Proposal for Parallel Path Trunking in 802

SCOPE:

Specify a DTE to DTE logical link which consists of n instances of an 802.3 full duplex link. The logical link will provide the existing full duplex 802.3 service to the MAC Client.

Define the necessary management objects and protocols to control appropriate addition and deletion of physical links to and from the logical link.

PURPOSE:

To increase the bandwidth available between DTEs by specifying the necessary mechanisms for parallel path trunking.

Proposed Exclusions from the near term problem

Different MACs: 802.3 only for the 1st project

Different speeds: Complicates delivery sequencing

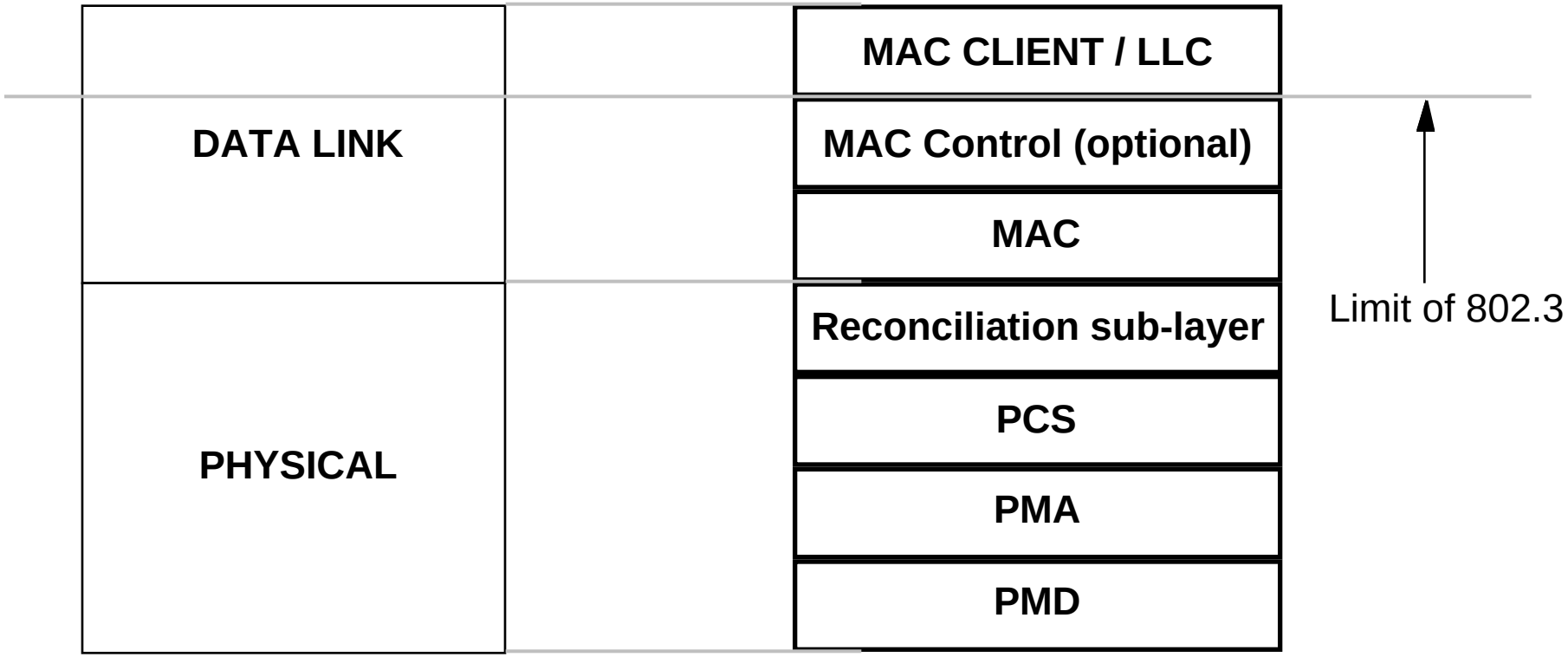
Duplex: Full Duplex only. If you need trunking you should have already upgraded from 1/2 Duplex to Full-Duplex.

Point-to-Point only: Result of above, no coax.

