

Make-Before-Break MPLS-TE LSP restoration and reoptimization procedure using Stateful PCE

draft-tanaka-pce-stateful-pce-mbb-01

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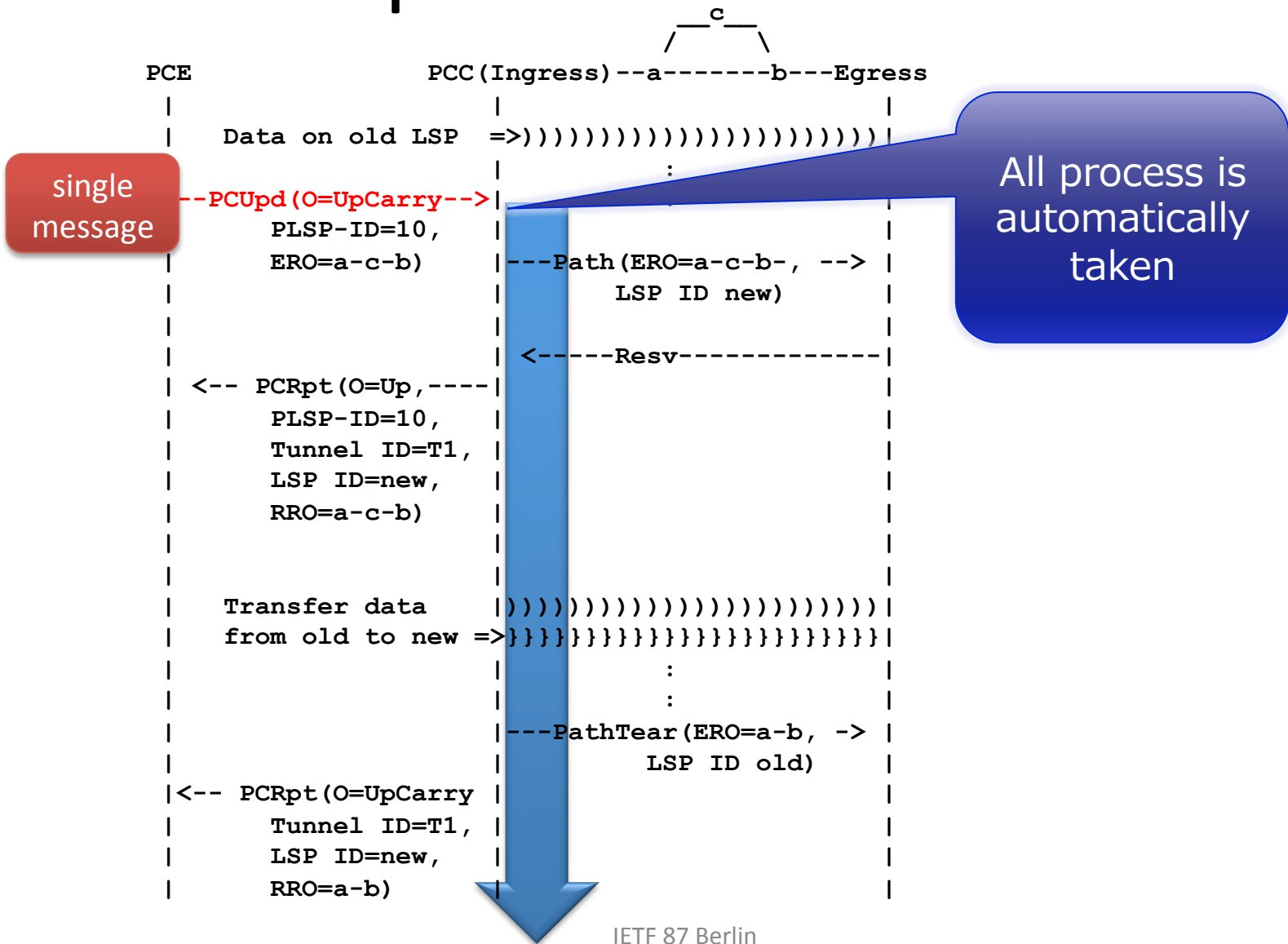
Motivation

- In today's MPLS RSVP-TE, make-before-break (M-B-B) is widely common operation.
 - In some advanced use cases, you need to control when data is switched and which LSPs are used.
- New type of restoration/reoptimization procedure

