Two Port MAC Relay Scope

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Agenda

- Application Recap
- Proposed (Minimal) Functionality
- TPMR Model
TPMR Application Example

- Operator Network Edge
- Customer Location
- Extension Link
- UNI
- CLE
- User Link
- CPE
- Metro Node
- MAN
- 802.1ad Bridge
- Two Port MAC Relay
- IEEE P802.1aj Task Group
TPMR Functions: Forwarding

- Port-based relay
- Not VLAN-aware
- Simple port-based forwarding decisions
- No learning
- Transparent to STP and GARP protocol families
TPMR Functions: Links

- 802.3 media only
- Sub-rate support on User Link
- 802.3x Pause support to:
  - send Pause request to CPE device, or CO device
  - respond to Pause request from CO device
- Buffer management
TPMR Functions: Management

- Powers up in active operational default state
- 802.3ah OAM on Extension Link
- User Link port configured & monitored via single OAM Client and Extension Link 802.3ah OAM
- Simple Bridge Management subset via OAM Client
- Optionally, 802.3ah OAM on User Link
TPMR Functions: Management (cont’d)

- Management translation back at Metro Node
- No SNMP (or TL1)
- No IP address
Managed entirely via 802.3ah OAM over Extension Link
Next Steps

- Capture this minimal functionality bookend in draft
- Discuss fully-featured bookend functionality
Reference
802.3ah Clause 57 OAM Sublayer

Two Port MAC Relay
IEEE P802.1aj Task Group
OUI-Extensible 802.3ah OAM

- OAMPDU code ‘FE’
- Information OAMPDU TLV type ‘FE’
- Event Notification OAMPDU TLV type ‘FE’