Precision Time Protocol Version 2 (PTPv2) Management Information Base

draft-ietf-tictoc-ptp-mib-01.txt IETF 83, Paris, March 2012

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Overview of Draft

- Presents a MIB for a PTP Clock
 - Concentrates on standard PTP data elements
 - Associated information such as performance data metrics are to be covered in a separate MIB
- PTP protocol-specific standard data sets:
 - Default, Current, Parent, Time Properties, Port,
 TC Default and TC Port Data Sets
- Covers all types of PTP clocks
 ordinary, boundary and transparent clocks
- Aims to create a standard method for managing PTP clocks

History

- 00 (Jul 11) First full, syntactically correct and compile-able MIB
- 01 (Jan 12) Revised following comments from Bert Wijnen (6 Oct 2011) + editorial changes

Overall changes

- Revised introduction to clarify the scope, and the relationship to other MIBs and profiles
- Changed name to "ptpbase"
- Correction of some data types
- Correction in reference section
- Correction of typos

Editorial changes

- Changes in the introduction includes that the MIB is readonly.
- Change to "ptpbase" should allow complementary MIBs.
- Removal of unused acronyms from the MIB description.
- All the references changed to [IEEE 1588-2008]
 - some were using [1]
- Check of all remaining references.
- Check and restructuration of line lengths to meet ID requirements.
- Run through the IETF IDnits tool to check other compliance issues.

Structure extensions

- Some structures in the MIB have been extended.
 - The MIB is able to cover the structures defined in the IEEE standards and is extensible as well.
- Examples:
 - ClockIdentity :
 - IEEE 1588-2008: Octet[8] → octet string (1..255)
 - Priority and domain number values:
 - IEEE 1588-2008: UInteger8 → Unsigned32

Current Status

• Last call issued in October

No comments received on list

• Requires a thorough "MIB Doctor" review

Next steps

- Add an Annex with list of extended structures.
- New related MIBs
 - MIB for ITU profile (extension)
 - G.8265.1
 - On-going G.8275.1 (ITU-T telecom profile for time) will use Ethernet mapping (IP mapping controversial) Note: Other profiles (IEEE) use Ethernet mapping and have own MIBs
 - "ptpbase" MIB does not support Ethernet mapping
 - → Add Ethernet mapping? Allowed by IETF?
 - MIB for performance metrics (extension)
 - Controversial item: what over the 13 metrics? All?
 - Reference: ITU-T G.8260 Appendix I