Text to Address Editor's Note in 802.1ASds/D0.1, p.28, line 36

This presentation is referred to in a comment on 802.1ASds/D0.1 TG ballot

Geoffrey M. Garner Analog Devices (Consultant)

gmgarner@alum.mit.edu

IEEE 802.1 TSN TG 2024.01.22

Proposed text for 19.2.2, in response to editor's note (referred to in comment on 802.1ASds/D0.1 TG ballot)

19.2.2 Determination of asCapable and asCapableAcrossDomains

There is one instance of the global variable asCapable (see 10.2.5.1) per PTP Port, per domain. There is one instance of the global variable asCapableAcrossDomains (see 11.2.13.12), per port, that is common across, and accessible by, all the domains.

The per-PTP Port global variable asCapable (see 10.2.5.1) indicates whether the IEEE 802.1AS protocol is operating, in this domain, on the PTP Link attached to this PTP Port, and can provide the timesynchronization performance described in B.3. asCapable is used by the PortSync entity, which is mediaindependent; however, the determination of asCapable is media-dependent.

The per-port global variable asCapableAcrossDomains is set to TRUE by the MDPdelayReq state machine (see 11.2.19 and Figure 11-9, and 19.2.13.12) for a PTP port attached to an HDE gPTP communication path.

[Commenter's note: Text for 19.2.13.12 is proposed in another comment from this commenter.]

The default value of meanLinkDelayThresh shall be set as specified in Table 11-1.

The per-PTP Port, per-domain global variable asCapable shall be set to TRUE if and only if the following conditions hold:

a) The port is exchanging peer delay messages with its neighbor,

b) The measured delay does not exceed meanLinkDelayThresh,

c) The port does not receive multiple Pdelay_Resp or Pdelay_Resp_Follow_Up messages in response to a single Pdelay_Req message, and

d) The port does not receive a response from itself or another PTP Port of the same PTP Instance.

[Commenter's note: Analogous conditions to a)-d) above in 11.2.2 are stated for asCapableAcrossDomains. Since asCapableAcrossDomains is always TRUE for HDE gPTP communication paths (because it is, essentially, not used), these conditions must apply to asCapable here.]