Associate PW label with PTP application

draft-fuxh-tictoc-associate-pw-with-tp-00.txt

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Background

• When PTP PDU is mapped inside a PW/LSP via Ethernet encapsulation.
  – If PHP is applied to PTP LSP,
  – If the PW is established between two endpoints directly and no PTP LSP is needed (Dry-Martini),

• PW label must be associated with PTP application at the PW termination point.

• This document extends PW signaling protocol to meet this requirement.

• Configuration by NMS is out scope of this document.
PTP-Aware Capability Advertisement

• It is useful for PW switching point to announce its capabilities, such as the capability to be PTP-aware. So both PW switching points could know each other of the PTP-aware capability.
  – If both of them could support PTP-aware, PW label could be associated with PTP traffic during the label mapping.

• This document introduces a new Capability Parameter TLV [RFC5561], PTP-Aware Capability.
PTP Application Association

• This document defines a new TLV, PTP Association TLV which can be used to indicate a PW is associated with PTP traffic. It is carried in the Label Mapping message [RFC3036]
• The OFFSET to the start of the PTP message header MAY also be signaled like RSVP-TE extension for TC application.
• The T-PE or S-PE must include this object in the LDP Mapping Message when it want to request a PTP label or advertise a PTP label to a peer.
Next Step

- Supplement BGP extension in next version
- Collect feedbacks from the meeting and list