

RSVP-TE Based MPLS LI & LB

draft-dong-ccamp-rsvp-te-mpls-tp-li-lb-04

J. Dong, M. Chen (Huawei), Z. Li (China Mobile)

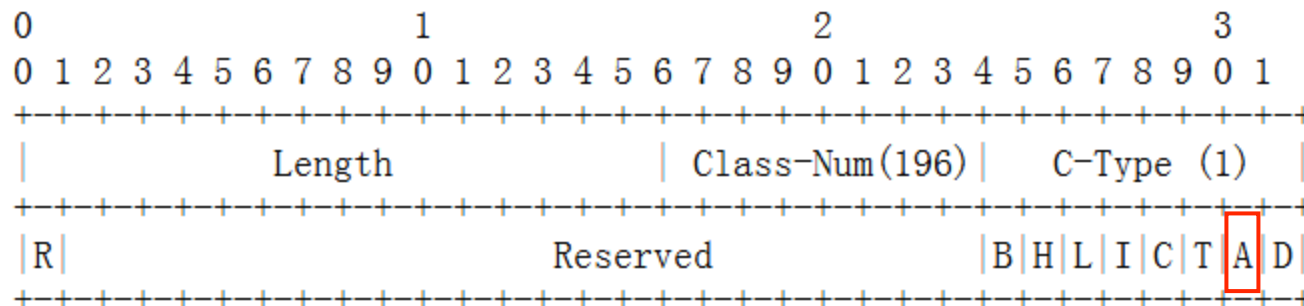
IETF85 CCAMP Nov. 2012 Atlanta

Background

- NMS based LI & LB is defined in RFC 6435
 - In-band LI message is additional
 - Suitable for the scenario where no control plane used
- LI and LB affect the data plane of the LSP
 - As enabler of some other OAM functions
- When dynamic control plane exists, could perform LI & LB through control plane signaling
 - Ensure control plane & data plane consistency
 - Complementary to NMS based LI & LB
- Mechanism also applicable to other non-MPLS-TP scenarios
 - E.g., Lambda

Solution Overview

- Lock Instruct
 - Re-use the existing A bit (defined in ADMIN_STATUS Object)



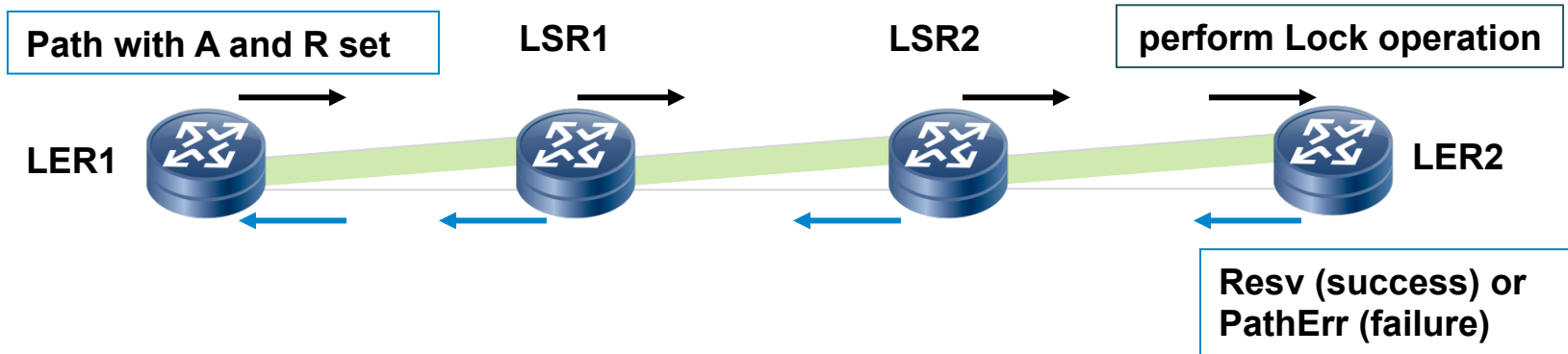
- A: Administratively Down, re-used for Lock Instruct
 - Signaled using Path/Resv message from MEP to MEP

Solution Overview (cont.)

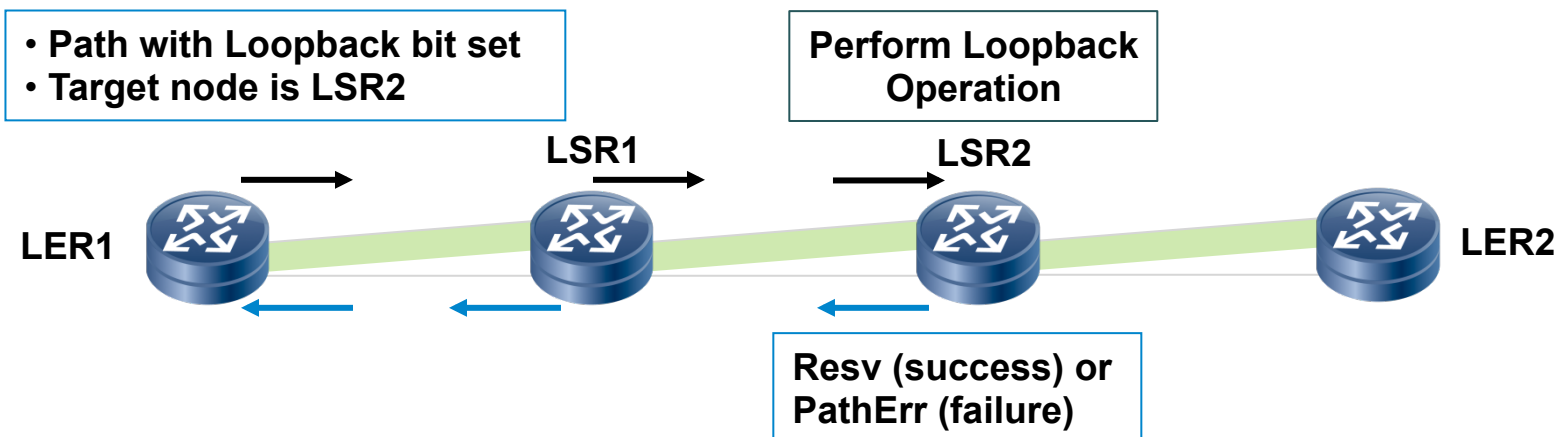
- Loopback
 - MEP to MIP, or MEP to MEP
 - Leverage the mechanism defined in Cyril's draft-lsp-attribute-ero
 - Target LSP Attribute to specific LSR by Extended ERO Object
 - Define a new bit number (Loopback flag) in LSP Attribute Flags (RFC5420)
 - The Loopback flag carried in LSP Attribute subobject (Path message)
 - LSP Attribute subobject carried in Extended ERO Object
 - The Loopback flag carried in RRO Attribute subobject (Resv message)

Solution Overview (cont.)

- Lock Instruct



- Loopback



Updates in v-04

- Editorial changes
- Target Loopback to MIP/MEP
 - Using Extended ERO Object

Next Steps

- Further comments are welcome
- Would like it be adopted as WG item!