SR-TE Path Midpoint Protection

draft-hu-spring-segment-routing-proxy-forwarding-13
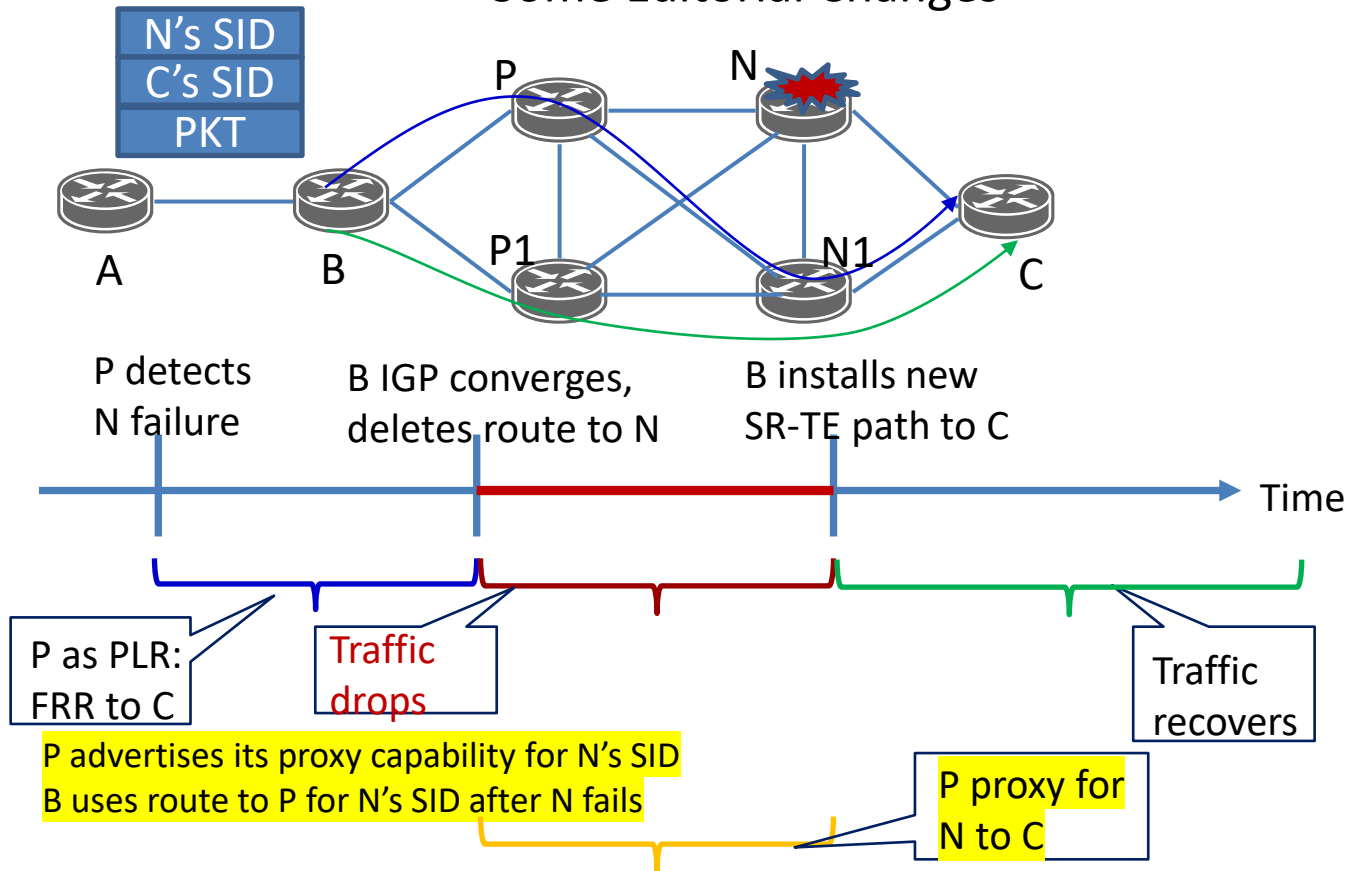
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IETF 110

Overview

Updates to Previous Versions
- Updated Section 1 "Introduction"
- Some Editorial Changes

N's SID
C's SID
PKT

P   N

A   B   P1   N1   C

P detects N failure

B IGP converges, deletes route to N

B installs new SR-TE path to C

Time

P as PLR: FRR to C

Traffic drops

Traffic recovers

P advertises its proxy capability for N's SID
B uses route to P for N's SID after N fails

P proxy for N to C

ietf-spring-segment-protection-sr-te-paths (Informational)
➢ Node supporting it uses old route to N for a configured time after failure
➢ Protection may not work if some do not support it

Our draft improves this and others

Improvements

➢ Uses a capability flag for a node
  - indicates it is capable to forward traffic on behalf of its failed neighbors.
  - When node X fails, other nodes send traffic for X's SID to the nearest capable X's neighbor.

  Protection may work if some do not support it

➢ Protects binding segments on a node when the node fails.

Next Steps

Comments
Adoption