

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:
 - “Shall 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
 - “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards 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 or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

This slide set is available at
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>

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:
 - Either speak up now 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
 - Cause an LOA to be submitted

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, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain 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.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association’s Antitrust and Competition Policy” for more details.

Agenda

- | Meeting #8 (28 March 2018)
- | Frontmatter
 - | Call for Patents
 - | No response to call
 - | Slides Reviewed
- | Topics
 - | Review of Chicago YANG discussions
 - | IETF Update
 - | Review of first IEEE and ITU-T Coordination Call
 - | YANG Issues
- | Administrative
 - | YANGsters Webpage
 - | Next YANGsters CALL
 - | Next ITU-T Coordination Call
- | AoB
- | Attendees
- | Backlog

YANG Recap from Chicago Plenary

802.1Qcp

- ┆ Bridges and Bridged Networks Amendment: YANG Data Model

802.1ABcu

- ┆ LLDP YANG Data Model

- ┆ <http://www.ieee802.org/1/files/public/docs2018/cu-mansfield-draft-YANG-0318-v01.pdf>

802.1Qcw

- ┆ YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing

- ┆ <http://www.ieee802.org/1/files/public/docs2018/cw-gutierrez-status-0318-v01.pdf>

802.1Qcx

- ┆ YANG Data Model for Connectivity Fault Management

- ┆ <http://www.ieee802.org/1/files/public/docs2018/cx-mholness-YANG-Model-0318-v02.pdf>

P802.1Xck

- ┆ Port-Based Network Access Control—Amendment 2: YANG Data Model

P802.3.2 (IEEE 802.3cf)

- ┆ YANG Data Model Definitions Task Force

┆ Marc Holness provided a presentation on YANG Model Styles (comparing NMDA to OpenConfig)

- ┆ <http://www.ieee802.org/1/files/public/docs2018/mholness-YANG-Model-Style-0318-v02.pdf>

┆ <https://github.com/YangModels/yang>

NMDA Status

- | The following documents are important to ensure the IEEE YANG Models have normative documents to reference related to NMDA

- | Network Management Datastore Architecture
 - | Now RFC8342
 - | <https://datatracker.ietf.org/doc/rfc8342/>
- | NETCONF Extensions to Support the Network Management Datastore Architecture
 - | [draft-ietf-netconf-nmda-netconf](#)
 - | Working Group Draft
 - | Timeframe: Nearly finished waiting some IETF documentation to be completed
- | RESTCONF Extensions to Support the Network Management Datastore Architecture
 - | [draft-ietf-netconf-nmda-restconf/](#)
 - | Timeframe: Working Group Last Call Completed, waiting for write-up
- | YANG Library
 - | [draft-ietf-netconf-rfc7895bis](#)
 - | Working Group Draft
 - | Timeframe: RFC before July 2018 IETF Meeting (Working Group Last Call Currently)

Other IETF YANG Status

- | RFC 8349 for Router YANG includes NMDA update
- | The updated YANG Guidelines has been submitted for publication
 - | draft-ietf-netmod-rfc6087bis
- | The Updated Router YANG (NMDA) version has also been submitted for publication
 - | draft-ietf-netmod-rfc8022bis

ITU-T IEEE Modeling Coordination Calls

Not everyone has a TIES account, so an extranet is being setup (details when they become available)

TIES Accessible: https://www.itu.int/ifa/t/2017/sq15/exchange/wp3/q14/2018.03-09_eMeetings_Modelling/

MaintenanceDomain:

Confirm the use of mdIndex for key. This is to support G.8013, in which MD name is null

Since mdIndex is the key, it should be mandatory, i.e., Integer [1].

MaintenanceAssociation:

Confirm the use of maIndex for key, although there is already the attribute maNameChoice which can meet the G.8013 needs. This is to have consistent approach as MD indexing.

MaintenanceAssociationComponent

Marc clarify the purpose of this object class. In certain bridges, there are multiple components. For examples, in Provider Backbone Bridge (PPB), there are I component, B component. Most common is VLAN component. Note that BBF will not use component. Alternative approach for not using this class could either be a default component instance or allow direct association from Mep to MaintenanceAssociation.

Agreed that the maintenanceGroup attribute is useful. In G.8052, there is such an attribute even though no explicit MaintenanceGroup object class is defined.

