# **YANGsters Weekly Telephone Conference**

## Date/Time:

2020-01-07 (week 2)

10 a.m. - 11 a.m. (Eastern Time)

## **Participants:**

- Scott Mansfield (Ericsson)
- Mark Ellison (Ind)
- Don Fedyk (LabN Consulting)
- William Zhao (Siemens)
- Rob Wilton (Cisco)
- Paul Congdon (Huawai)
- Stephan Kehrer (Hirshmann)
- Johannes Specht (DUE)

## **Topics:**

- IPR Call
  - Call for essential patents was made with no response
- Agenda
  - Structure discussion
  - Status of YANG Modules
    - Action to everyone: Check out the open ballots and comment on the YANG work that is out for ballot.
  - o AoB
- Structure Discussion
  - Reviewed: <a href="http://www.ieee802.org/1/files/public/docs2019/maint-specht-yang-comments-0919-v01.pdf">http://www.ieee802.org/1/files/public/docs2019/maint-specht-yang-comments-0919-v01.pdf</a> and <a href="https://www.802-1.org/items/357">https://www.802-1.org/items/357</a>
  - First action was to identify the Categories to use for sorting the comments
  - o Initially the categories were:
    - YANG "leafref" nodes
    - 802.1Q conformance
      - Does the YANG model really conform to the model in 802.1Q (for example clause 12)
      - YANG modules need to ensure that they are in line with the 802.1Q document and that conformance to the 802.1Q document is given.
         This is not necessarily the case if leafref is used in all cases as this is a reference by name to names not always provided in 802.1Q.
        - The conformance aspect is, that there is no name in the data model in the standard text but it is used in the YANG model.
           This needs to be aligned.
    - Bad 802.1Q Reference

- This could be simple Maintenance
- A value judgement needs to be made if it is worth making this type of change
- Also discussed, was the fact that moving forward, consider not defining to the smallest section, just refer to the major section in the YANG description/reference. This would be less error prone.
- References to the standards text often is out of date if something changed and was not correctly updated in the YANG module references. This should not be changed for existing YANG modules (unless there is an error there) but YANGsters need to give guidance on how references should be handled in the future.

#### YANG data consistency

- Point of discussion, because there are some that thing that must statements and other constraints may be too restrictive, while some think that they improve machine readability and reduce the reliance on human readable instructions.
- When are must statements used? Must is best used for config data because the protocol checks that the must statements are true when config data is entered. Must statements on operational data leafs (config=false) are not as useful, because NETCONF allows those must statements to be violated.
- One example was maintenance item #3: the numbers of ports is implicitly given by leaf-list bridge-port in line 352 of ieee802-dot1qbridge.yang. In addition there is an integer in line 342 that gives the number of ports in the bridge-port list. However, there is no binding to automatically change the number if the bridge-port list entries change.
- This kind of relations need to either be handle in a more automatic fashion (e.g. with a 'must' statement) or the integer providing the number should be deleted.
  - What makes most sense in such a case is dependent on the use (e.g. for increase in efficiency) of the redundant data member.

#### Actions Items:

- Johannes Specht will formulate a mail to the YANG doctors regarding the "YANG data consistency" discussion
- Johannes Specht will provide his list of action items to the YANGsters chair to include the information in the notes.
  - Start from this list:
     <a href="http://www.ieee802.org/1/files/public/docs2019/maint-specht-yang-comments-0919-v01.pdf">http://www.ieee802.org/1/files/public/docs2019/maint-specht-yang-comments-0919-v01.pdf</a>
  - The categories are not 100% disjoint, category "FDB modelling" overlaps at several places (see explanation below):
    - Trivial & Conformance: #1, #4, #10b), #12, #13, #14

- List size consistency: #3, #5 [more complex than the others], #6, #10a), #11a)
- Names as (functional) references: #2, #7, #8, #9
- FDB modelling\*: #10, #11c), #12, #13, #14, #15, #16, #17
- \*: I've extended the list in this category compared to the original list mentioned yesterday (I've added #10, #11c), #12, and #13). While we could fix those independent of the other FDB modelling items, I wonder whether these would still be valid after we discussed all FDB modelling items. It might be better to get the complete understanding of FDB modelling items first, decide what we want to change here, and then see which of these items are still valid afterwards.
- The FDB modelling category contains many items. I recommend to take a look at #17 first before diving into the remaining items

- 802f Update
  - o 802f on NesCom agenda 22 Jan 2020
    - https://standards.ieee.org/about/sasb/nescom/meetings.html
    - https://standards.ieee.org/content/dam/ieeestandards/standards/web/governance/nescom/agenda.pdf
- Any Other Business
  - No other business
- Next Meeting is 14 January and will be followed by the Maintenance Meeting
  - The Maintenance Meeting has no other agenda topic other than dealing with any YANG related items identified while analyzing
     http://www.ieee802.org/1/files/public/docs2019/maint-specht-yang-comments-0919-v01.pdf