I E T F

SPRING WG

Segment Routing Drafts Update

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IETF93 – Prague, July 2015

SPRING WG drafts

SPRING WG drafts

- draft-ietf-spring-problem-statement
  - Version 04
  - Added clarification text on "source" definition
  - Fixed typo's and proper use of RFC2119 keywords
  - Removed "SDN Example" and "OAM" sections
  - Added Manageability section
  - Fixed references

SPRING WG drafts

- draft-ietf-spring-segment-routing
  - Version 03
  - Added text about SRGB allocation recommendation
  - Added clarification about Anycast SID
  - Made author's list compliant with IETF rules

SPRING WG drafts

- draft-ietf-spring-ipv6-use-cases
  - Version 04
  - Fixed references
  - Clarification text on MPLS use cases to be supported on IPv6 dataplane
  - New test on SRv6 policy list to provide VM isolation in the Data Center
  - Added reference to SRH security draft

SPRING WG drafts

- draft-ietf-spring-resiliency-use-case
  - Version 01
  - No changes since IETF92

SPRING WG drafts

- draft-ietf-spring-segment-routing-mpls
  - Version 01
  - Added clarification text on reserved SRGB values (0-15) and SRGB space
  - Fixed references

SPRING WG drafts

- draft-ietf-spring-sr-oam-requirement
  - Version 00 (WG item) from
    draft-kumar-spring-sr-oam-requirement-03
  - Pending updates all discussed into -01
- draft-geib-spring-oam-usecase-06
- draft-kumarkini-mpls-spring-lsp-ping-03

SPRING drafts ready for WG adoption

Important drafts that could be consider for WG ITEMS

- draft-filsfils-spring-segment-routing-ldp-interop
  - Version 03
  - No changes since IETF92
  - Stable and ready for adoption
  - Describes the SR Mapping Server function using IGP extensions defined in OSPF and ISIS drafts
  - At least 4 implementations exist

Important drafts that could be consider for WG ITEMS

- draft-filsfils-spring-segment-routing-msdc
  - Version 03
  - Segment Routing solution to the BGP-based large-scale data-center design described in draft-ietf-rtgwg-bgp-routing-large-dc
  - Added contributions from multiple authors
  - Refined and restructured most of the text
  - MPLS and IPv6 dataplane sections
    - MPLS with RFC3107 (iBGP and eBGP)Labeled Unicast section with eBGP and iBGP
    - IPv6 with MP-BGP (AFI2)
  - Define the use of the Prefix-SID BGP attribute defined in IDR WG

Important drafts that could be consider for WG ITEMS

- draft-filsfils-spring-segment-routing-central-epe
  - Version 04
  - Changed terminology:
    - PeerNode-SID describes the neighbor of the EPE node
    - PeerAdj-SID describes the interface/adjacency between EPE node and its neighbor
    - Two distinct TLVs in EPE BGP-LS extensions draft
  - Added clarification text and fixed typo's and broken references
  - The BGP-LS extensions draft is now WG item
    - draft-ietf-idr-bgpls-segment-routing-epe

Important drafts that could be consider for WG ITEMS

- draft-francois-spring-segment-routing-ti-lfa
  - Version 01
  - Very stable…. Expired !!!
  - In IETF92 SPRING chair's suggested "maybe better to be discussed in RTGWG"

Important drafts that could be consider for WG ITEMS

- draft-filsfils-spring-large-scale-interconnect
  - Version 00
  - Newly submitted
  - Describes how Segment Routing addresses large scale interconnection
    - "Interconnecting Millions Of Endpoints With Segment Routing"

Segment Routing protocol extensions drafts

Segment Routing Protocol Extensions Drafts

- ISIS WG
  - draft-ietf-isis-segment-routing-extensions-05
  - No substantial changes since IETF92
  - More clarification text:
    - R and N flags referred to draft-ietf-isis-prefix-attributes
    - Binding TLV propagation
    - Mapping Server and PHP
    - SR Capability TLV flags
    - SRGB ranges
    - New algorithm value
  - In progress:
    - Overlapping SRGB ranges
    - Inconsistent MS entries
    - Multiple SR-Cap Sub-TLVs

Segment Routing Protocol Extensions Drafts

- OSPF WG
  - draft-ietf-ospf-segment-routing-extensions-05
    draft-ietf-ospf-ospfv3-segment-routing-extensions-03
  - No substantial changes since IETF92
  - Changes:
    - Strict Shortest Path First (SPF) algorithm
    - Adj-SID/LAN ADJ-SID B-Flag semantic change
    - PHP behavior for SRMS advertised SIDs
    - SR-Forwarding Capabilities (OSPFV3 only)
  - In progress:
    - Overlapping SRGB ranges
    - Inconsistent MS entries

Segment Routing Protocol Extensions Drafts

- PCE WG
  - draft-ietf-pce-segment-routing-05.txt
  - No substantial changes since IETF92
  - Requires early codepoint allocation from IANA

Segment Routing Protocol Extensions Drafts

- IDR WG
  - draft-keyupate-idr-bgp-prefix-sid-04
  - Merge with draft-gredler-idr-bgplu-prefix-sid-00
  - Defines the Prefix-SID attribute addressing use cases described in draft-filsfils-spring-segment-routing-msdc

Segment Routing Protocol Extensions Drafts

- IDR WG
  - draft-ietf-idr-bgpls-epe-extensions-00
  - WG doc (draft-previdi-idr-bgpls-epe-extensions-03)
  - Changes:
    - Clarification text on BGP Identifier
    - PeerNode SID and PeerAdj SID TLVs
    - Interface addresses/identifiers
    - New contributor: Acee Lindem

Segment Routing Protocol Extensions Drafts

- IDR WG
  - draft-ietf-idr-bgpls-epe-extensions-00
  - WG doc (draft-previdi-idr-bgpls-epe-extensions-03)
  - Changes:
    - Clarification text on BGP Identifier
    - PeerNode SID and PeerAdj SID draft-gredler-bgp-ls-segment-routing-extensionsTLVs
    - Interface addresses/identifiers
    - New contributor: Acee Lindem

Segment Routing Protocol Extensions Drafts

- IDR WG
  - draft-gredler-idr-bgp-ls-segment-routing-extension-02
  - Needs update based on last ISIS/OSPF segment routing extension to be reflected in BGPLS TLVs
  - Draft has expired…

Segment Routing Protocol Extensions Drafts

- 6MAN
  - draft-previdi-6man-segment-routing-header-06
  - draft-vyncke-6man-segment-routing-security-02
  - Describe the Segment Routing Header (SRH) and associated security mechanisms
  - Type of RFC2460 Routing header (suggested value 4)
  - Minor update since IETF92 after comments received on the list
  - Mostly, clarification text and typo's
  - Multiple interoperable implementation exists (also demo'ed at B&B)
  - Drafts are ready for adoption…. but chairs now ask to merge SRH and security drafts…