# **YANGster Meeting #25**



## **Agenda Meeting #25**

- IPR Call (Slides at end of presentation)
- Agenda Bash
- New Ballot
- Enum vs. Choice vs. Identity
- Support Request
- Meta Data Information Update
- IEEE Ethertypes
- Updates from Projects
- Any Other Business



### **New Ballot**

- P802.1Qcx/D1.4 Ballot
- The closing date of this ballot is:
  - 10th September 2019
- The PDF file of P802.1Qcx/D1.4 can be found at:
  - http://www.ieee802.org/1/files/private/cx-drafts/d1/802-1Qcx-d1-4.pdf



# **Enum/Choice/Identity**

- There was a comment to LLDP YANG that requested a change from Enum to Choice.
- Subsequent discussion converged, and the sentiment is best expressed by Rodney's comment....
  - The problem with 802.1 YANG (and also 1588 YANG) is that we are configuring a protocol that operates onthe-wire. The on-the-wire protocol uses numeric values in its packets... not strings. It is okay for the YANG to configure that with a string, but... the device needs to know the associated number. A string alone doesn't sufficient information. In order to associate a string with a number, the only viable feature in YANG is enum.



# **Enum/Choice/Identity**

- Mahesh has the following guidance
- Choice is generally used when one has to choose between two or more incompatible attributes.
- Enum is good when the types of values for that enumeration, i.e. an attribute, are fixed and are not going to change, and you are deciding which value to pick within the same attribute. An addition to the enum requires the model to be revised.
- Identities (and not identity-refs, which is something different) are good when a given attribute might change in the future and not all values are known at current time. New identities can be added without revving the whole model.



## **Items for Discussion**

- William Zhao
  - Has some discussion items based on maintenance items that were closed because they were classified as enhancements
- Invitation to submit email to YANGsters reflector for further discussion



## **VLAN YANG**

- remove the Customer VLAN Bridge module (since it is empty)
  - https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MAINT-REQ;82c4fb76.19
  - https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MAINT-REQ;9db014ae.19
  - https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MAINT-REQ;f55f20dc.19



## **Support Request**

Thorsten Heinze is looking for support with questions related to ieee802-dot1q-pb.yang



## **Meta Data Update**

- Thanks Mark!
- Value for module-classification
- Network Element
  - YANG Modules describe the configuration, state data, operations, and notifications of specific device-centric technologies or features.
- Network Service
  - YANG Modules describe the configuration, state data, operations, and notifications of abstract representations of services implemented on one or multiple network elements.



## **IEEE Ethertypes**

- In Vienna, clearance was given to work on a PAR for pre-circulation
- Create an IEEE Ethertypes YANG
- Initial draft of PAR should be ready before the Sept Interim



# FROM LAST MEETING (#24)



# **YANG Recap From Vienna**

Project	Subject	Last Motion	Current Stage	Draft Number	Next Action	PAR Ends
802.1CBcv	FRER YANG & MIB	TG Ballot	Editor's draft	D0.0	TG ballot	Dec '22
802.1X-REV	Port Access Control	WG ballot	WG ballot	D1.4	Sponsor Ballot	Dec '22
802.1ABcu	LLDP YANG	TG Ballot	TG Ballot	D0.6	WG ballot	Dec '21
802.1Qcw	TSN (Qbu, Qbv, Qci) YANG	TG Ballot	TG Ballot	D0.4	WG ballot	Dec '21
802.1Qcx	CFM YANG	WG Ballot	WG Ballot	D1.2	Sponsor Ballot	Dec '21
802.1Qcr	Asynchronous Traffic Shaping	WG ballot	WG ballot	D1.1	WG Ballot recirculation	Dec '20

P802.1Qdj

Configuration Enhancements for TSN



## **YANG**

## Current YANG

# Any changes?

ieee802-dot1ab-lldp.yang	draft/802.1/Abcu
ieee802-dot1ab-types.yang	draft/802.1/Abcu
ieee802-dot1q-ats.yang	draft/802.1/Qcr
ieee802-dot1q-stream-filters-gates.yang	draft/802.1/Qcr
ieee802-dot1q-preemption.yang	draft/802.1/Qcw
ieee802-dot1q-psfp.yang	draft/802.1/Qcw
ieee802-dot1q-sched.yang	draft/802.1/Qcw
ieee802-dot1q-cfm.yang	draft/802.1/Qcx
ieee802-dot1q-cfm-bridge.yang	draft/802.1/Qcx
ieee802-dot1q-cfm-types.yang	draft/802.1/Qcx
ieee802-dot1x.yang	draft/802.1/x
ieee802-dot1x-types.yang	draft/802.1/x
ieee802-types.yang	published/802
ieee802-dot1q-bridge.yang	published/802.1
ieee802-dot1q-pb.yang	published/802.1
ieee802-dot1q-tpmr.yang	published/802.1
ieee802-dot1q-tsn-types.yang	published/802.1
ieee802-dot1q-types.yang	published/802.1
ieee802-dot1q-vlan-bridge.yang	published/802.1
ieee802-ethernet-interface.yang	published/802.3
ieee802-ethernet-interface-half-duplex.yang	published/802.3
ieee802-ethernet-link-oam.yang	published/802.3
ieee802-ethernet-pon.yang	published/802.3
ieee802-ethernet-pse.yang	published/802.3



# **Common File Updating**

- Are there any common files currently being updated?
  - For example:
    - https://github.com/YangModels/yang/blob/master/standard/ieee/draft/802/ieee802-types.yang
- If there are:
  - The file needs to be copied from the published directory into the project that is modifying the file



# **IPR SLIDES**



## Participants have a duty to inform the IEEE

- Participants <u>shall</u> inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

## Early identification of holders of potential Essential Patent Claims is encouraged



## **Ways to inform IEEE**

- Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or
- Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
- Speak up now and respond to this Call for Potentially Essential Patents

  If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair



## Other guidelines for IEEE WG meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
  - Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
  - Don't discuss specific license rates, terms, or conditions.
    - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - Technical considerations remain the primary focus
  - Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
  - Don't discuss the status or substance of ongoing or threatened litigation.
  - Don't be silent if inappropriate topics are discussed ... do formally object.

For more details, see IEEE-SA Standards Board Operations Manual, clause 5.3.10 and Antitrust and Competition Policy: What You Need to Know at http://standards.ieee.org/develop/policies/antitrust.pdf



#### **Patent-related information**

The patent policy and the procedures used to execute that policy are documented in the:

- IEEE-SA Standards Board Bylaws (http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6)
- IEEE-SA Standards Board Operations Manual (http://standards.ieee.org/develop/policies/opman/sect6.html#6.3)

Material about the patent policy is available at <a href="http://standards.ieee.org/about/sasb/patcom/materials.html">http://standards.ieee.org/about/sasb/patcom/materials.html</a>

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org



# **YANGsters Meetings**

- ☐ YANG across IEEE 802
  - Communication, Coordination, Mentoring
  - Point of Contact/Center of Expertise for IEEE 802
- Monday 18:00 19:30 (ACV 0.94/0.95)
  - IEEE YANG Work
  - YANG Catalog Github Update
  - Git Commands
  - YANG Catalog Meta-Data Update
  - Ethertype Discussion
  - Administrative

