

Using IS-IS MT for Segment Routing based VTN

draft-xie-lsr-isis-sr-vtn-mt-02

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Background

- A VTN is a virtual underlay network with the required topology and resource characteristics
 - Introduced in *draft-ietf-teas-enhanced-vpn*
- Resource-aware SID is defined in *draft-ietf-spring-resource-aware-segments*
 - SR SIDs can represent different sets of resources allocated for packet processing
- SR for VPN+ is described in *draft-dong-spring-sr-for-enhanced-vpn*
 - Describes the mechanisms to build SR based VTNs with resource-aware SIDs
- This document describes the MT based control plane mechanism for SR VTN
 - To distribute the per-VTN topology and resource information to network nodes and controller

Mechanisms in this draft

- MT-ID is reused as the control plane identifier of VTN
 - Use IS-IS Multi-topology (RFC 5120) for the advertisement of VTN topology
 - Use IS-IS SR extensions (RFC 8667 and draft-ietf-lsr-isis-srv6-extensions) to advertise topology-specific SR-MPLS SIDs or SRv6 Locators and SIDs
- Advertise topology-specific TE attributes for different VTNs
 - The advertisement of topology-specific link bandwidth is described
 - Other TE attributes may also be advertised in topology-specific manner

Updates in -02 version

- The document type is changed to informational
 - Based on the discussion and suggestion from the WG
- Add descriptions about forwarding plane behaviors
- Add reference to *draft-ietf-spring-resource-aware-segments*
 - Resource-aware SIDs are used in the data plane of SR VTN
- Some editorial changes

Next Steps

- The content of this document is stable
- Document type is now informational
- Authors would like to ask for WG adoption of this document

Thank You