

# Precision Time Protocol Version 2 (PTPv2) Management Information Base

*draft-ietf-tictoc-ntp-mib-03.txt*  
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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
- 02 (Jul 12) Add flexibility to transport type
- 03 (Jul 12) Changes from Andy Bierman comments
- 03-v2 (July 30) Fixed minor compile errors

# Overall changes in -02

- Replace ptpbaseClockPortRunningVersion by ptpbaseClockPortTransportType
- Change addresses associated with transports from "InetAddress" (for the IP transport) to a string, to allow for the different transport types
- Few minor changes

# Editorial changes in -02

ClockPortTransportType ::= TEXTUAL-CONVENTION

STATUS current

DESCRIPTION

DESCRIPTION

"The Clock port transport type. The transport protocol used for the communication between the clock nodes. This includes IP version 4, IP version 6, Ethernet, DeviceNet, ControlNet and IEC61158."

REFERENCE "Annex D (IPv4), Annex E (IPv6), Annex F (Ethernet), Annex G (DeviceNet), Annex H (ControlNet) and Annex I (IEC61158) of [IEEE 1588-2008]"

SYNTAX INTEGER {  
    ipversion4(1),  
    ipversion6(2),  
    ethernet(3),  
    DeviceNet(4),  
    ControlNet(5),  
    IEC61158(6)  
}

- ptpbaseClockPortAssociateAddressType ClockPortTransportType,
- ptpbaseClockPortCurrentPeerAddressType ClockPortTransportType,

# Editorial changes in -02 (follow-up)

ClockPortTransportTypeAddress ::= TEXTUAL-CONVENTION

STATUS        current

DESCRIPTION

"The Clock port transport protocol address used for the communication between the clock nodes. This is a string corresponding to the address type as specified by the ClockPortTransportType.

This can be an address of types IP version 4, IP version 6, Ethernet, DeviceNet, ControlNet and IEC61158."

REFERENCE   "Annex D (IPv4), Annex E (IPv6), Annex F (Ethernet),  
              Annex G (DeviceNet), Annex H (ControlNet) and  
              Annex I (IEC61158) of [IEEE 1588-2008]"

SYNTAX        OCTET STRING (SIZE (1..255))

- ptpbaseClockPortAssociateAddress                      ClockPortTransportTypeAddress,
- ptpbaseClockPortCurrentPeerAddress                    ClockPortTransportTypeAddress,

# Overall changes in -03

- Correct minor compiling errors and typos from -01
- Correct breaking compiling error from -02
- Move the OBJECT-GROUPS and MODULE-COMPLIANCES to the end
- Edit description clauses of MIBCompliances 1,2,3 & 4 and rename ptpbaseMIBCompliances1 to 4:
  1. ptpbaseMIBCompliancesSystemInfo
  2. ptpbaseMIBCompliancesClockInfo
  3. ptpbaseMIBCompliancesClockPortInfo
  4. ptpbaseMIBCompliancesTransparentClockInfo
- Add an Annex with list of extended structures which has been added in -01
- Minor edit corrections from -02

# Overall changes in -03-v2

- Correct minor compiling errors from -03

# Current Status

- Last call issued in October (on -00)
- One review since -01 (Andy Bierman)
- New revision to include 'autonomous type'
- Requires more "MIB Doctor" review

# Next steps

- For further flexibility on transport type object, use AutonomousType textual convention and define the transport types using OBJECT-IDENTITY statements.
  - Ex: PTPoMPLS
- Include write/create objects: Write object would allow other groups to not have to define their MIB if willing (as C37.238) to use MIB management vs. PTP management.
- Could benefit SMPTE [Society of Motion Picture and Television Engineers].
- New related MIBs
  - MIB for ITU profile (extension) ➔ ITU-T SG13?
    - G.8265.1
    - G.8275.1 (working item; telecom profile for time)
    - Metrics? (reference: ITU-T G.8260 Appendix I)