

Multi-chassis PON Protection in MPLS

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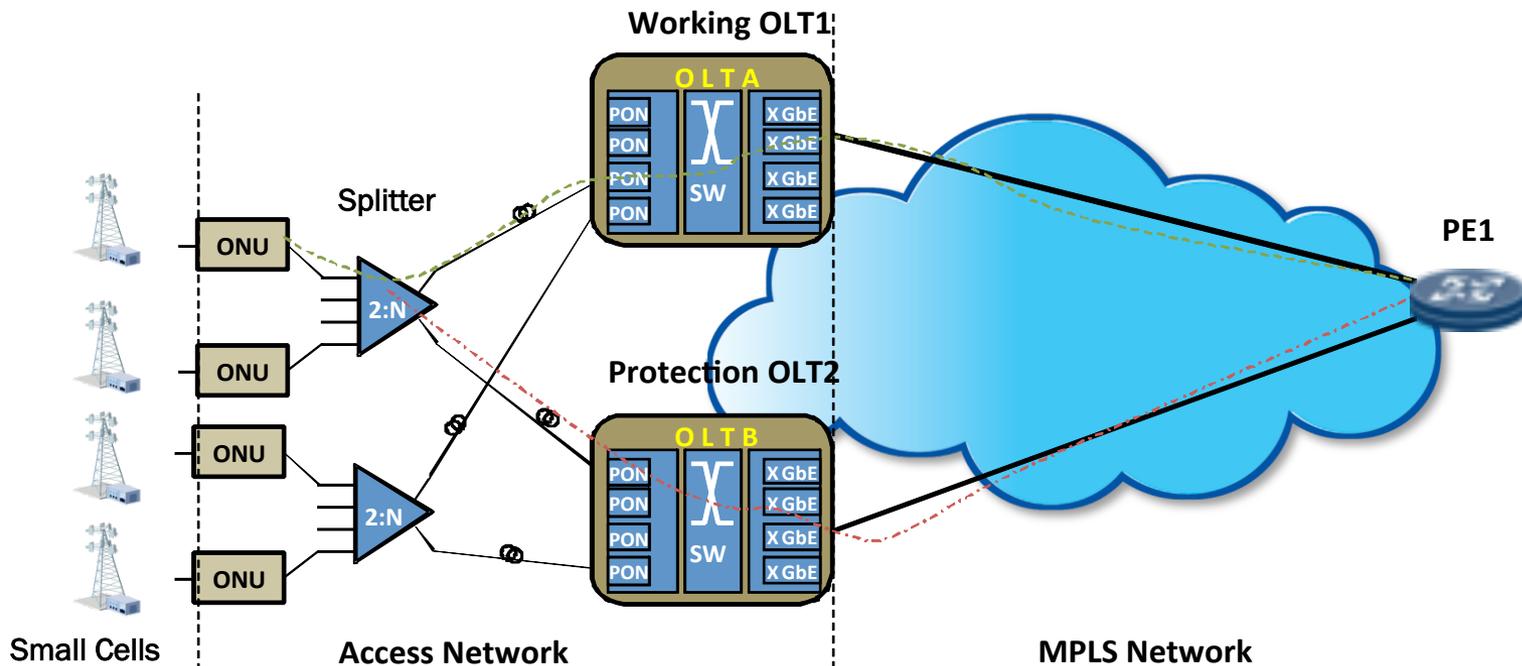
Backgrounds

- Seamless MPLS
 - MPLS, as a multi-service transport technology, is pushing further and further towards network edge
 - More and more PON equipments (OLT and even ONU) are provided with MPLS functionalities

- MPLS + PON, ideal for small cell backhaul and cable MSO services
 - Saving chunk fibers
 - High bandwidth
 - low Total Cost of Operation

Type-B PON protection scenario

- Services can be restored by type-B PON protection in most cases
- But protection OLT and PEs need a mechanism to be notified of the switchover



Main updates

- New PON application TLVs are added
 - PON ONU Database Sync TLV
 - In order to avoid de-registering and re-registering in OLTs
 - Work OLT sends database of its actively registered ONUs to the protection OLT for the same ROID
- Update to existing PON application TLVs, for example, System ID are extended to 8 octets to accommodate for future IEEE addresses
- More descriptions on protection procedures
 - Protection procedures are more consistent for different failures
 - Reuse some procedures in PW redundancy and the base ICCP draft

Next Step

- More reviews from WG are greatly appreciated
- Adopted as a WG document?

Thank You