

SRv6 Midpoint Protection

draft-chen-rtgwg-srv6-midpoint-protection-08

Huanan Chen (China Telecom)

Zhibo Hu (Huawei Technologies)

Huaimo Chen (Futurewei)

Xuesong Geng (Huawei Technologies)

Yisong Liu (China Mobile)

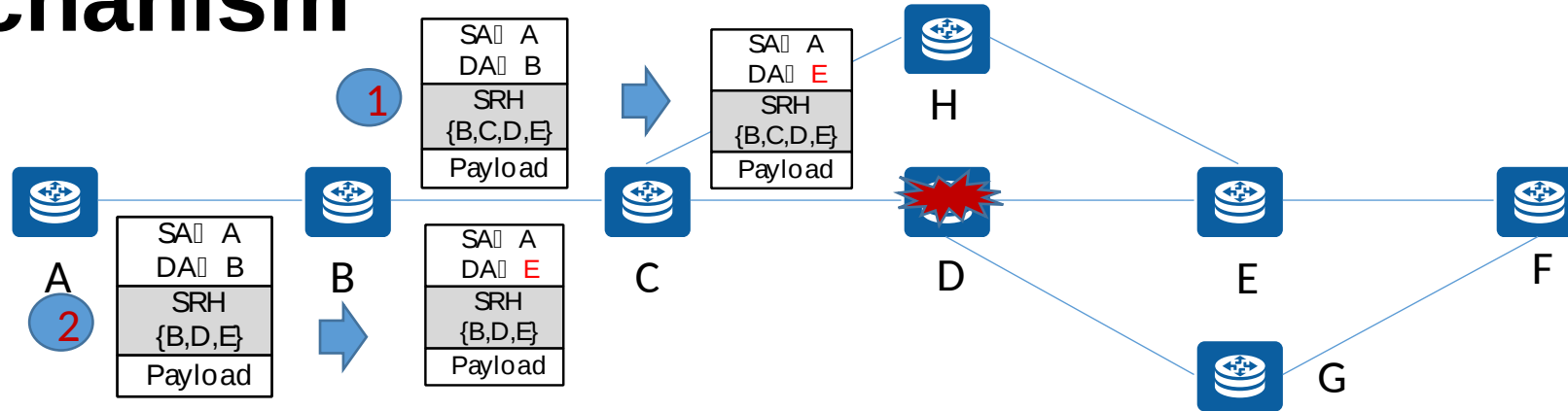
Motivations and Goals

Motivations

- **Scenario:** When an SRv6 Endpoint failed, the existing FRR mechanism cannot be used to restore the reachability;
- **Requirement:** SRv6 E2E protection could work, but a simpler and faster local repair mechanism is also requested;
- **Existing work:** The mechanism defined in [draft-ietf-spring-segment-protection-sr-te-paths] is able to provide endpoint protection for SR MPLS network;

Goals: This document introduces a SRv6 midpoint protection mechanism: when an SRv6 endpoint fails, an SRv6 proxy forwarding node can replace the failed endpoint to perform SRv6 end function.

SRv6 Midpoint Protection Mechanism



- Scenario 1: Strictly Paths:
 - Node C is a SRv6 endpoint node, perform proxy forwarding and send packet to the next endpoint in the segment list.
- Scenario 2: Loose path:
 - Node C isn't a SRv6 endpoint node, It Can't perform proxy forwarding.
 - After IGP convergence, Node B deleted the FIB to D, It will trigger Fib Miss and perform the proxy forwarding action, send packet to the next endpoint in the segment list. .

Comments & Update

- Collect feedback in SPRING
 - When the repair node is a transit node, it may be against RFC 8200 which won't allow transit node to modify SRH
 - In this version, Only SRv6 endpoints can run the midpoint-protection command, and transit nodes cannot run the midpoint-protection command.

Next

Request working group adaption.

Thanks