

Meeting minutes YANGsters #22, 25 June 2019

Attendees

Scott Mansfield Ericsson

Don Fedyk LabN

Mark Ellison Independent

Bob Grow

Stephen Kehrer (Hirschmann)

Agenda:

Call for Patents

Structure of GitHub:

Yang Catalog meta-data

Ethertypes Discussion

## Call for Patents

Showed the IPR Slides

(<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>) and made call for Patents. No response.

## Structure of GitHub

The IEEE area of the YANG Repositories GitHub has been restructures per previous discussions.

The master branch of the YangModels/yang repository now has:

experimental

→ ieee

standard

→ ieee

○ draft

▪ 802

▪ 802.1

• ABcu

• Qcr

- Qcw
  - Qcx
  - X
- 802.3
- 802.11
- 1588
- Published
  - 802
  - 802.1
  - 802.3
  - 802.11
  - 1588

The draft folders (can) have a sub directory for each in-flight project. This makes it easy for anyone to get the latest files that a project is working on.

It was suggested to create a script that will maintain a list of the current files being worked in the draft directory structure. So that it will be easy to lookup if a module is being updated. An example table:

ieee802-dot1q-stream-filters-gates.yang	draft/802.1/Qcr
ieee802-dot1q-preemption.yang	draft/802.1/Qcw
ieee802-dot1q-psfp.yang	draft/802.1/Qcw
ieee802-dot1q-sched.yang	draft/802.1/Qcw
ieee802-dot1q-cfm.yang	draft/802.1/Qcx
ieee802-dot1q-cfm-bridge.yang	draft/802.1/Qcx
ieee802-dot1q-cfm-types.yang	draft/802.1/Qcx
ieee802-dot1x.yang	draft/802.1/x
ieee802-dot1x-types.yang	draft/802.1/x
ieee802-types.yang	published/802
ieee802-dot1q-bridge.yang	published/802.1
ieee802-dot1q-pb.yang	published/802.1
ieee802-dot1q-tpmr.yang	published/802.1
ieee802-dot1q-tsn-types.yang	published/802.1
ieee802-dot1q-types.yang	published/802.1
ieee802-dot1q-vlan-bridge.yang	published/802.1
ieee802-ethernet-interface.yang	published/802.3
ieee802-ethernet-interface-half-duplex.yang	published/802.3
ieee802-ethernet-link-oam.yang	published/802.3
ieee802-ethernet-pon.yang	published/802.3
ieee802-ethernet-pse.yang	published/802.3

## YANG Catalog meta-data

The YANG Catalog has a set of meta-data that provides useful information about the modules that are loaded into the YANG Catalog's GitHub repository. For more information see →

<https://yangcatalog.org/contribute.html>

It is desirable to standardize how the IEEE fills out the meta-data fields. There are some fields that need discussion.

[reference]

Holds a textual cross-reference to an external document. The discussion concluded that [reference] should hold a reference to the standard that the YANG model is part of. Use the same format that is used for normative references. For example:

IEEE Std 802.1AX-2014, IEEE Standard for Local and metropolitan area networks—Link Aggregation.

Notice that the year was added to the standard. By adding the year, we will not need to go back and add the year when the standard is updated.

[author-email]

This is an email contact for the module. The discussion converged on [stds-802-1-L@ieee.org](mailto:stds-802-1-L@ieee.org) or similar for the working group that produced the module.

[document-name]

Use the document identifier and the title from the cover page. For example:

IEEE Std 802.1Q-2018, Bridges and Bridged Networks

[module-classification]

As of now, the meta-data includes: network-service, network-element, unknown, and not-applicable. At this time the suggestion is to use "network-element", since the YANG produced by 802.1 and 802.3 describes the configuration, state data, operations, and notifications of specific device-centric technologies or features (which is the definition of network-element from the meta-data specification).

[maturity-level]

This entry will take a bit more discussion.

Currently the options are: ratified, adopted, initial, and not-applicable. The values of ratified and initial are fairly non-controversial. The level of adopted might not give enough granularity for the IEEE process. Here is a mapping that can be used until further discussions are held:

Ratified == any YANG module in standards/ieee/published

Adopted == any YANG module in standards/ieee/draft (That has had at least one ballot resolution cycle)

Initial == any YANG module in experimental/ieee or the initial model placed in standards/ieee/draft

A YANGsters discussion that brings together 1588 and all the 802 groups to determine if what is above is sufficient, or if the IEEE should liaise to the IETF YANG Catalog people and discuss a feature change request is in order.

## Ethertypes Discussion

Some background on the IETF/IANA/IEEE work on IEEE 802 parameters can be found here → <https://tools.ietf.org/html/rfc7042#page-25>

The IETF has published <https://tools.ietf.org/html/rfc8519> which includes a YANG module that takes information from the IEEE Ethertype registry and in some cases augments that information.

Bob Grow who is the chair of the IEEE RAC (Registration Authority Committee) provided some background on the issue. When someone requests and receives an Ethertype, it is considered a legal contract. The RAC can't change entries in the RAC tables without permission of the owner of the entry. The issue is that many of the entries are very old and the owners may or may not be around any longer. However, what the RAC will accept, is if there is a project that will lead to a ballot group of experts that augments the entries (keep the original information but add new friendly names for example) then the standard that is produced could associate those new "friendly" names with the original information from the RAC.

Other considerations are that some of the Ethertypes defined in the IETF YANG module are squatting on unassigned Ethertypes. Those entries need to find an owner, so that they can become valid IEEE RAC entries.

Having said that, an 802.1 project would be an appropriate place to have the Ethertype YANG model discussion and could take RFC8519 as input leading to an IEEE owned and maintained YANG model for Ethertypes. Further discussion, including the creation of a draft PAR is suggested for the meeting in Vienna.