YANGster Meeting Week 29 2020
16 July 2020
July 2020 Plenary Session
(Electronic)

Webex Link
Meeting number (access code): 129 239 4012
Meeting password: d8hMJysVC64
July 2020 Plenary Session (Electronic) – YANGsters Agenda

1. Meeting introduction (5)
   - Admin WG TG Intro Slides
2. Approval of agenda
   - Agenda bash
3. Introduction to YANGsters (5)
4. Issues in Focus (45)
   - Transmission Selection Algorithm YANG design discussion
   - Pretty Printing Discussion
   - IANA YANG Update
   - I2RS Review
5. Update on Hot Issues (20)
6. Continue Maintenance Discussion (45)
7. Any Other Business
Established in 2017 to:

- Coordinate YANG projects within IEEE 802
- Discuss and agree on guidelines for YANG use in IEEE 802
- Coordinate with other SDOs working on YANG
- YANG education, tooling, and support group
YANGsters wiki

- https://1.ieee802.org/yangsters/
  - Link found on left navigation menu on the https://1.ieee802.org/ site

- Weekly meeting agenda and contact details can be found here https://1.ieee802.org/yangsters/yangsters-call-information/
  - New set of weekly calls is requested at each IEEE 802.1 Plenary
YANG Resources

- IEEE 802 YANG can be found
  - Published: [https://1.ieee802.org/yang-modules/](https://1.ieee802.org/yang-modules/)

- YANG Catalog’s Github repository
    - Has draft directory structure and published directory structure

- Mailing List Info
  - [https://1.ieee802.org/yangsters/yangsters-mail-list-information/](https://1.ieee802.org/yangsters/yangsters-mail-list-information/)
Currently there is no way to set a Transmission Selection Algorithm (TSA) for a specific traffic class in a YANG module.

- There is a proposal to use a uint8
- There is a proposal to use Identities
Pretty Printing

* ieee802-dot1x-types.yang has some bad formatting

**Before**

```yang
module ieee802-dot1x-types {
  namespace urn:ietf:stds:802.1X:yang:ieee802-dot1x-types;
  prefix dot1x-types; organization "Institute of Electrical and Electronics Engineers";
  contact "WG-URL: http://www.ieee802.org/11-WG-EMail: stds-802-1-I-LISTSERV.IEEE.ORG";
  description "Port-based network access control allows a network administrator to restrict the use of IEEE 802.1 LAN service access points (ports) to secure communication between authenticated and authorized devices. IEEE Std 802.1X specifies an architecture, functional elements, and protocols that support mutual authentication between the clients of ports attached to the same LAN and secure communication between the ports. The following control allows a port to be reinitialized, terminating (and potentially restarting) authentication exchanges and 802.1X operation, based on a data model described in a set of YANG modules."
  revision 2020-02-28 [ description "Updates based upon comment resolution on draft-v10 of P802.1X-Rev.3", reference "IEEE Std 802.1X-2020, Port-Based Network Access Control." ];

  * Type definitions used by dot1x YANG module

  typedef pae-nid (type string (length "0..100"))
  description "Network Identity, which is a UTF-
```

