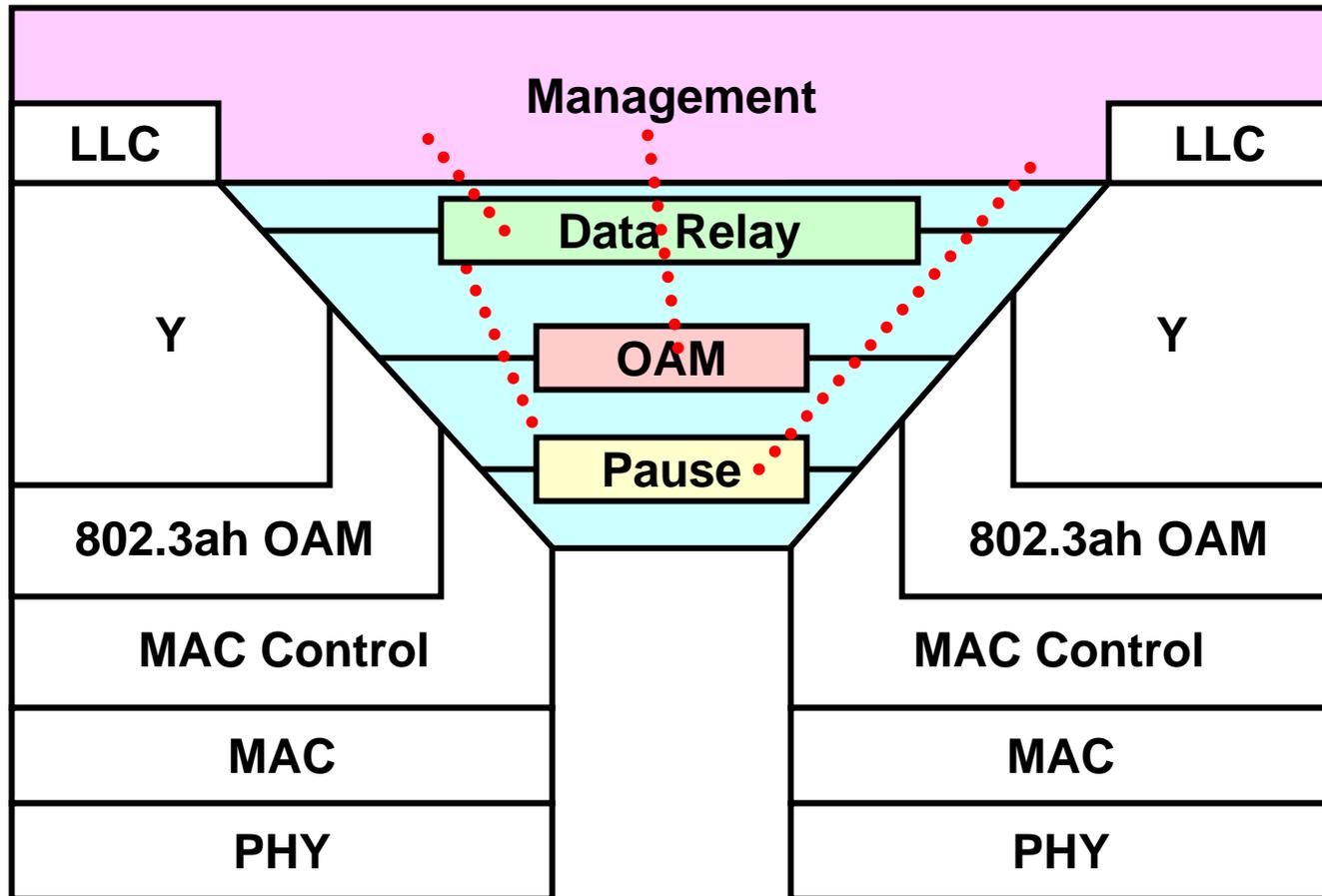


Two-Port MAC Relay Diagrams

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Two-Port MAC Relay



New functions in colored areas only.

802.3X OAM Interface

- **IEEE Std. 802.3-2002 Clause 31 splits MA_DATA.request and MA_DATA.indication from the optional MA_CONTROL.request and MA_CONTROL.indication.**
- **The latter two constitute the interface to the “Pause” module in the relay trapezoid.**

802.3ah OAM interface

- **IEEE Std. 802.3ah-2004 Clause 57 has two interfaces to the upper layers, the “MAC Client” and the “OAM Client”.**
- **The “OAM Client” is the interface to the “OAM” module in the relay trapezoid.**

Data Relay and Management interface

- The usual “baggy pants” frame replication function, labeled “Y” in the diagram, works for this unit, as well.
- The “Data Relay” function can refuse to relay frames addressed to one or the other of the two MACs.

This enables management functions on the “Uplink” MAC to avoid communicating through the “Downlink” interface.

It also neatly solves the problem of handling broadcast frames.

Interactions between relay functions

- **The buffers are in the relay trapezoid.**
- **Control paths therefore exist (the red lines in the diagram) among the various modules.**

- **Is the TPMR compatible with, or relevant to, media other than 802.3?**
- **A liaison letter to other dot groups, a technical plenary, or a tutorial, is needed to settle this issue.**