M-B-B Two modes by s-PCE

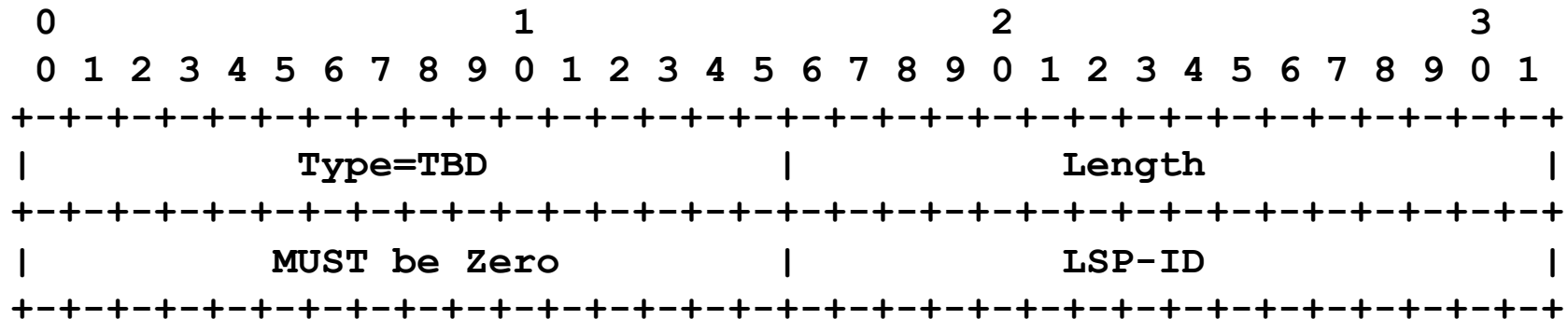
- “Implicit M-B-B mode”
 - Basic procedure, defined by [draft-ietf-pce-stateful-pce-05]
- “Explicit M-B-B mode”
 - Enhanced procedure, defined specifically by this draft
 - “Step-by-Step” mode, i.e., several PCUpd messages are used

Implicit M-B-B mode



TRIAL-LSP TLV in a LSP Object

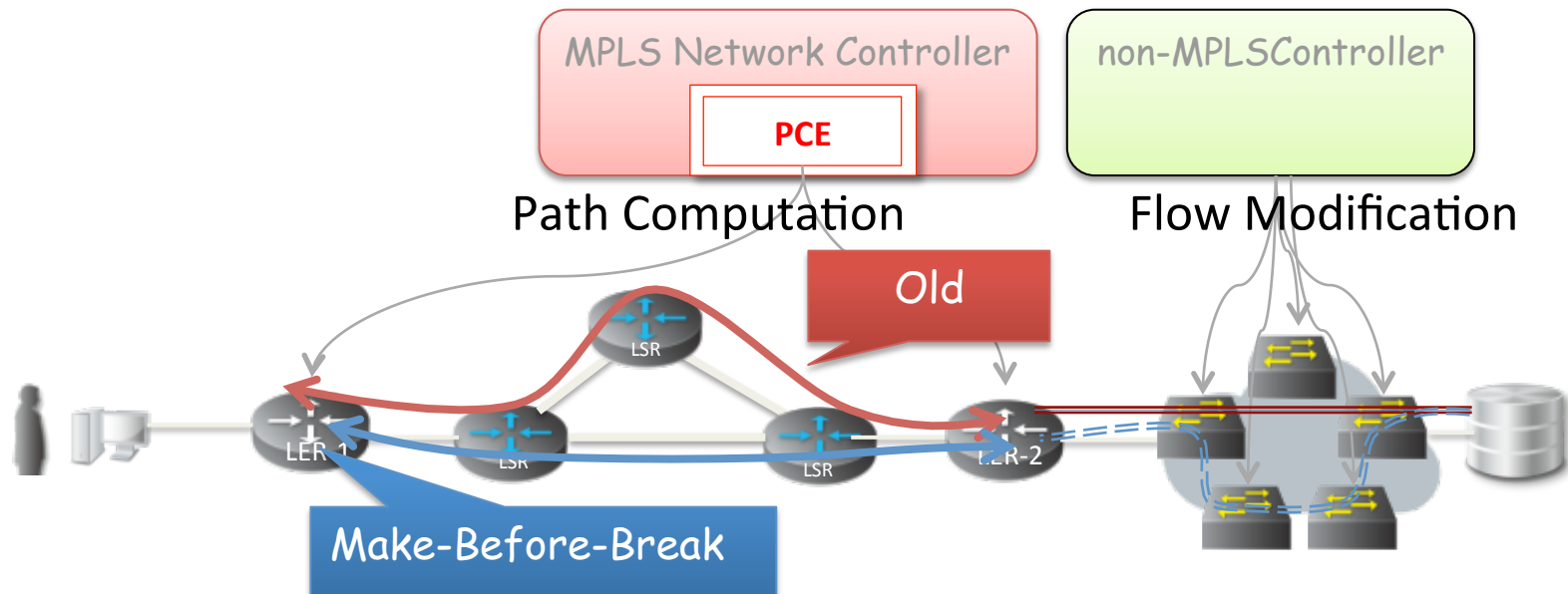
- To identify a specific LSP in a single MPLS-TE Tunnel



TRIAL-LSP TLV

Applicability of Explicit mode

- advanced use cases under SDN context
 - Example (1) LSP stitching
 - Data traffic can't be started unless all signalings are completed
 - Example (2) MPLS connected to other non-MPLS domains
 - Example (3) D-Plane OAM check before switchover



From IETF86 meeting

- Got lots of comments and feedbacks
- Implicit M-B-B mode is merged into base-spec (draft-ietf-pce-stateful-pce-05)

Next-Steps

- Get feedback from WG
 - We proposed “Explicit mode” as extended mechanism
- Invite contributors
- Incorporate several private feedback