

SPRING

IETF-101

Friday, March 16

Note Well

- This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

- As a reminder:

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- Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)

- BCP 25 (Working Group processes)

- BCP 25 (Anti-Harassment Procedures)

- BCP 54 (Code of Conduct)

- BCP 78 (Copyright)

- BCP 79 (Patents, Participation)

- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

Minutes

- May be collaborative:
- <http://etherpad.tools.ietf.org:9000/p/notes-ietf-101-spring?useMonospaceFont=true>
- Need 1 minute taker & jabber scribe

Agenda

1. WG Status

Chairs 6'

2. SPRING re-chartering discussion

Chairs 14'

3. Segment Routing with MPLS data plane

draft-ietf-spring-segment-routing-mpls-12
Ahmed Bashandy 15'

4. Segment Routing Policy for Traffic Engineering

draft-filsfils-spring-segment-routing-policy-05
Ketan 10'

5. Segment Routing for Service Chaining

draft-xuclad-spring-sr-service-chaining
Francois

6. SRv6 YANG: Base/Static

draft-raza-spring-srv6-yang-01
Kamran 5'

7. OAM in SRv6

Networksdraft-ali-spring-srv6-oam-00Zafar Ali
5'

8. BFD in SR Networks using MPLS

draft-mirsky-spring-bfd
Greg Mirsky 5'

9. BFD for SR Policies

draft-ali-spring-bfd-sr-policy-00
Zafar Ali 5'

10. Segment Routing for Enhanced VPN Service

draft-dong-spring-sr-for-enhanced-vpn-00
Jie 10'

Agenda (2)

- Extremely heavy agenda: 235 minutes requested for a 90 minutes WG slot.
- Please initiate discussion of your draft(s) on the list
 - Helps chairs evaluating the required WG duration
 - May be used as input to build the agenda
 - Doesn't work when -00 draft are submitted "late"

SPRING Chairs & AD

- Martin step down as co-chair
 - Thanks Martin
- Rob Shakir is the new co-chair
- Martin is the new SPRING AD
 - Thanks Alvaro

All SR uses cases and EPE in RFC editor queue

- draft-ietf-spring-ipv6-use-cases
- draft-ietf-spring-oam-usecase
- draft-ietf-spring-resiliency-use-cases
- draft-ietf-spring-segment-routing-central-epe

- Thanks to authors, shepherds, AD

draft-ietf-spring-conflict-resolution

- WG Last Called
- 1 outstanding issue related to consistent conflict resolution from multiple IGPs/routing protocols.
- SR-MPLS specific. Now addressed in SR-MPLS
 - [draft-ietf-spring-segment-routing-mpls](#)
 - More on this on the agenda
- SR-conflict draft is now dead.

draft-ietf-spring-mpls-anycast-segments

- Ready for WG Last Call
- WG Last Call to be initiated SOON

IESG/AD review

- draft-ietf-spring-segment-routing
 - In IESG Evaluation::AD Followup
 - 1 remaining DISCUSS. Lacks of active resolution
- draft-ietf-spring-segment-routing-msdc
 - In IESG Evaluation::Revised I-D Needed
 - 1 remaining DISCUSS. Pending reply from transport area reviewer.
- draft-ietf-spring-segment-routing-ldp-interop
 - In AD Evaluation::Revised I-D Needed
 - AD review since 2017-12-20. Waiting for authors answers.

SPRING WG re-chartering

- First set of core documents are in the hands of IESG or beyond
- Good time to gauge interest on willingness to work on next work items
 - Technical items. Charter review, if any, will come later.
- WG discussions:
 - IETF 98 meeting (Chicago)
 - Mailing list pre-IETF 101
 - IETF 101 (London)

Recap mailing list discussion

- SPRING is the home of segment routing/source routing work both for SR-MPLS and SRv6. Aka Source Packet Routing in Networking
- SPRING-WG serves as a forum to discuss how SPRING can be applied
- SPRING explicit routing along topological paths (SR policy routing)
- SPRING explicit routing along both topological and service paths (chaining of services)
- Specification of SRv6 behaviors /SID types(SRv6 network programming)
- Management models (YANG)
- OAM, traffic accounting, performance measurement
- SPRING extensions, in particular to support ongoing deployment feedbacks.
- Interworking: SR-MPLS & LDP, SR-MPLS & SRv6
- Virtualization and partitioning of network resources.
- Interactions between overlay/applications and optimized underlay
 - E.g. SR-assisted SD-WAN, path awareness
- Ingress replication SID (Tree SID /spray)

Working across routing area

- SPRING related documents split across multiple WGs:
 - many inter-WG coordination required, may sometime translate in sub-optimal coordination
 - possibly incomplete global view
 - some spring extension documents turns into use cases for other WG. (then uses-case documents frown upon)
- Should SPRING do protocol work or architecture/functional spec only?
 - Option 1(current): SPRING defines functional specifications/architecture. Encoding done in each protocols WGs.
 - Option 2 (à la BIER WG): protocol extensions in the SPRING WG, in coordination with the related WGs

Backup slides

Reminder of SPRING WG description from the charter

The ability for a node to specify a forwarding path, other than the normal shortest path, that a particular packet will traverse, benefits a number of network functions, for example:

- Some types of network virtualization, including multi- topology networks and the partitioning of network resources for VPNs
- Network path and node protection such as fast re-route
- Network programmability
- New OAM techniques
- Simplification and reduction of network signalling components
- Load balancing and traffic engineering