

# YANGsters

IEEE 802 Plenary

March 2023

Atlanta Georgia

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# YANGsters Agendas (March 2023 Plenary)

## YANGsters Session 1 Agenda

- Introduction to YANGsters
    - <https://1.ieee802.org/yangsters/>
    - <https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/>
  - Status
    - Qcw, Qcj, Qdj, AEdk update
    - Review yang status spreadsheet
  - 60802 Question related to port specific features supported by a server (Martin)
    - Looking for guidance on use of YANG feature, presence container, and/or mandatory statements.
    - <https://www.ieee802.org/1/files/private/60802-drafts/d2/60802-Mittelberger-YANG-Module-0323-v01.pdf>
  - Update on derived-from-or-self() usage
    - <https://www.ieee802.org/1/files/public/docs2023/yangsters-smansfield-yang-derived-example-0323-v02.pdf>
  - Information on the git lifecycle
  - Information on YANG revision importing
    - Status of IETF work on revision handling
    - Review of suggest YANG packages for IEEE 802.1 and IEEE 1588
  - Request for Next Calls
    - Discuss Doodle Poll Results and settle on eMeeting day and time
      - The poll indicated either 1000-1100 Eastern Time on Tuesday or Wednesday
      - Tuesday is what we have been using. Would it be worth swapping every other week?
        - or just stay with Tuesday?
    - Continue with calls every two weeks (Motion)
  - Any Other Business
- Session 2 - [802.1/802.3 YANGsters Session](#)

## YANGsters Session 2 Agenda

- Introduction to YANGsters (Scott Mansfield)
    - Overview of YANGsters
    - Review of YANGsters Guidelines and FAQ
    - Introduction to YANG development and testing tools used
  - Introduction and discussion of the YANG related 802.3 PARs (David Law)
    - IEEE 802.3 Clause 30 management, MIB, definitions for Ethernet, registers and function
    - <https://www.ieee802.org/1/files/public/docs2023/new-yangsters-law-IEEE-802d3-management-0323-v02.pdf>
  - IEEE 60802 priority list related to missing 802.3 YANG (Ludwig Winkel)
    - This item is related to YANG modules for IEEE 802.3 functionality, that have been identified by the IEC/IEEE 60802 joint project to be important to the industrial profile but are currently not available.
    - IEEE 60802 asked about the best way forward to make YANG modules for the identified functionality available and would like guidance from IEEE 802.3
    - <https://www.ieee802.org/1/files/public/docs2023/yangsters-mittelberger-dot3-missing-objects-0323-v01.pdf>
  - MAC Address maintenance items in IEEE 802.1 and IEEE 802.3 (Stephan Kehrer)
    - MAC address presentation update (Scott)
    - <https://www.ieee802.org/1/files/public/docs2023/yangsters-smansfield-mac-address-0323-v01.pdf>
    - Review maintenance items related to the representation of MAC addresses in YANG modules
    - Seek guidance from 802.1 and 802.3 participants
- Session 1 - [YANGsters](#)

# YANGsters Status

- YANGsters site
  - <https://1.ieee802.org/yangsters/>
- YANGsters agendas
  - <https://1.ieee802.org/category/yangsters-agenda/>
- Activities
  - Held 6 regular YANGsters calls since end of November 2023 and
  - One hour and half session during the 802.1 interim in November
- Key Achievements Include
  - Support of several YANG comment resolution issues
- Plans
  - YANG lifecycle, YANG packages, YANG guidelines development
  - Motion for bi-weekly meetings (every two weeks) to begin 4 April 2023

# YANG Status

- Goal: Validated YANG!
- As drafts are balloted, the YANG is extracted and validated to ensure there are no YANG syntax issues
- If the github is leveraged, the validation can be done before the draft is balloted.
- When in SA ballot, there are editorials like revision dates etc.
- Use the YANGsters group if help is needed to get YANG into the repository!

ShortName	Name	github status	Ballot
802.1AEdk	MAC Privacy protection	update needed	SA
802.1ASdm	Hot Standby	not created	
802.1ASdn	Timing and Synchronization for Time-Sensitive Applications — Amendment: YANG Data Model	current	
802.1ASds	Support for the IEEE Std 802.3 Clause 4 Media Access Control (MAC) operating in half-duplex	not created	
802.1CS-2020/Cor1	Link-local Registration Protocol (LRP)	update needed	
802.1DC	Systems	current	
802.1Qcj	LLDP extension tlv for auto attach	current	SA
802.1Qcw	Amendment: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing	update needed	SA
802.1Qcz	Amendment: Congestion Isolation	current	SA
802.1Qdd	Resource Allocation Protocol	not created	
802.1Qdj	Amendment: Configuration Enhancements for Time-Sensitive Networking	current	
802.1Qdv	Enhancements to Cyclic Queuing and Forwarding	not created	
802.1Qdw	Source Flow Control	not created	
802f	YANG Data Model for Ethertypes	not created	SA
IEEE1588e	Networked Measurement and Control Systems	current	SA

# Git lifecycle

- Recent presentation on an updated git lifecycle is available here:
  - <https://www.ieee802.org/1/files/public/docs2023/yangsters-smansfield-git-repo-0123-v01.pdf>
- Remember: Git is used to help the editors deal with version control, validation, and rebasing when updating published modules. The official YANG is in the published IEEE Standards.
- If anyone is interested... Help is always appreciated
  - Adding continuous integration support to automate validation
  - Creation of config instance data for scenarios to help test semantics of the models and not just the syntax of the YANG module

# YANG Revisions

- Recent presentation on YANG revision handling:
  - <https://www.ieee802.org/1/files/public/docs2022/yangsters-smansfield-versioning-guidelines-1222-v01.pdf>
- IETF 116 meeting is the week of 27 March, so look for an update on YANG Semantic Versioning and Packages on an upcoming YANGsters call.
- Example of how YANG Packages would help
  - IEEE Std 802.1Q-2022 has 12 YANG modules attached
    - If you took those out and validated them, the validation would fail, because there are imports needed that are not included in the standard
    - A Package could detail all the modules (including the dependencies) needed.
    - Todo: Create examples of various packages that would be interesting.
      - Not all YANG modules are needed from 802.1Q-2022 depending on use-case (for example)
      - A Sync package that included ASdn, 1588e
      - Suggested use-cases requested

# Doodle Poll for eMeeting Schedule

- Two Potential Dates
- Tuesday 1000-1100am Eastern Time (current)
- Wednesday 1000-1100am Eastern Time
  
- Not all people can attend all, but...
- If we switched every other meeting, we could cover more people.
  
- Thoughts?