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Ms. Gorman,

I wish to request an interpretation of IEEE Std. 802.1ad-2005. The relevant parts of the document are:

Subclause 8.6.3 “Frame filtering”, particularly Table 8-2.

The question I raise is the interaction between the cited table in 802.1ad and the following subclause of IEEE Std. 802.1AB-2005:

Subclause 1.2 “Purpose”.
Annex G.2 “MAC/PHY Configuration/Status TLV”

The expectation of 802.1AB, as expressed in point b) of subclause 1.2 and in the existence of the MAC/PHY Configuration/Status TLV, is that two systems A and B, each connected to a physical LAN, e.g. one complying with IEEE Std. 802.3-2002 Clause 25, and that are able to trade LLDPDUs (802.1AB Clause 4), can make use of the information carried in that TLV.

However, if the LANs to which A and B are connected are each connected to a Provider Bridge, so that A and B are separated by a Provider Bridged Network (802.1ad subclause 3.61), 802.1ad Table 8-2 indicates that A and B will still be able to trade LLDPDUs that use the standard destination MAC address 01-80-C2-00-00-0E. This defeats the purpose of the MAC/PHY Configuration/Status TLV, since these TLVs in the two systems’ LLDPDUs carry information about two separate LANs, instead of a single LAN.

The problem is therefore that the expectations of the users of 802.1AB are violated by 802.1ad networks. This could be corrected by altering 802.1ad Table 8-2 to include address 01-80-C2-00-00-0E. If this creates a problem, in that both addresses 01-80-C2-00-00-03 and ... -0E have the same reachability, then -03 could be removed from Table 8-2.

Since neither 802.1AB nor IEEE Std. 802.1X-2004 have been modified, yet, to handle additional destination MAC addresses as suggested in the note in subclause 1.2 of

802.1ad, no significant interoperability issues should result from this suggested change to Table 8-2 of 802.1ad. Deployed 802.1ad-compliant equipment would have to change their operation, but this change should be easier for the user community to bear than the impact on the use of 802.1AB that would result from the current Table 8-2 of 802.1ad.

I believe that the chairs of both 802.1 and 802.3 will be interested in this request, since 802.3 generated the text for 802.1AB Annex G.

Thank you for your attention,
Norman Finn