

SRv6 Path Egress Protection

draft-ietf-rtgwg-srv6-egress-protection-11

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IETF 117

Overview

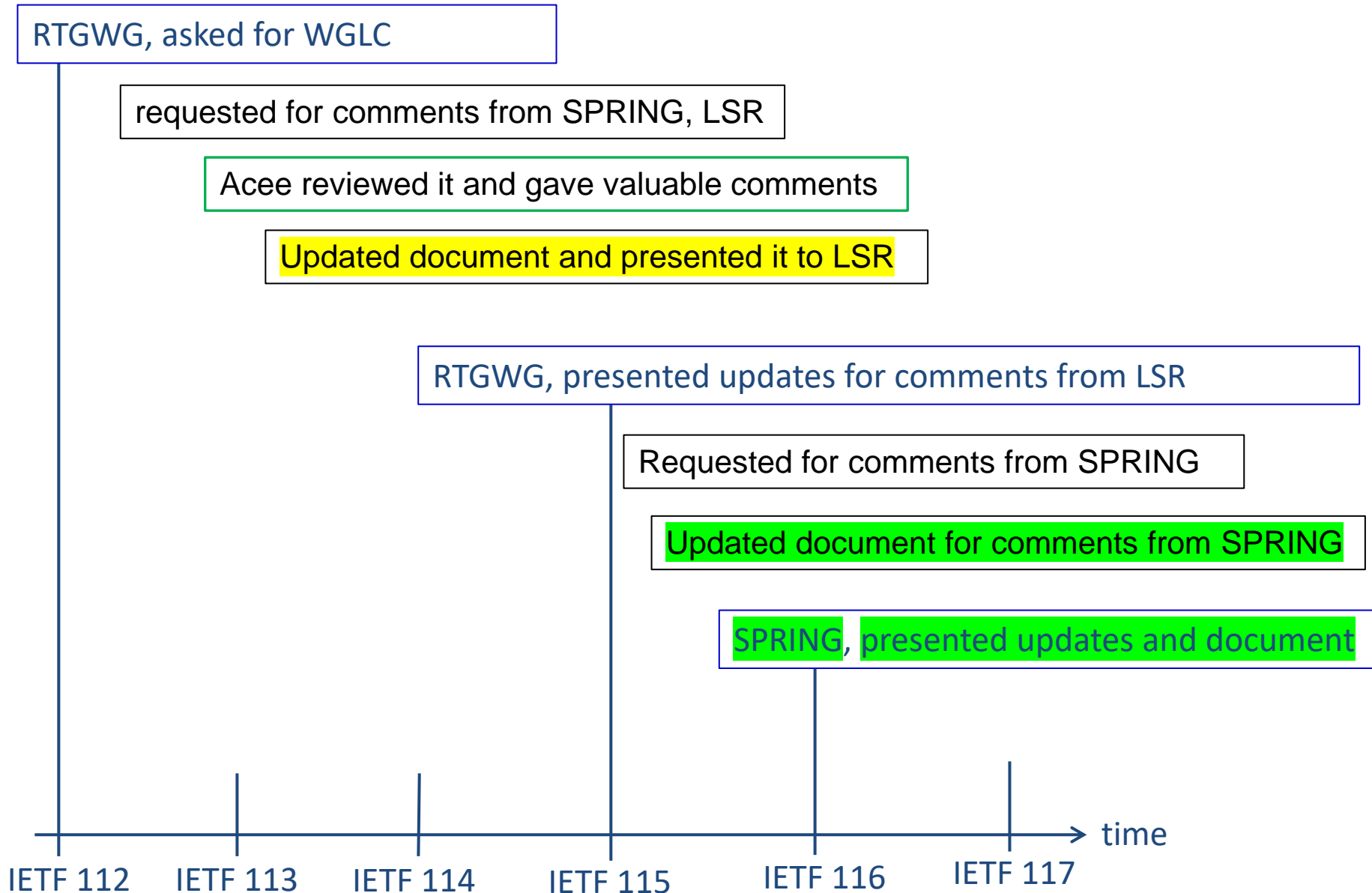
Thank people below for their comments and suggestions

- Acee Lindem
- Bruno Decraene
- Jeff Tantsura,
- Chris Bowers
- Ketan Talaulika
- Jie Dong
- Peter Psenak
- Yimin Shen
- Zhenqiang Li
- Alexander Vainshtein r
- Greg Mirsky
- Bob Halley

Latest Updates to Previous Version

- Number of authors to 5
- Mention retain route in normative section
- Editorial changes

Progress Timeline



Presentation Overview in IETF 116 SRIPNG

Updates to Previous Version (to address comments)

