IEEE 1904.2 Universal Management Tunnel

Topology Elements

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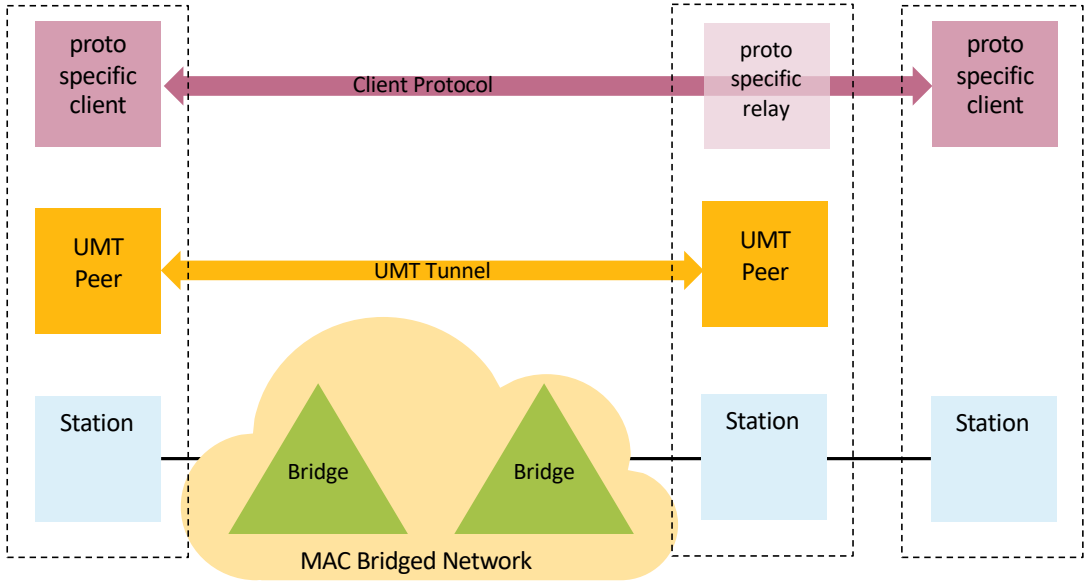
UMT Network Topology Elements

- UMT Peer: An entity implementing an instance of the UMT sublayer and UMT client
- Protocol-Specific Client: The entity implementing a protocol being encapsulated in a UMTPDU
- MAC Bridged Network: A term describing a network that forwards frames based on MAC-layer addressing. A MAC bridged network as defined in IEEE 802.1Q-2018.
- Protocol-Specific Relay: A special case of a Protocol-Specific Client that relays the client protocol from a UMT Peer to a UMT-Unaware station.
- Station: As defined in IEEE 802 (end station), is a source and/or destination of link layer traffic
- Client Protocol: The protocol being encapsulated in a UMTPDU
- Bridge: As defined in IEEE 802.1Q-2018, a MAC bridge or VLAN bridge



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Additional Vocabulary

- Universal Management Tunnel (UMT) –
  - The protocol defined by IEEE 1904.2;
  - also refers to an instance of the protocol operating between two implementations of the IEEE 1904.2 protocol
- UMT Protocol Data Unit (UMTPDU) – The unit of UMT data sent across the network
- Service Data Unit (SDU) – The unit of data carried as payload in service-providing protocol (inferior layer in a stack) for a client protocol (superior layer in a stack)
- Protocol Data Unit (PDU) – The unit of data for a service-providing protocol
- UMT-Unaware: An entity (station) that does not implement an instance of the UMT sublayer/client, but has a protocol entity that uses a UMT tunnel
- UMT-Blind: An entity (typically a bridge) that forwards a UMTPDU with no awareness of it being a UMTPDU

