YANGster Meeting IEEE 802.1 and IEEE 802.3 Interim Meeting January 2020



IEEE SA COPYRIGHT POLICY

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

- Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
- Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
- For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.



IEEE SA COPYRIGHT POLICY

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
 - IEEE SA Copyright Policy, see
 Clause 7 of the IEEE SA Standards Board Bylaws
 https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7
 Clause 6.1 of the IEEE SA Standards Board Operations Manual https://standards.ieee.org/about/policies/opman/sect6.html
- IEEE SA Copyright Permission
 - https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip
- IEEE SA Copyright FAQs
 - http://standards.ieee.org/faqs/copyrights.html/
- IEEE SA Best Practices for IEEE Standards Development
 - http://standards.ieee.org/develop/policies/best_practices_for_ieee_standards_development_051215.pdf
- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
 - https://standards.ieee.org/about/policies/opman/sect6.html



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 http://standards.ieee.org/about/sasb/patcom/materials.html

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



Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group, etc.) is on an individual basis

- Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)
- IEEE 802 Working Group membership is by individual; "Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives". (subclause 4.2.1 "Establishment", of the IEEE 802 LMSC Working Group Policies and Procedures)
- Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant's obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.
- Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 "Chair", list item x.

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: http://www.ieee802.org/devdocs.shtml)

Agenda

- 21 Jan 2020
 - Maintenance Discussion
 - Boilerplate text for draft YANG
 - IEEE YANG Structure
 - Information about Workshop on 25 Jan
 - AoB



Maintenance Item

- YANG Doctors were contacted about list size
- Four options were presented (in summary)
 - Delete the size leaf
 - Document in IEEE Doc
 - Document in YANG description
 - Use Must Statements

```
Consider the following YANG code example:

01: leaf my-list-size {

02: type uint32;

03: config false;

04: description "The number of elements in 'my-list'";

06: }

07: leaf-list my-list {

08: type my-list-element-type;

09: }
```



Yang-Doctor's reply

- A number of Yang Doctors replied. To summarize:
- Because of the way datastores work, it would be best to capture the size requirement/constraint in a YANG Description statement. That would provide the guidance to the developer that is needed.
- The Must solution doesn't work because the size of the list isn't configuration data, so there is nothing to enforce the constraint violation.
- A size operation might be something interesting to add to YANG/NETCONF.



Boilerplate text for Draft YANG

- A question was asked if there is boilerplate text that can be put in draft YANG to ensure the YANG is easily identified as draft.
- The following text is used in a couple of projects:
 - This experimental YANG module is an individual contribution, and does not represent a formally sanctioned YANG module of IEEE. Therefore, this YANG module will change in incompatible ways from its current revision to the formally published YANG module for << Insert module here>>.



YANG Structure

Discussion



Joint IEEE 802 and ITU-T Study Group 15 Workshop

- 25 January 2020, 0900-1800
- https://www.itu.int/en/ITU-T/Workshops-and-Seminars/202001/Pages/default.aspx
- There is a YANG Session (1600-1730)
 - Session Organizer: Scott Mansfield (Q14/15 Associate Rapporteur, Ericsson)
 - ITU-T Information & Data Modeling and status (Kam Lam: CICT, Q14/15 Rapporteur)
 - Introduction to IEEE 802.1Q Bridging and Connectivity Fault Management YANG Data Model (Marc Holness: Ciena, Editor IEEE 802.1Qcx)
 - Overview of G.8052.1 and its connection to the IEEE YANG (Kam Lam: ITU-T Q14/15 Rapporteur, CICT)
 - Discussion (all)



Any Other Business