**After**

```yang
module ieee802-dot1x-types {
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  revision 2019-05-28 [ description "Updates based upon comment resolution on draft-v10 of P802.1X-Rev.3", reference "IEEE Std 802.1X-2020, Port-Based Network Access Control." ];

  * Type definitions used by dot1x YANG module

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Pretty Printing Discussion

- Added double quotes around the value associated with bit position clauses.
- Re-wrapped text to create longer text lines. This may be okay if a maximum allowable line length is not exceeded. But it makes unnecessary changes.
- Removed blank links that had provided visual separation between typedef statements.

- Review tool to look for command switches
- Determine the guidelines for use of the options to ensure consistency

- Running the tool and rev-ing the yang in the YANG catalog is not a maintenance issue
  - However the YANG on the github will not match what is in published document
IANA YANG Update

- The YANG Catalog’s github repository has an out of date iana-if-type YANG module.
- The iana-if-type YANG module should be automatically generated whenever the Interface Types (ifType) table is updated in the IANA registry ([https://www.iana.org/assignments/smi-numbers/smi-numbers.xhtml](https://www.iana.org/assignments/smi-numbers/smi-numbers.xhtml)).
- This is a known issue with the YANG Catalog maintainers and will be fixed within the month.
Interface Type (ifType)

Interface Types (ifType)

Registration Procedure(s)
Expert Review

Expert(s)
Dave Thaler (primary), Dan Romascu (secondary)

Description
iso.org.dod.internet.mgmt.mib-2.interface.ifTable.ifEntry.ifType (1.3.6.1.2.1.2.1.3)

Reference
[ RFC1213 ][ RFC2863 ][ RFC7224 ][ RFC-thaler-ifType-reg-07 ]

Note
For future ifType assignments, an OID-subtree assignment in MIB-II's 'transmission' subtree will be made with the same value. In addition, the [IANAIfType-MIB] and [iana-if-type-YANG] modules should be updated in accordance with [RFC2863] and [RFC7224], respectively.

Note
For a functional mib language definition please see the Following:
[IANA registry ifname/ifType-mib]

Rules for real mib names:

#NAME?
"-if its made of several words,"
the second and later word's first letter is uppercase
#NAME?
#NAME?
#NAME?

Thus try an example we have:
traif   kosher
------   ------
ccd-x25 "ccdX25(4),"
FDDI      "fddi(15),"
smds-dxi "smdsDxi(43),"
IEEE802.11 "IEEE80211(71),"

"-Finally, the last item in the list has no coma,
while all previous items have a comma

Note
Note: MIB and YANG formats are available at [IANAIfType-MIB] and [iana-if-type].
YANGsters review of draft-ietf-i2rs-yang-l2-network-topology

IETF draft-ietf-i2rs-yang-l2-network-topology references some IEEE 802.1 standards.

Long story short:

A request has been made from the IETF document shepherd and other interested parties to get a review of the document and the YANG modules, before the document becomes an RFC.
One example question

What MO in the 802.1Q document (Table 48-7) would be mappable to the sys-mac-address “System MAC address” leaf in the l2-node-attributes container?

Some initial reaction for the YANGsters is:

There isn’t a 'sys-mac-address' in a compliant 802.1Q bridge. Any port of the bridge can be used to reach the 'higher layer entity' that would act as management. The bridge ports are connected to the relay, so any port MAC address, where the port is on the desired VLAN, could be used as the MAC address for a higher-layer entity like SNMP, or whatever. It is possible (optional) to define an internal (management) port for the purposes of management only, but this is a 'may' in the standard. One should read and understand Clause 8, in particular 8.2 and 8.3. Look for how frames are delivered to higher layer entities.

Request to interested YANGster is to:

Please review draft-ietf-i2rs-yang-l2-network-topology
Bring issues to YANGsters for discussion
Engage in discussion on the i2rs@ietf.org mailing list if you feel comfortable doing so
Hot Issues

Active

- MAC Address Format
  - IEEE 802.3 has agreed to modify 802.3.2 to point to ieee802-types for mac-address datatype
- Semantics of read-write in YANG
- Press Release Discussion
- IEEE P802f Update
- YANG Revisions Update
- Update on Tooling Guidance
  - Add Confd (Mark E’s material to be included)
  - Add Yanglint
- Use of Git workflow document created
- Status of meta-data in YANG Catalog
  - All IEEE published YANG has meta-data populated in YANG Catalog github repository
- Splitting functionality out of EVB to support managed objects for ECP
- Transmission Selection Algorithm
- Pretty Printing Discussion
- IANA YANG
- I2RS YANG Discussion
Maintenance Discussion

- Status related to 13 and 14
- Continue with Discussion