- Updated description on backup path
- Added text on slow convergence of non-PLR

SRv6 Path Egress Protection Mechanism

Next Steps

- Comments welcome
- WGLC

SRv6 Path Midpoint Protection

draft-chen-rtgwg-srv6-midpoint-protection

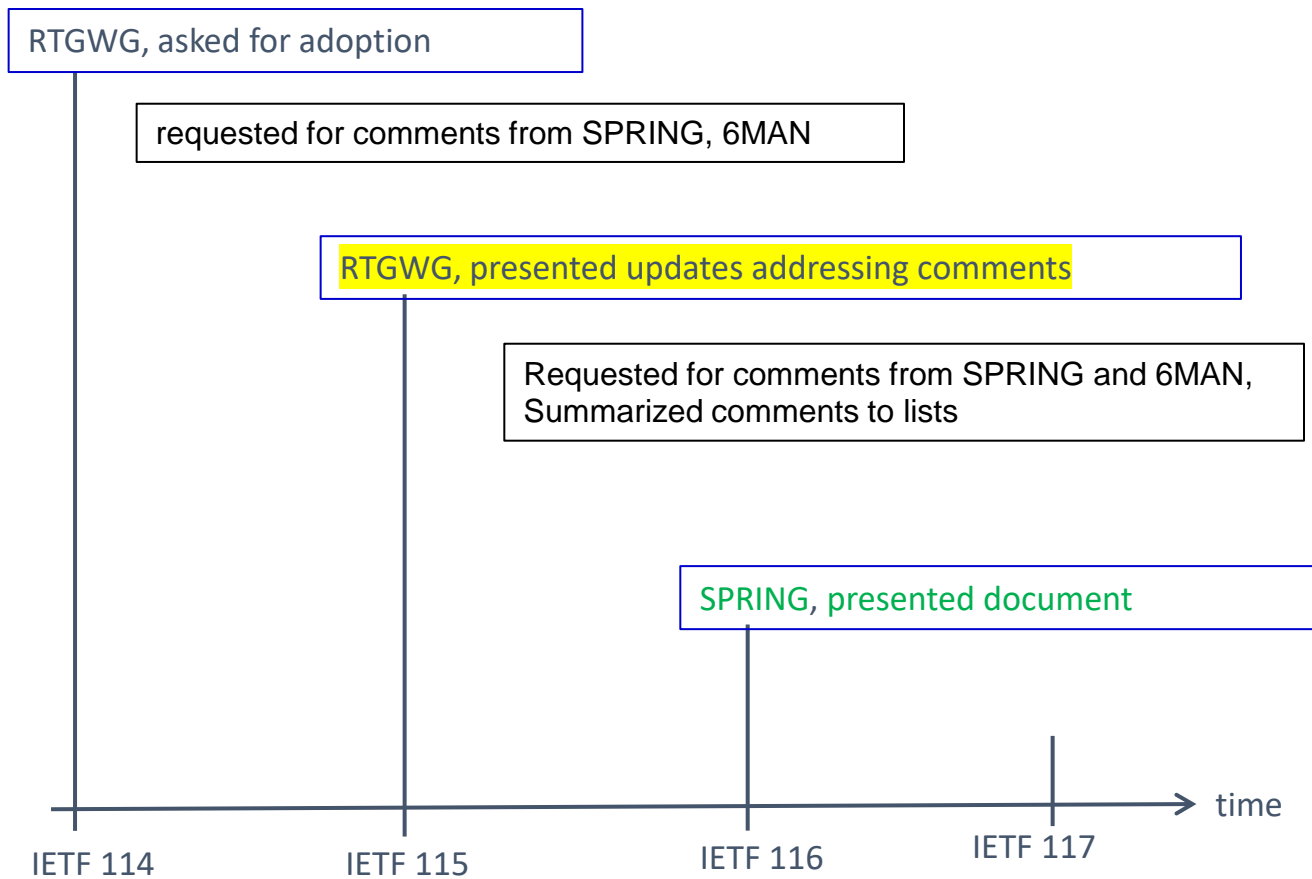
Huanan Chen, China Telecom
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Xuesong Geng, Huawei
Yisong Liu, China Mobile
Gyan S. Mishra, Verizon

