

26 July 2024

IETF 120 SPRING

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Note Well

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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)

Note Really Well

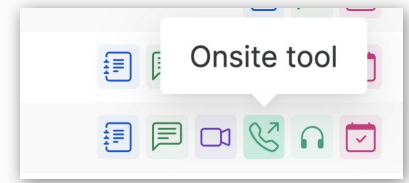
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IETF 120 Meeting Tips

In-person participants

- Make sure to sign into the session via Datatracker or the QR Code in this session.
- Use Meetecho (usually the “Meetecho lite”) client to:
 - join the mic queue
 - participate in shows of hands
- *Keep audio and video off if not using the onsite version.*



Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session.
- Use of a headset is strongly recommended.

Minutes are collaborative

<https://notes.ietf.org/notes-ietf-120-spring?both>

Please help with the notes

Please check and correct your name and comments...

Document Activity Update

Document	Name	WG Status	Notes
draft-peng-spring-pmtu-sr-policy	Path MTU (PMTU) for Segment Routing (SR) Policy	Adopted by a WG	Waiting for draft-ietf-*
draft-agrawal-spring-srv6-mpls-interworking	SRv6 and MPLS interworking	Call For Adoption By WG Issued	Ends on August/1, please review!
draft-ietf-spring-srv6-srh-compression	Compressed SRv6 Segment List Encoding	Submitted to IESG for Publication	

WG Documents

Document	Name	Status	Notes
draft-ietf-spring-dhc-distribute-srv6-locator-dhcp	Distribute SRv6 Locator by DHCP	I-D Exists	Early Allocation
draft-ietf-spring-srv6-path-segment	Path Segment for SRv6 (Segment Routing in IPv6)	I-D Exists	
draft-ietf-spring-resource-aware-segments	Introducing Resource Awareness to SR Segments	I-D Exists	WGLC Queue
draft-ietf-spring-bfd	Bidirectional Forwarding Detection (BFD) in Segment Routing Networks Using MPLS Dataplane	I-D Exists	WGLC Queue
draft-ietf-spring-stamp-srpm	Performance Measurement Using Simple Two-Way Active Measurement Protocol (STAMP) for Segment Routing Networks	I-D Exists	
draft-ietf-spring-cs-sr-policy	Circuit Style Segment Routing Policies	I-D Exists	
draft-ietf-spring-sr-policy-yang	YANG Data Model for Segment Routing Policy	I-D Exists	
draft-ietf-spring-srv6-yang	YANG Data Model for SRv6 Base and Static	I-D Exists	
draft-ietf-spring-sr-for-enhanced-vpn	Segment Routing based Network Resource Partition (NRP) for Enhanced VPN	I-D Exists	WGLC Queue
draft-ietf-spring-sr-service-programming	Service Programming with Segment Routing	I-D Exists	
draft-ietf-spring-segment-protection-sr-te-paths	Segment Protection for SR-TE Paths	I-D Exists	WGLC Queue
draft-ietf-spring-sr-redundancy-protection	SRv6 for Redundancy Protection	Expired	
draft-ietf-spring-mpls-anycast-segments	Anycast Segments in MPLS based Segment Routing	Expired	

Adoption Queue (not in order)

Document	Name
draft-bdmgct-spring-srv6-security	SRv6 Security Considerations
draft-cheng-spring-srv6-policy-resource-gurantee	Resource Guarantee for SRv6 Policies
draft-gong-spring-hierarchical-slice-solution	Segment Routing based Solution for Hierarchical IETF Network Slices
draft-hr-spring-intentaware-routing-using-color	Problem statement for Inter-domain Intent-aware Routing using Color
draft-liu-spring-sr-policy-flexible-path-selection	Flexible Candidate Path Selection of SR Policy
draft-salih-spring-srv6-inter-domain-sids	SRv6 inter-domain mapping SIDs

<https://wiki.ietf.org/en/group/spring>

SPRING rechartering

Current charter is six years old and the chartering of the new srv6ops WG impacts it.

Proposed charter sent to the list for comments and discussions.

Please review and comment.

<https://mailarchive.ietf.org/arch/msg/spring/xebGJFcbxpv44q06y81gEpHXH-w/>

SPRING proposed charter (1)

The Source Packet Routing in Networking (SPRING) Working Group is the home of Segment Routing (SR) using MPLS (SR-MPLS) and IPv6 (SRv6). The SPRING WG is responsible for defining new applications and specifying extensions of Segment Routing technologies. It also serves as a forum to discuss SR-MPLS network operations.

