Timing Fidelity Reporting

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Agenda

- IEEE 1588 proposal
- Mapping to 802.1AS
- Managed objects

1588 work

- "Enhanced PTP Integrated Synchronization Path Quality Metrics"
  - Opher Ronen (ADVA Optical Networking) proposal in August 2015
  - https://ieee-sa.centraldesktop.com/1588/file/41972309/
- new TLV in management message
  - and maybe appended to announce messages similar to the way the path trace mechanism works

TLV Type (2)
TLV Length (2)
OUI (3)
OrgSubType (3)
GrandMasterID (2)
GrandMasterTimeInaccuracy (4)
MaxStaticInaccuracy (4)
StdStaticInaccuracy (4)
MaxDynamicInaccuracy (4)
StdDynamicInaccuracy (4)

Mapping to 802.1AS

- ## Adopt 1588 management?

  - overlaps/conflicts with "normal" 802/IETF management

  - better, perhaps, to just define as regular managed objects and let SNMP/NETCONF/1722.1/etc. protocols do this

- ## Path trace?

  - append to Announce just like 1588?

  - note that all systems store received path trace info, so managed objects include both local timing inaccuracy and cumulative inaccuracy

Managed objects

- I propose adopting 1588 terms and define local and cumulative timing inaccuracy reporting
- 1588 is NOT done yet, so we may need to make room for a future change to map their way of doing things into the structures
  - I'm sure they are willing to work together, but schedules may not match

That's it