EFM P2MP Recap and Issues

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P2MP Fiber Protocol Recap

- Convergence to Multi-Point Control Protocol (MPCP)
- MPCP uses MAC Control frame messages (like PAUSE) to control upstream data flow in P2MP fiber network
- GATE: downstream OLT to ONT message
- REPORT: upstream ONT to OLT message
- Messages contain absolute timestamp
- Other messages (REGISTER) will be defined for autodiscovery (initializing ONT)
- March baseline proposal for MPCP is feasible

P2MP Fiber Protocol Issues

MPCP Frame structure

Message format, in discussion Is 64 bytes long enough? Incorporate optional vendor specific TLV fields? What goes in a REPORT (ONT) message?

- MPCP Auto discovery details
- Other Issues

How many pending grants should an ONT support? Multi-cycle grant support? What entity is the GATE message addressed to? Unsolicited or On demand REPORTs Verify MPCP meets P2MP network requirements

P2MP Fiber Compliance

Recap

P2P and Shared Emulation using Logical PHY ID message in preamble is designed to meet 802.1 compliance (ONU to ONU forwarding).

Issues

Support for both P2P and Shared Emulation? Support for only one Shared media link? Layer for this mux/demux function? Ability to decouple MPCP from Compliance Layer?

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Thank you