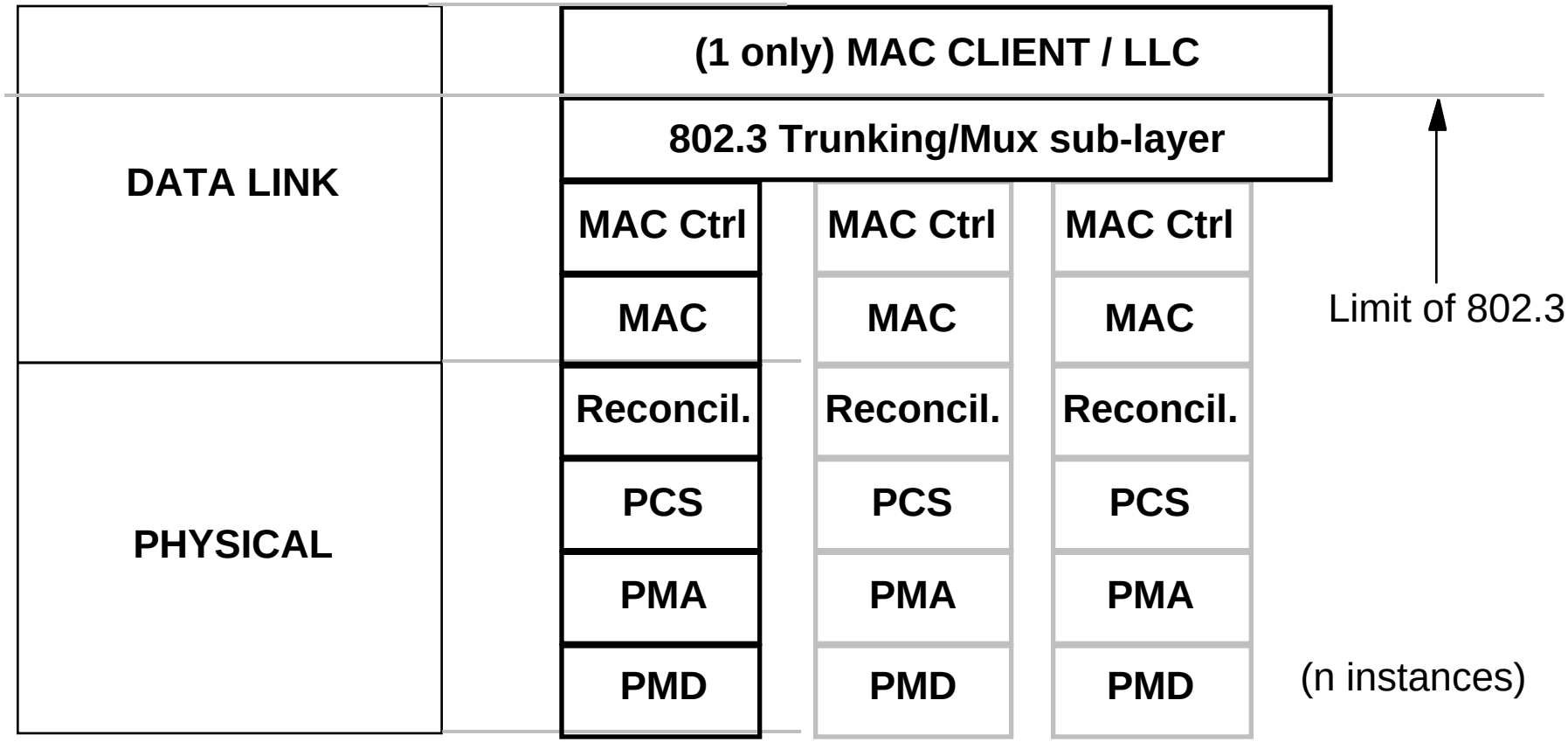
Repeaters: Repeaters are shared bandwidth devices, Trunking's purpose is to get more than a channel bandwidth. They are at cross purposes so there is no need to complicated life by dealing with them. (Unaddressed issue: Hooking in an analyzer)

Distribution algorithm: Not an interoperability issue, collection is the problem.

Existing Layer Model, 802.3 (thru 802.3z)



Proposed Layer Model, 802.3ad



Proposal for Link Aggregation in 802.3 (as agreed to by the group)

SCOPE:

Specify a DTE to DTE logical link which consists of n parallel instances of an 802.3 point-to-point link segment. The logical link will support existing 802.3 MAC Clients.

Define the necessary management objects and protocols to support link aggregation, including identification, addition and deletion of link segments to and from the logical link.

PURPOSE:

To increase link availability and bandwidth between DTEs by specifying the necessary mechanisms for parallel link segment aggregation.