

# Experimental YANG for Time Sync (IEEE 1588-rev and 802.1AS-rev)

Rodney Cummings  
National Instruments

# YANG for IEEE 1588 & 802.1AS

- Proposed roadmap:
  - <http://www.ieee802.org/1/files/public/docs2017/as-cummings-yang-roadmap-proposal-0317-v0.pdf>
- Summary (in order):
  1. IETF YANG for 1588-2008
    - Meets near-term need for 1588 products
  2. 1588-rev approved
  3. 802.1AS-rev approved
  4. Amendment PAR to do YANG for 1588-rev
    - Based on 1588-2008 but IEEE namespace (like Bridge MIB)
  5. Amendment PAR to do YANG for 802.1AS-rev
    - Augment of 1588-rev YANG, not standalone

# Where are we today?

- YANG for 1588-2008 in IESG Last Call
  - <https://datatracker.ietf.org/doc/draft-ietf-tictoc-1588v2-yang>
- 1588-rev Initial Sponsor Ballot planned for Sep 17 2018
- 802.1AS-rev in Working Group Recirculation Ballot
  
- Data sets (managed objects) are relatively stable

# Experimental YANG

- Recent YANGsters decisions for GitHub `yang/experimental/ieee`
  - Not formally sanctioned by any IEEE working group
    - IEEE licensing does not apply
  - Only "rule": Avoid IEEE's module naming and namespace
    - If someone ships in commercial product, must avoid conflicts
- Why use `yang/experimental` (instead of `yang/vendor`)?
  - Intended as potential input to a future PAR
    - Prototype YANG to check managed objects in ballot
    - Get early feedback on YANG design as head-start on future PAR
  - Not intended to ship in commercial product

# Experimental YANG for Time Sync

- 1588-rev
  - <https://github.com/YangModels/yang/blob/master/experimental/ieee/1588/ni-ieee1588-ntp.yang>
  - I did not find major issues with managed objects
    - Minor issues to be submitted in sponsor ballot comments
- 802.1AS-rev
  - <https://github.com/YangModels/yang/blob/master/experimental/ieee/802.1/ni-ieee802-dot1as.yang>
  - Designed as an augment
    - Seems to work well; early feedback appreciated
  - I found handful of major issues with managed objects
- For YANG Tree Diagram overview ([RFC 8340](#))
  - ZIP the two files above and submit to [www.yangvalidator.com/validator](http://www.yangvalidator.com/validator)

# Thank You