

# IEEE 802.1Qcp YANG Update Summary

IEEE 802.1Qcp YANG Data Model  
802.1WG  
08-11 Sep 2015

- Updated IEEE 802.1Q YANG module provided
  - Deposited in 802.1Q [public] folder at <http://www.ieee802.org/1/files/public/docs2015/>
  - A set of 802.1Q YANG modules have been defined
    - IEEE 802.1Q “Generic 802.1Q Bridge” YANG module (“new-mholness-8021q-bridge-yang-0815-v02.yang”)
    - IEEE 802.1Q “Generic 802.1Q Bridge Type Definitions” YANG module (“new-mholness-8021q-types-yang-0815-v01.yang”)
    - IEEE 802.1Q “Two Port MAC Relay Bridge” YANG module (“new-mholness-8021q-tpmr-yang-0815-v02.yang”)
    - IEEE 802.1Q “Customer VLAN Bridge” YANG module (“new-mholness-8021q-vlan-bridge-yang-0815-v02.yang”)
    - IEEE 802.1Q “Provider Bridge” YANG module (“new-mholness-8021q-pb-yang-0815-v02.yang”)
  - IEEE types YANG module (“new-mholness-ieee-types-yang-0815-v02.yang”)



# Overview



- YANG module structural definitions adheres to IEEE 802.1Q-2014 Clause 12 Bridge Management
- YANG modules compile clean and adhere to IETF YANG module guidelines (e.g., RFC 6087 — Guidelines for Authors and Reviewers of YANG Data Model Documents), where applicable



# Outstanding Areas

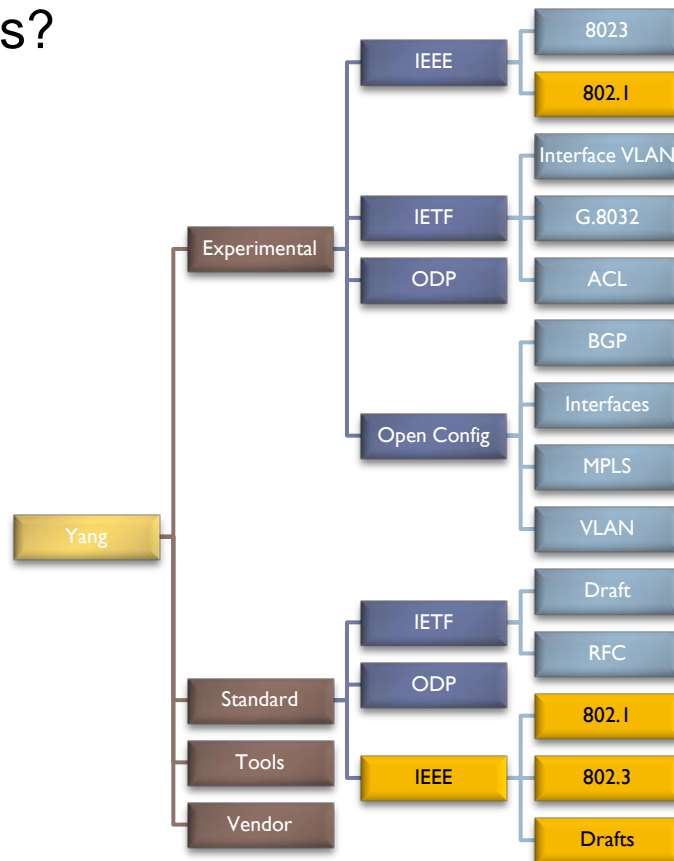
1. Namespace definition used by the IEEE 802 YANG module definitions
2. Should IEEE align with the IETF YANG module definition formatting rules?
  - For example, should maximum line length be 70 characters?
  - Full adherence to IETF draft rfc6087bis (e.g., found at <https://tools.ietf.org/html/draft-ietf-netmod-rfc6087bis-04>)
3. IEEE ownership of the IEEE-TYPES YANG module
  - In addition, both YANG modules *ietf-yang-types* as well as *ieee-types* define the mac-address type

