

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
 - Handled same as contribution for a meeting
 - 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 IEEE project
 - Prototype YANG to check managed objects in ballot
 - Get early feedback on YANG design
 - 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

Thank You