# P2MP PW Protection For MPLS-TP Network

draft-liu-pwe3-mpls-tp-p2mp-pw-protection-00

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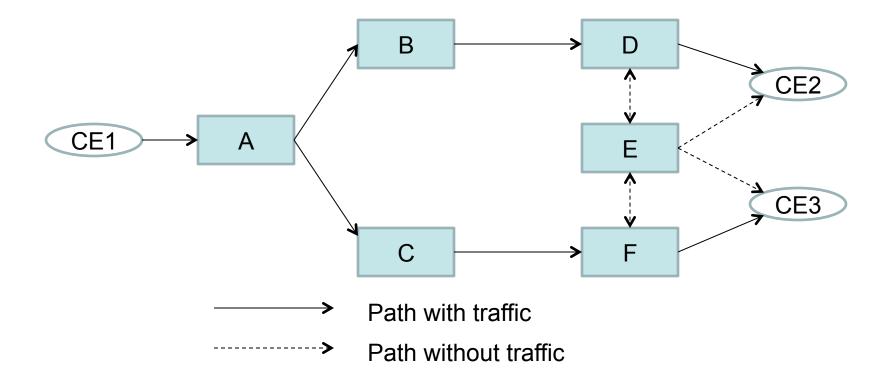
83<sup>th</sup> IETF Meeting in Paris

### Motivation

Requirements and applications

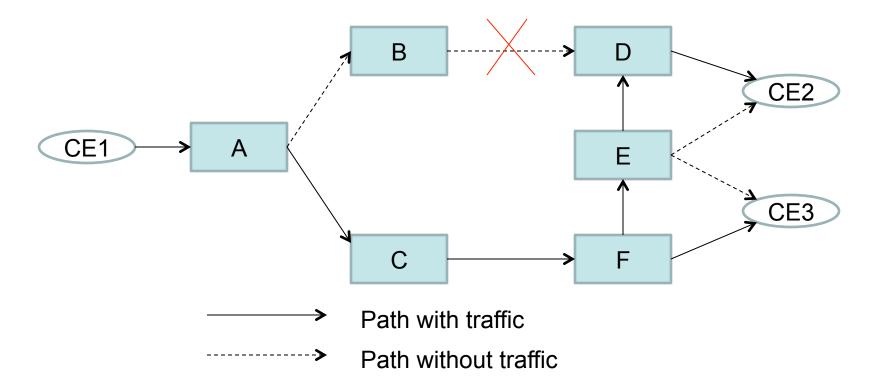
- Req.63 : It must be possible to provide protection for MPLS-TP data plane without any IP forwarding capability in RFC 5654.
- MPLS-TP data plane should be independent of its control plane.
- For p2mp service, it may be bad to set up a return path for each branch path .
- □ Purpose of this draft
  - This draft provides a protection solution for p2mp service without IP forwarding capability, control plane, return path;

#### Normal



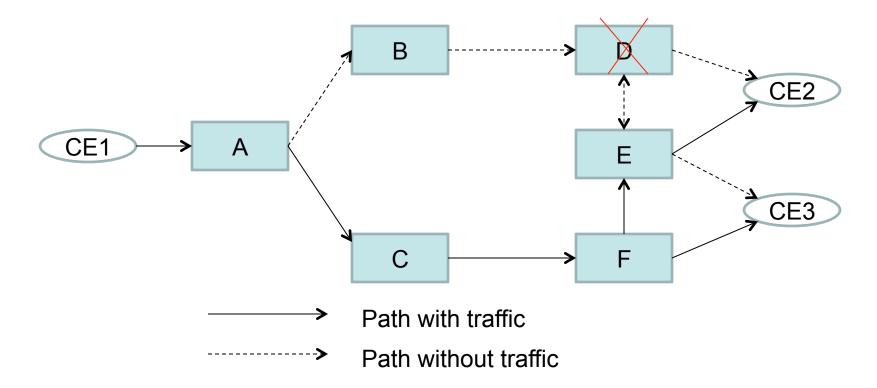
- Service flow : CE1→A→B,C→D,F→CE2,CE3;
- E: backup node of D,F;
- D,F is protector node for each other;

#### Forwarding pw failure



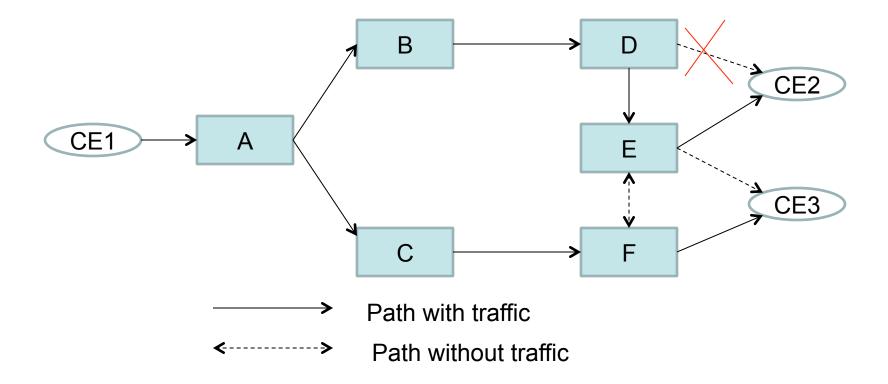
#### failure message: $D \rightarrow E \rightarrow F$ service flow: $F \rightarrow E \rightarrow D \rightarrow CE2$

#### Egress node failure



failure message:  $E \longrightarrow F$ service flow:  $F \longrightarrow E \longrightarrow CE2$ 

#### Attachment Circuit(AC) Failure



failure message:  $D \rightarrow E$ service flow:  $D \rightarrow E \rightarrow CE2$ 

#### **Status Message**

Res	PW Status	Length
status code		

PW Status: indicate type of message; Status code:

0xTT: Forwarding pw failure; 0xYY: Egress node failure; 0xZZ: Attachment Circuit(AC) failure;

### Next steps

- 1 Solicit comments and questions for this draft;
- 2 Update the draft according to comments and questions in the future;

## thank you !