Agreed that the G.8013/Y.1731 CCM-based LM (proactive) be modelled by using Spec class on the ContinuityCheck (i.e., augmenting/decorating the ContinuityCheck class with the LM related attributes/properties).

Agree that the G.8013/Y.1731 measurement jobs (such as DM, LM, SLM, ...) could be modelled by using the Specifying/decorating the CFM Mep class

In the next meeting, we will aim to illustrate how instances of Mep and Mip are created

Extranet has been created, details to be shared on the list.

The Extranet can be used by anyone, but an account will have to be created. If the individual has a TIES account, that can be used.

YANG Issues

- | Still working on TAddress issue
 - | Consider looking at the usage and determine if the TAddress / TDomain fields are used in practice
- | Integrating YANG into a Standard that also includes MIBs
 - | Adding (or YANG) where MIBs are discussed
 - | Creating new more generic terminology
 - | See examples from ABcu draft
- | Open Discussion notes, next page....

Open Discussion

| TAddress

- | Modify section to indicate that TAddress and TDomain are used with SNMP, and that for YANG the address used is retrieved using a YANG structure
- | Or, don't use the TLV when YANG is used

| YANG integration into a document

- | Add text that states wherever the term MIB is used, it can mean MIB or YANG (or some other data modeling tool)

Administrative

- | Website

- | <http://1.ieee802.org/yangsters/>

- | Mailing List

- | STDS-802-YANG@listserv.ieee.org

YANGsters Webpage

- | Information added about
 - | YANG Background
 - | Tools for YANG
- | Much still to do
 - | Gather Guidelines and promote discussion
 - | Reorganize Background material to provide suggestions on what order to read the material

YANGsters Meeting

- | Meeting Time
 - | Bridge: join.me/ieee802.1
 - | Next Call Wednesday, April 25, 2018 6:00 AM (US-Pacific)
 - | Calls: Mar 28, Apr 25, May 30, Jun 27 (then need to request at next plenary for continuation of calls)
- | Reminder:
 - | Regardless of daylight savings time, the time of the call is 0600 AM US-Pacific time

Next ITU-T Coordination Call

- | 16 April, 2018
- | Conference call to discuss YANG structure and interoperability between IEEE 802.1, 802.3, and ITU-T Q14/15
- | Details
 - | Dates (2018)
 - | Mondays: Apr 16, May 21, Jun 18, Jul 16, Aug 20, Sep 17;
 - | Time
 - | 1400 PM - 1500 PM CET
 - | URL
 - | <https://global.gotomeeting.com/join/570415269>

AoB

- | Schema Mount was discussed
 - | Allows part of the schema to be remounted somewhere else in the tree
 - | Useful for Virtual Routers and Logical Forwarding Instances
- | Think of it as a “file system” mount
- | Not to be over used
- | [draft-ietf-netmod-schema-mount](#)

AoB

- | Need to update frontmatter slides to the latest versions
- | Patent Slides for Standards Development Meetings
- | IEEE 802 Participation slide.

Attendees

Meeting Attendees:

- | Karthik Chandra Bose
- | Lihao Chen
- | Rodney Cummings
- | Stephan Kehrer
- | Scott Mansfield
- | Glenn Parsons
- | Ludwig Pauwels
- | Duane Remein
- | Jessy Rouyer
- | Johannes Specht
- | Rob Wilton

BACKLOG

TAddress and TDomain

- IEEE 802.1Q appears to have a tight coupling to SNMP. Using 802.1Q-rev-d2-1.pdf as a reference, there are a number of statements made that tie the standard to SNMP. The crux of the problem is that there is a CFM related TLV that requires the use of an SNMP OID to point to a structure in SNMP that contains a list of the potential address types. For example here is the Managed Object that is used in the TLV and the section specifically about how the management address is defined.

More Information here →



address-tdomain

TAddress and TDomain

- | More information from Andy Bierman
 - | <https://www.ietf.org/mail-archive/web/netmod/current/msg02457.html>
- | Can we treat (or think of) an identity ref (URI) in YANG as an OID?
 - | A YANG identity is more like an SMIv2 OBJECT-IDENTITY.
 - | The encoding is nothing like OIDs. It is more of a QName than an OID. Each identity name is unique within the module that contains the definition, so an identity is fully qualified as `<module-name>:<identity-name>`
 - | The OID used as a object identifier is actually an XPath absolute expression,
 - | using the YANG build-in type instance-identifier