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Overview

- Progress since IETF 114
- Comments from IETF 116 SPRING

Progress Summary

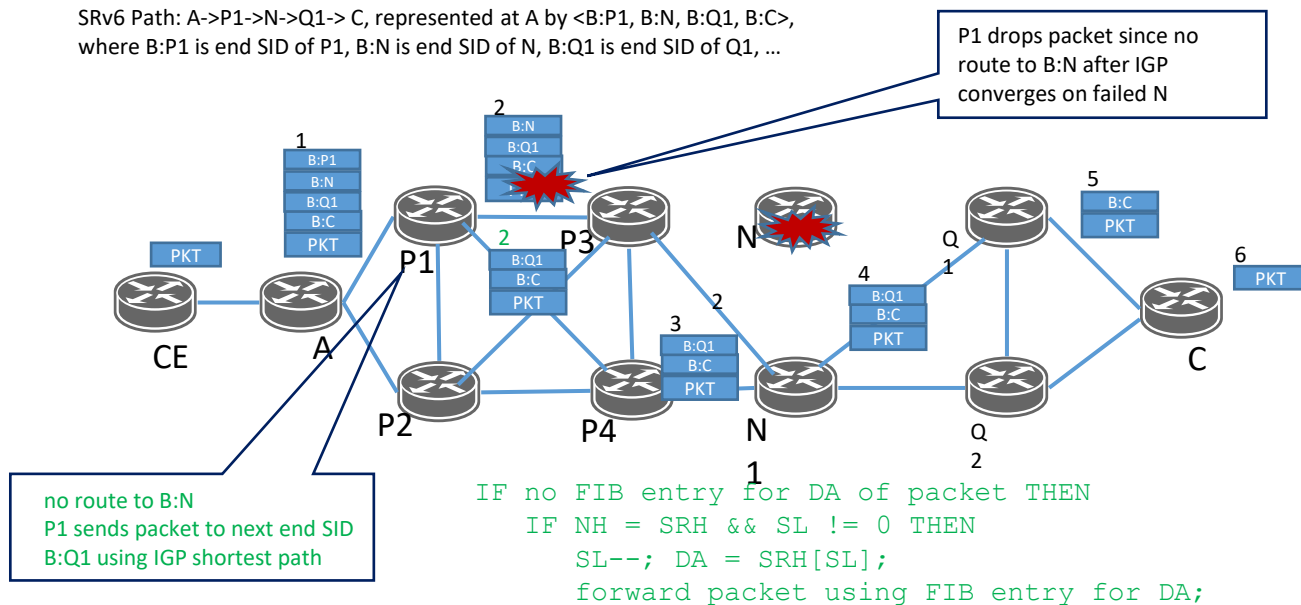


Presentation Overview in IETF 116 SRIPNG

- SRv6 Path Midpoint Protection Mechanism: Before IGP Converges
- SRv6 Path Midpoint Protection Mechanism: After IGP Converges

Endpoint node X: DA of the packet received by node X is a X's local END SID
 E.g., P1, N, Q1, C are endpoint nodes for the SRv6 path

SRv6 Path: A->P1->N->Q1-> C, represented at A by <B:P1, B:N, B:Q1, B:C>, where B:P1 is end SID of P1, B:N is end SID of N, B:Q1 is end SID of Q1, ...



Summary of Comments from IETF 116 SPRING

C1: Midpoint protection document (for SR-MPLS) exists in SPRING, Why SRv6 work is in RTGWG?

A1: At high level, the mechanism are the same, but the details are different.

For example, in SR-MPLS we can change stack, but in SRv6 we need to do encapsulation.

RTGWG co-chair: The WG is aware of SR-MPLS work in the SPRING and that is why we suggested presenting here.

The behavior should be consistent.

C2: (slide 4) P1 will drop the packet if no reachability for N, but if N is ABR and no visibility this is an issue.

A2: This is midpoint protection only!.

If ABR is failed node, inter-domain routing should make it work.

C3: Stack was created with some intent, does P1 know the intent (latency) to be able to switch to bypass!

A3: No, it does not know and does not care! Maybe in future!

C4: How does P1 know to jump the pointer?

A4: Before IGP convergence on the failure, P1 does not know the failure. P1 has a FIB entry to N via P3 directly connected to N. P1 sends packet to P3, after receiving packet, P3 as PLR does normal FRR (i.e., existing midpoint protection)

C5: There is a WG document for SR-MPLS, we have updated the solution to use rear-side tunneling to solve the problem. This solution does not work for micro-SID and common solution should be preferred.

A5: Node-SID is example, draft also supports other SIDs (ex. adj-SID). At high level things are same but the details are different.

C6: SRv6 makes things simpler, authors should work on a merged solution.

A1: Open to 1 draft in 1 WG.

Comment from IETF 116 SPRING: Merge

Merge SR-MPLS midpoint protection with SRv6 midpoint protection?

C5: There is a WG document for SR-MPLS, we have updated the solution to use rear-side tunneling to solve the problem. common solution should be preferred.

C6: SRv6 makes things simpler, authors should work on a merged solution.

A: Communicated with authors. No Merge.

Next Steps

- Comments
- Adoption