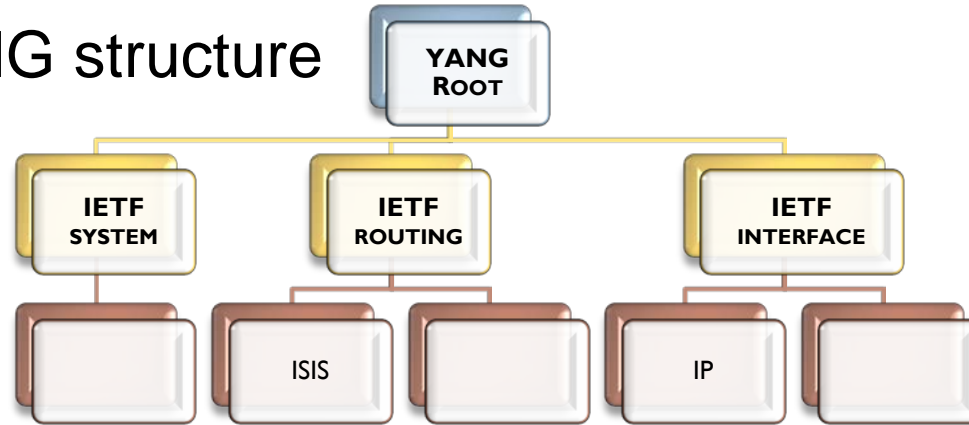
802.1 YANG Model Update

- 802.1 YANG models are derived from UML based information models
 - Benefits of this approach include
 - a) A more generalized (and semantic language agnostic) representation of the model
 - b) Since agnostic to a semantic language (e.g., YANG), facilitates future proofing of the model
 - c) Easier to communicate the model and entity relationships across a large diverse group (that are not YANG experts)
- 802.1Xck YANG model derived from IEEE Std 802.1XbxTM-2014, Figure 12-3 (PAE management information)
- 802.1Qcp YANG model derived from UML model that are based from IEEE Std 802.1QTM-2014, Clause 12 (Bridge management)

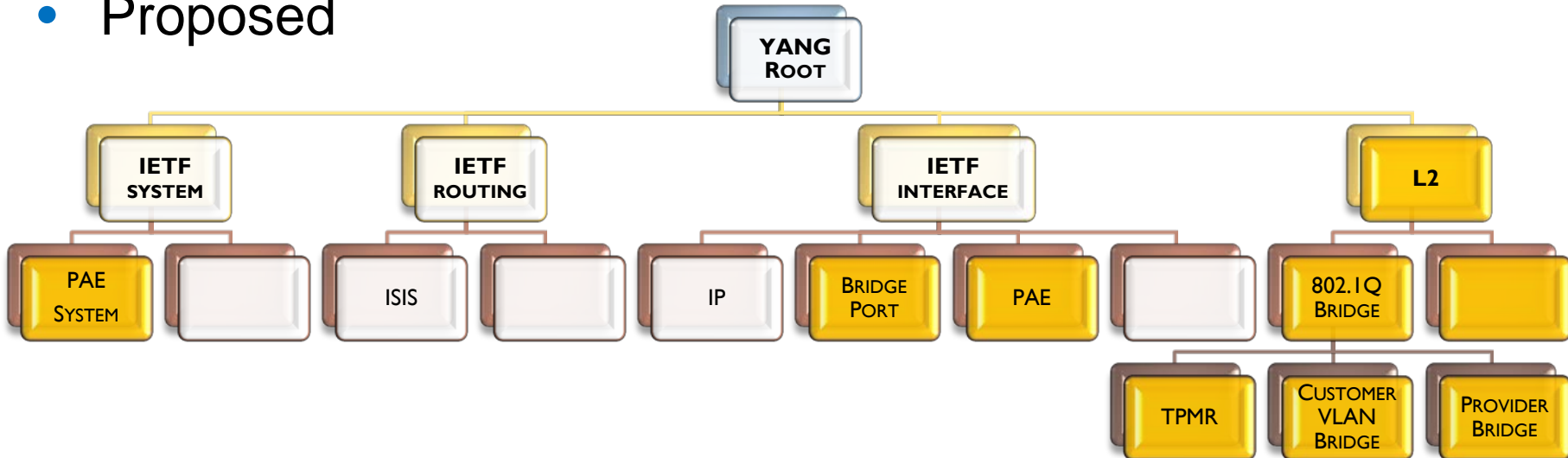


General YANG Structure

- Current YANG structure



- Proposed



- 802.1X and 802.1Q YANG modules are now deposited in GitHub (<https://github.com/YangModels/yang>)
 - The "experimental/ieee" branch is intended for IEEE work that does not yet have a Project Authorization Request (PAR)
 - The "standard/ieee" branch is intended for approved PARs, for drafts as well as published standards
 - Within "experimental/ieee" and "standard/ieee", use a branch name with the number of the IEEE Working Group (e.g. "802.1", "1588")
- GitHub “committer” associated with IEEE “standard” branches is currently me
 - The role of the “committer” is to approve changes and content to the respective branch

GitHub Structure