The work in the SPRING WG should avoid modification to existing data planes that would make them incompatible with existing deployments. Where possible, existing control and management plane protocols must be used within existing architectures to implement the SPRING function. Any modification of -or extension to- existing architectures, data planes, or control or management plane protocols should be carried out in the WGs responsible for the architecture, data plane, or control or management plane protocol being modified and in coordination with the SPRING WG, but may be done in SPRING WG after agreement with all the relevant WG chairs and responsible Area Directors.

SPRING proposed charter (2)

The SPRING WG defines procedures that allow a node to steer a packet through an SR Policy instantiated as an ordered list of instructions called segments without needing per-path state information at transit nodes. A network comprising only SPRING nodes can achieve full path control (through loose or strict path specification). However, SPRING nodes must interoperate through loose routing in existing networks.

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SPRING proposed charter (3)

By default, Segment Routing operates within a trusted domain and requires the enforcement of a strict boundary to prevent Segment Routing packets from entering the trusted domain [rfc8402]. Some deployments may involve multiple trusted domains and the use of cross/inter-domain segments. Documents which deal with such situations need to include a risk analysis and use mechanisms to validate that the segment list is provided by an authorized entity and has not been modified in transit.

The scope of the SPRING WG work includes both single Autonomous System (AS) and multi-AS environments. Segment Routing typically operates within a single trust domain which requires the enforcement of a strict boundary and preventing Segment Routing packets from entering the trusted domain from the untrusted exterior. Certain deployments may however involve multiple trust domains which in turn may imply the use of cross/inter domain segments. Risk models associated with these various scenarios may necessitate the use of a cryptographic integrity checks to validate that the segment list is provided by an authorized entity.

As is customary in the Routing Area, the SPRING WG will also identify and address any other security considerations introduced by the technologies it defines; addressing such considerations may require the introduction of new functionality in protocols leveraged for Source Routing, in which case the SPRING WG will formulate requirements to be considered by the appropriate WG for that work. The SPRING WG is however not expected to wait on the development of a solution to these requirements before progressing its own documents. SPRING technologies may be deployed in environments spanning a range of risk and threat models, which may impact both the security considerations and the requirements placed on other protocols in order to support Source Routing protocols.

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SPRING proposed charter (4)

The SPRING WG will manage its specific work items based on WG input and according to milestones agreed upon with the responsible Area Director.

The SPRING WG will coordinate and collaborate with other WGs as needed. Specific expected interactions include (but may not be limited to):

mpls on the MPLS data plane and associated extensions

6man on the IPv6 data plane and associated extensions

lsr on OSPF and IS-IS extensions

idr on BGP extensions

bess on VPN control plane pce on extensions for centralized solutions

teas on traffic engineering architecture

rtgwg on fast-reroute technologies

srv6ops on SRv6 operations

Agenda

13:00 SPRING Status - Chairs (15 mins)

13:15 SRv6 Security Considerations (10 mins)

[\[draft-bdmgct-spring-srv6-security\]](#)

[\(https://datatracker.ietf.org/doc/draft-bdmgct-spring-srv6-security/\)](https://datatracker.ietf.org/doc/draft-bdmgct-spring-srv6-security/)

Presenter: Nick Buraglio

13:25 Validity of SR Policy Candidate Path (10 mins)

Presenter: Ran Chen

[draft-chen-spring-sr-policy-cp-validity](#)

13:35 SRv6 for Inter-Layer Network Programming (10 mins)

Presenter: Liuyan Han/Jie Dong

[draft-dong-spring-srv6-inter-layer-programming](#)

13:45 MicroTap Segment in Segment Routing (10 mins)

Presenter: Zhaohui (Jeffrey) Zhang

[draft-zzhang-spring-microtap-segment](#)

13:55 SRv6 SPAN (10 mins)

Presenter: Zhiqiang Li

[draft-li-span-over-srv6](#)

14:05 4map6 Segments for IPv4 Service delivery over IPv6-only underlay networks (10 mins)

Presenter: Guozhen Dong

[draft-dong-spring-sr-4map6-segments](#)

14:15 Encapsulation of BFD for SRv6 Policy (10 mins)

Presenter: Xiao Min

[draft-liu-spring-bfd-srv6-policy-encap](#)

14:25 Problem Statement with Aggregate Header Limit (10 mins)

Presenter: Yao Liu

[draft-liu-spring-aggregate-header-limit-problem](#)

14:35 Deterministic Networking specific SID (10 mins)

Presenter: Balazs Varga

[draft-varga-spring-preof-sid](#)