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

Rodney Cummings
National Instruments
YANG for IEEE 1588 & 802.1AS

- Proposed roadmap:

- 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
  • I did not find major issues with managed objects
    • Minor issues to be submitted in sponsor ballot comments

• 802.1AS-rev
  • 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](https://tools.ietf.org/html/rfc8340))
  • ZIP the two files above and submit to [www.yangvalidator.com/validator](http://www.yangvalidator.com/validator)
Thank You