Title: Liaison response to ITU-T SG15 LS-206
From: IEEE 802.1
For: Action
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Thank you for your liaison COM 15 – LS 206. We appreciate your interest in IEEE P802.1AX-REV, which has been finished and published as IEEE Std 802.1AX-2014. Providing bidirectional congruity is among the goals of per-service frame distribution provided by 802.1AX-2014, which can be applied for protocols that have strict symmetry requirements on their transmit and receive paths e.g. PTP. There are at least three models for the interaction between PTP and LAG.

Your understanding is correct, the use of VLAN tagged frames in conversation-sensitive LAG allows providing bidirectional congruity; therefore, it can be beneficial for PTP over LAG. Per-service frame distribution in LAG is provided based on Conversation IDs. A Conversation ID is encoded in 12 bits, thus, a VID can be used as a Conversation ID. Per-service frame distribution then distributes frames to physical links according to their VID. Bidirectional congruity can be provided by assigning a particular Conversation ID (i.e. VID) to the same physical link in the Systems participating LAG.

Secondly, all untagged frames are assigned Conversation ID zero (see IEEE Std 802.1AX-2014 subclause 8.2.2); therefore, the mapping of Conversation zero to the same physical link by the Systems participating in LAG would provide bidirectional congruity without requiring PTP to be tagged.

Finally, IEEE Std 802.1AX-2014 does not prevent an application from accessing a physical link directly, bypassing LAG, which your profile may find convenient. IEEE Std 802.1AX-2014 subclause 6.1.3 shows an example.

We look forward to address any further questions you may have on IEEE Std. 802.1AX-2014.