# Multi-chassis PON Protection in MPLS

#### draft-jiang-pwe3-mc-pon-03

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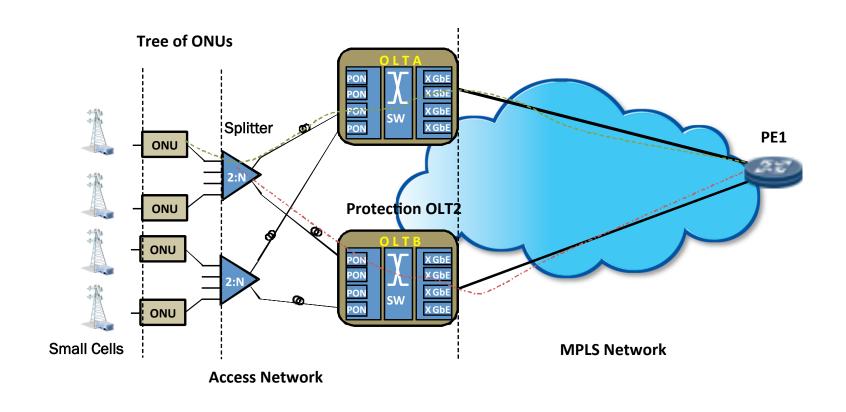
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### Overview

- Basically, this document provides multi-chassis support for PON access
- Unique characteristic of PON trunk protection
  - In trunk protection, downstream optical signal is not available on the protection link
  - End to end protection mechanisms such as ITU-T G. 8031 does not work as APS protocol runs on the protection path
- Extend ICCP to support synchronization of PON state and use PW redundancy to synchronize PW switchover

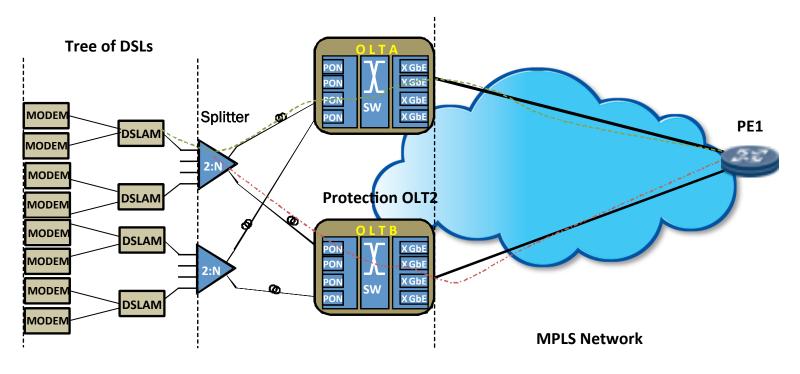
## Protection of a tree of ONUs

Trunk protection can protect a tree of ONUs with scalability



## Protection of a tree of DSL

- DSL tree builds on existing subscriber lines
- PON further provides a section of aggregation
- Trunk protection can protect a tree of DSLs with scalability



**Access Network** 

## Comments & questions on V.02

- Any deployment of Type-B PON protection?
  - Yes, we see quite a few real deployments of type-B PON protection in carrier networks around the world, and many more SPs have shown their interests in its future deployment.
- Like to see more access technologies are covered, such as DSL and Ethernet
  - For the moment, we focused on PON since it is the immediately needed, but contributions on other access technologies are greatly welcome.

## Updates in V.03

- New co-authors are added
  - Weigiang Cheng from China Mobile, and
  - Guangtao Zhou from China Unicom
- Added clarifications on the usage of PON Configuration TLV
- Added clarifications on the usage of PON State TLV

# Next Step

Can this be accepted as a WG item?

# Thank You