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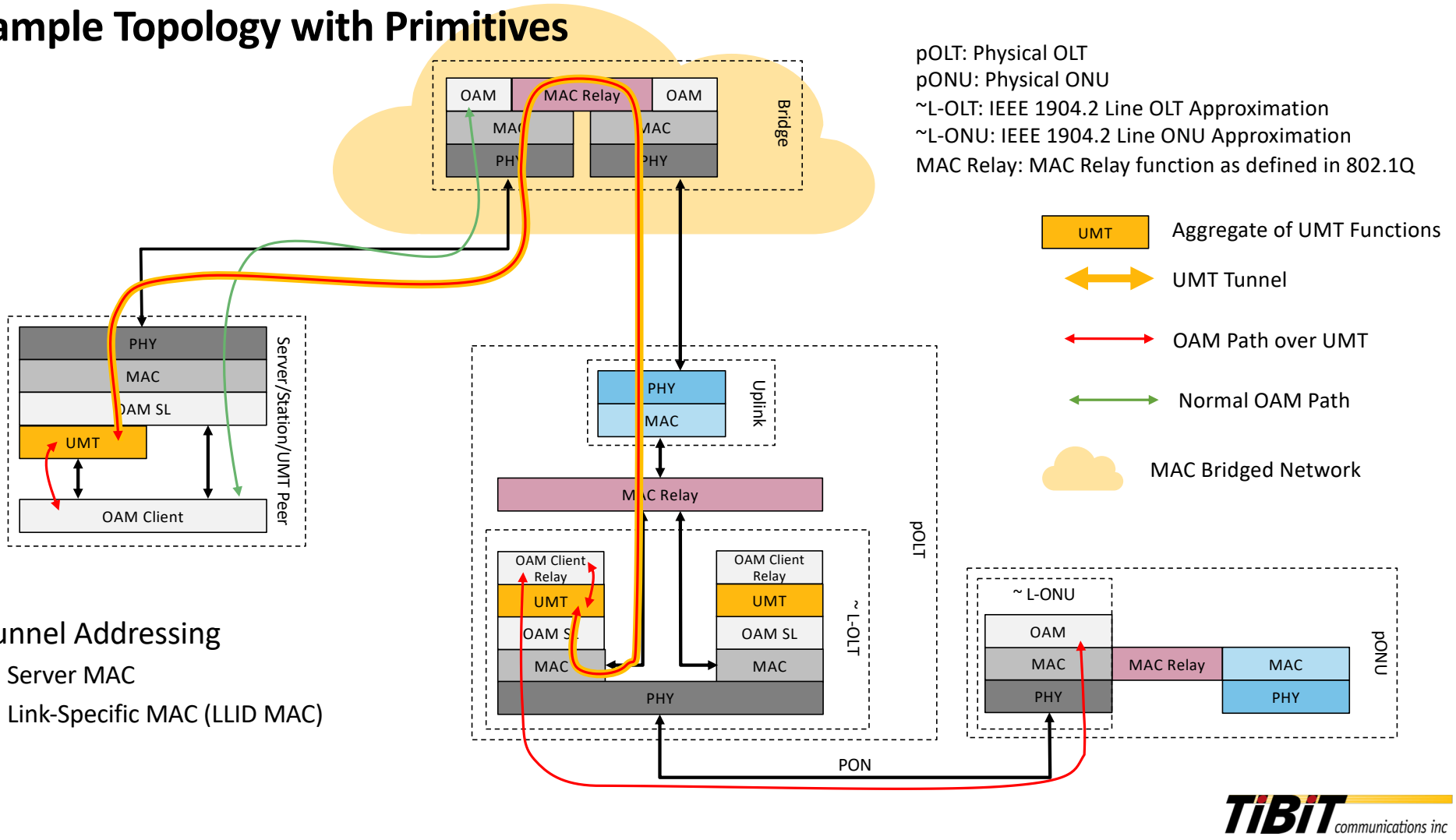
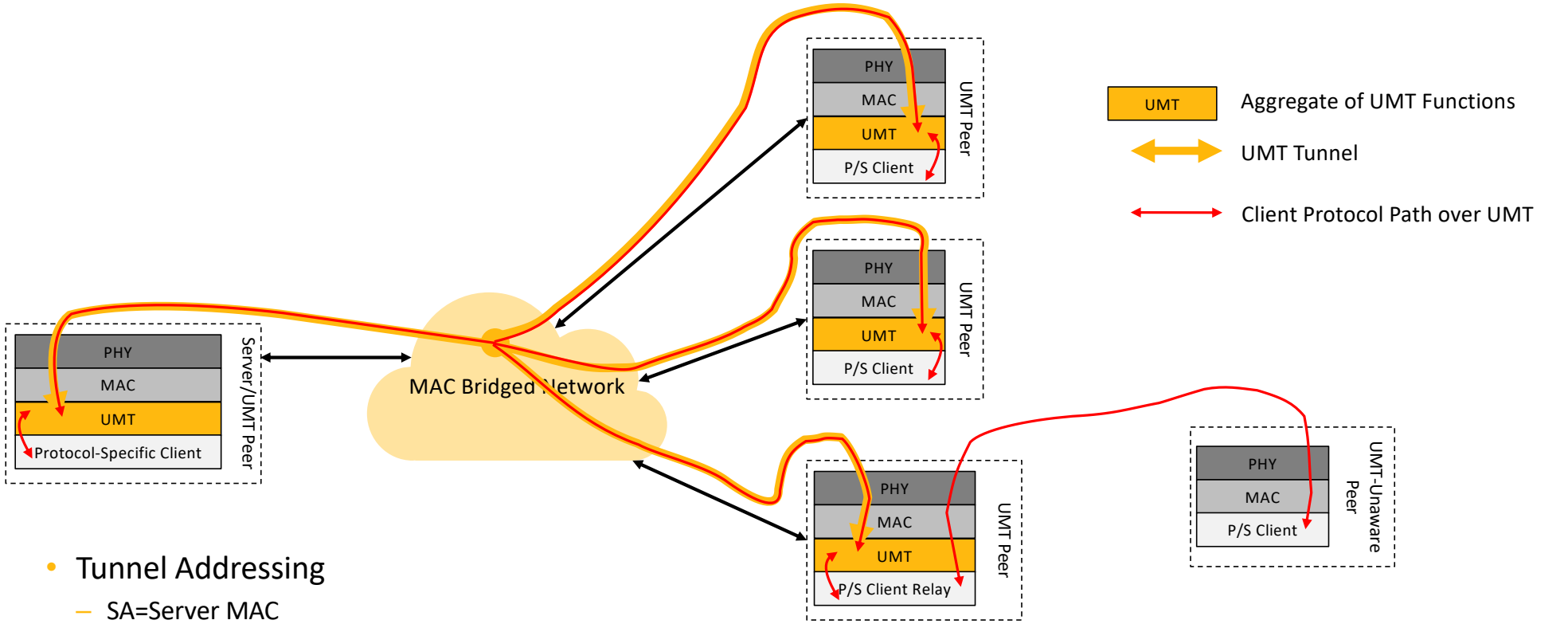
Example Topology with Primitives



- Tunnel Addressing
  - Server MAC
  - Link-Specific MAC (LLID MAC)

Multicast/Broadcast UMT



- Tunnel Addressing
  - SA=Server MAC
  - DA=Multicast or Broadcast MAC

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Thank You!
Additional Q&A

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