

# **YANGster Update Agenda**

**May 2019 802.1 Interim Meeting  
in Salt Lake City, Utah USA**

# Agenda

- | Meeting Details
  - | <https://519interim.sched.com/event/OWYH/802-yangsters>
  - | Tuesday May 21, 2019 6:00pm - 7:30pm
  - | Sundance Lobby Level
- | IETF Module on Ethertypes
- | YANG Development Lifecycle
  - | Use of IETF's Git repository
- | IEEE GitLab Information
- | Any Other Business

# IETF Ethertypes

- | IEEE Reg List for Ethertypes
  - | <http://standards-oui.ieee.org/ethertype/eth.txt>
- | The IETF has published the RFC
  - | <https://tools.ietf.org/html/rfc8519#page-51>
- | The RFC 8519 includes information that is not found in the IEEE Registry for Ethertypes
  - | Conflicting information
  - | Missing information
- | Action: What does the IEEE need to do?

# YANG Lifecycle

- | Keep in mind:
  - | There is sharing YANG with the community
    - | \*\*\*and\*\*\*
  - | There is the development lifecycle followed when building a YANG module in the IEEE as part of a project
- | We need to solve both, but getting the IEEE YANG to the community helps advertise the work of the IEEE
  
- | Current Situation
- | Short Term Plan
  - | Published
  - | Draft
- | Long Term Plan
  - | Automation

# IEEE YANG Current Situation

In the IETF's YANG Github repository

Current situation:

yang/standard

--> draft

--> 1588

--> 802

--> 802.1

--> 802.3

--> published

--> 1588

--> 802

--> 802.1

--> 802.3

There are options and different opinions on how to share work that is in draft form (a ballot is underway)

This structure works, holds the files that have been published (Published IEEE Standard document containing YANG modules)

# IEEE YANG Short Term Plan

- | Continue to leverage the IETF's Github repository as a place to put the published (IEEE Standard) modules
- | Lifecycle:
  - | When a standards project is approved and the standards document is published, all YANG modules from the published standard are moved to the published folder on the IETF's YANG Catalog (<https://github.com/YangModels/yang/tree/master/standard/ieee/published>)
  - | Currently the only populated folders are 802.1 and 802. The 802.3 modules could be loaded since the standard is published
- | Discuss with IEEE YANG editors two things:
  - | 1) How best to share information on drafts with the SDO community
  - | 2) How best to leverage tooling to aid in the development of the YANG (prior to sharing with the SDO community)
- | Discuss with IEEE GitLab people to determine if an IEEE Git repository can be used as a git submodule in the IETF's GitHub repository
  - | This would allow the IEEE to have tighter control over when modules are merged, and still allow the IEEE full access to the tools available for YANG verification, validating, and impact analysis.
  - | See <https://yangcatalog.org/> for description of the tools

# IEEE YANG Long Term Plan

- | Work toward more automated tools that leverage the power of the repository tools IEEE has while maintaining functionality that allows YANG developers to use the YANG Catalog and IETF's YANG GitHub repository.
- | --OR—
  - | Create a small team of people that handle the interactions with the IETF's YANG catalog

# IEEE GitLab Information

- | Initial discussions about the IEEE GitLab installation (thanks to Joshua Gay – I slightly edited an email conversation to provide the information below)
- | IEEE runs GitLab Omnibus on RHEL (RedHat Enterprise Linux) (along with postfix and a couple of other things to manage incoming email, etc and our host is AWS).
- | IEEE uses the open source/core edition of GitLab (the official gitlab-ce rpm) and upgrade monthly (plus any patching as needed). Currently we are running GitLab version 11.10.4.
- | We use most of the components that ship with omnibus, including mattermost. Mattermost is used for team communication (like Slack). Currently, we have domains for GitLab and Mattermost, but we have not configured pages or container registry at this time although it is on our roadmap.
- | User account creation/authentication is done with ones [ieee.org](https://www.ieee.org) credentials (via GitLab omniauth's SAML SSO support). Mattermost users use their IEEE gitlab credentials, and new groups created on GitLab automatically create new mattermost groups and assign users accordingly

# Wisdom from others

- | Discussions with other SDOs on the tools they use to develop YANG
- | MEF and BBF use the IETF's YANG git repository
  - | They use a git feature called submodules

# BBF YANG Development

- | BBF has a public YANG github
  - | <https://github.com/BroadbandForum/yang>
- | It is a submodule of the IETF YANG github
  - | <https://github.com/YangModels/yang>
- | BBF has a structure that uses the standard branch
- | BBF uses the BBF github as their external face, they use a different system for their internal development
- | They have a on-going project that maintains the YANG modules that are common among all the other projects
  - | So they do not have the problem related to multiple projects modifying the same module at the same time. That is coordinated with the project that is always running.
    - | "Common YANG Modules" (WT-383)
- | BBF uses Tags when they have a release.
- | BBF has person that interacts with the IETF YANG github, prepares the necessary meta-data and uploads/tags the files. This way the editors only have to deal with the BBF development environment.
- | There is more information/complexity in the BBF environment, so if others are interested, please let me know.

# YANG Lifecycle Suggestions

- | Use the IETF's git repository to communicate with the outside world (published and draft)
- | Consider the use of the IEEE's GitLab tool to build an area the YANG editors can use for development
- | Establish a small team to support the YANG editors so they don't have to interact directly with the IETF's YANG git repository

# (Just FYI) Running Git

- | I have created a set of notes that I use for various git related things in the IEEE.
- | <https://1.ieee802.org/yangsters/tools-for-yang/git-examples/>
  - | Provides information
    - | on how to fork/clone
    - | keep your local in sync with master
    - | add or modify a file
    - | make a request to update the master (pull request)

# Next YANGsters Meetings

- | Last Tuesday of every month from 10AM (US-Eastern) to 11AM (US-Eastern)
  - | 28 May 2019
  - | 25 June 2019
- | Web conference:  
<https://join.me/ieee802.1>