IEEE 802.1Qcp Update
Bridges and Bridged Networks Amendment: YANG Data Model

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Version 0.1
18 May 2016

IEEE 802.1Qcp

- Draft 0.3 uploaded to 802.1Qcp - Bridges and Bridged Networks Amendment: YANG Data Model site
- Resolution of outstanding comments, received during Jan 2016 IEEE Interim meeting comment resolution session, still required

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1. Received comment

   RFC 6020 which is YANG 1.0 is referred. The IETF is close to approve YANG 1.1 (rfc6020bis) and announced that further YANG modules in the IETF will use 1.1. Taking into account the timeline of this project and the fact that this is the first YANG project in IEEE 802.1, I suggest that development of the YANG modules starting with this project is done in YANG 1.1

   - How will introducing this dependency affect the schedule and progression of 802.1Qcp (and 802.1Xck)?
   - I'm hesitant to introduce this dependency at this time.
   - Can we not stick with YANG 1.0, and when YANG 1.1 (i.e., draft-ietf-netmod-rfc6020bis-12) becomes an RFC, we can revisit?

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2. The 802.1Qcp YANG models define a Bridge Port which is an augmentation of the IETF Interfaces model
   - Received comment that "… *With the SNMP MIB, there was a level of indirection -- 17.3.2.2 explains why. I do not understand why this is no longer needed. There is not always a one-to-one mapping between the Ethernet interface and the bridge port* …"
   - As stated in 802.1Q-2014, 17.3.2.2

     "… there are situations in which multiple Bridge Ports are associated with the same interface. That is, for a given IF-MIB, interface refers to one of the interface points in the bridging architecture (in Figure 8-1), and that zero or more multiple interface table entries can thus be instantiated for a given Bridge Port. An example of such a situation would be several Bridge Ports each corresponding one-to-one with several Ethernet private lines (or SDH virtual circuits) but all on the same interface. Alternatively, there is the Link Aggregation (IEEE Std 802.1AX) case where there are many physical Ports for one Bridge Port …"

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3. The 802.1Qcp YANG models define a Bridge Port which is an augmentation of the IETF Interfaces model
   - I believe that since multiple (and distinct) Bridge Ports can augment the same Interface in the YANG model, there is no need to model things where the Bridge Port points to an Interface
   - Are there any concerns with this position?

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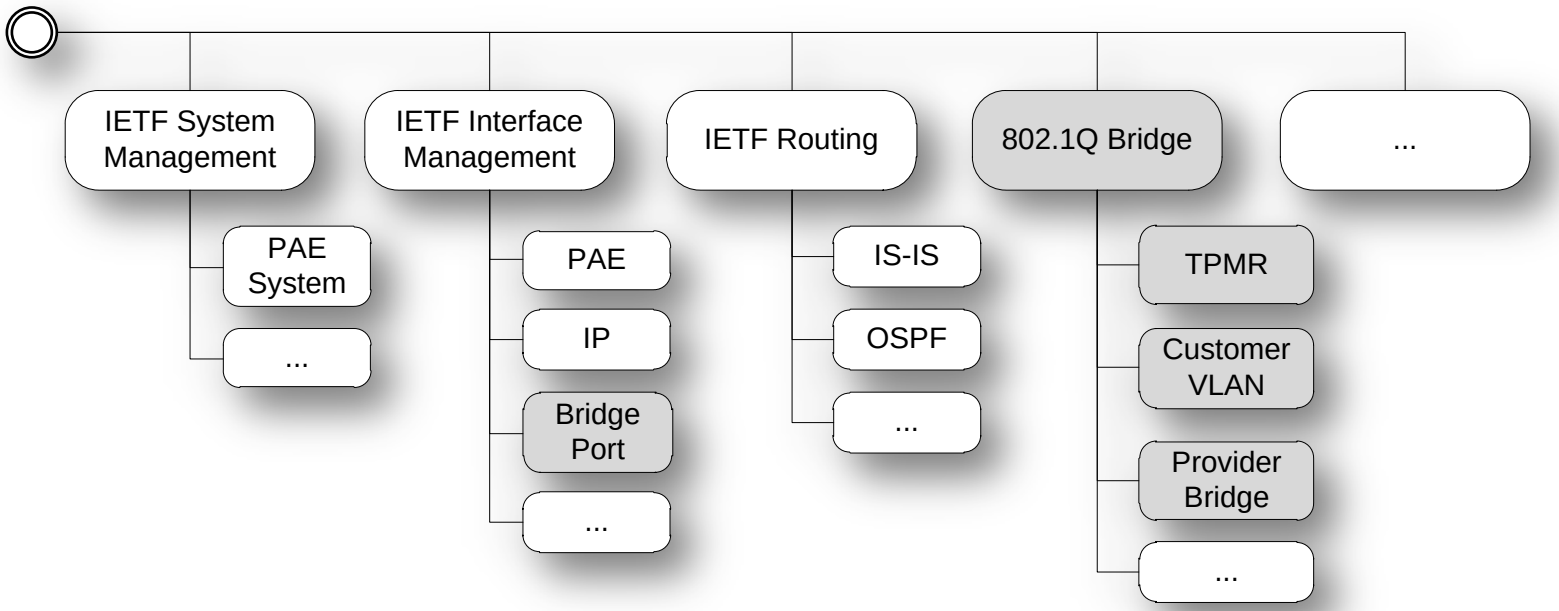
4. The 802.1Qcp YANG models hierarchy is illustrated below:



- Object “802.1Q Bridge” is a high level object where the other Bridge specific YANG models will augment
- Are there any concerns?

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5. Received comment

"… Dynamic filtering entries do not have a VID; they have a FID instead. FID would be part of the key for these entries. See 802.1Q 8.8.3 and 8.8.8 …"

- Yes, however YANG (configuration and operational) model was based off of Clause 12, which specifies that
  - {database-id, address, VID, port-map} are required when creating static filtering entries
  - {database-id, address, VID} are required when deleting static filtering entries
  - {database-id, address, VID, type} are required when reading static or dynamic entries
- Consequently, I believe the current YANG (configuration and operational) data model is correct in this regard

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6. What is the correct format of the port map structure?
   - Each outbound Port is associated with a Port map as illustrated below