# Outstanding Areas



## 4. Placement of the YANG modules within GitHub (<https://github.com/YangModels/yang>)

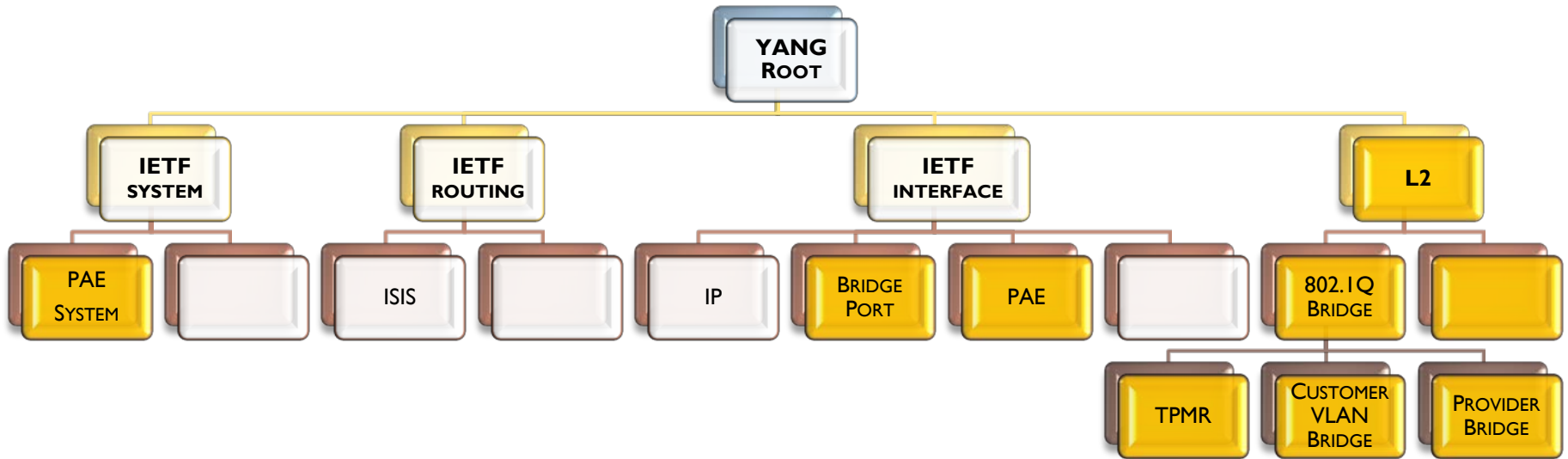
- Which directory within GitHub should we use for the IEEE 802.1 YANG drafts?



# Outstanding Areas



5. General YANG structure: Should the definition of the BRIDGE node be within a generalized YANG hierarchy?
- That is, should it “augment” a root YANG root node (e.g., system)?
  - Or should we create an IEEE-Bridge (or something similar) root node in the YANG hierarchy?



6. General YANG model “default” settings (assuming there should be a default configuration value)
  - a) Should traffic class enabled have default of *True*?
  - b) Should MMRP enabled status have default of *True*?
  - c) Should default priority associated with the BRIDGE PORT be *0*?
  - d) Should default PCP selection be *8P0D*?
  - e) Should use DEI have a default of *False*?
  - f) Should drop encoding have a default of *False*?
  - g) Should acceptable frames have a default of *admit-all-frames*?
  - h) Should enable ingress filtering have a default of *False*?
  - i) Should restricted VLAN registration have a default of *False*?
  - j) Should VID translation table have a default of *False*?
  - k) Should egress VID translation table have a default of *False*?
  - l) Etc.



# Outstanding Areas



7. Should “BRIDGE PORTS” be an augmentation of the IETF INTERFACE model?
8. Rationalization of YANG model definitions for applications
  - a) LAG interfaces
  - b) Two-Port MAC Relay Bridges
  - c) Customer VLAN Bridges
  - d) Provider Edge Bridges
  - e) CFM Interactions
  - f) Etc.
9. What is the correct association (or ownership relationship) of the BRIDGE VLAN object to the BRIDGE or BRIDGE COMPONENT?







# Outstanding Areas



10. When configuring a BRIDGE, should the BRIDGE/COMPONENT object point to the INTERFACES (i.e., BRIDGE PORTS) or should the INTERFACES (i.e., BRIDGE PORTS) point to the BRIDGE/COMPONENT or both?

