Using Flex-Algo for Segment Routing based VTN

draft-zhu-lsr-isis-sr-vtn-flexalgo-02

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Recap of Background

• A VTN is a virtual underlay network with a customized topology and a set of network resources
  • Introduced in draft-ietf-teas-enhanced-vpn as the underlay of VPN+ services

• SR based VTN is described in draft-ietf-spring-sr-for-enhanced-vpn
  • Provides the mechanism and procedures to build SR based VTN using resource-aware SIDs

• In some scenarios, each SR VTN can be associated with a unique Flex-Algo
  • This document describes the Flex-Algo based control plane mechanisms for distributing the topology and resource information of SR VTNs
Mechanisms in this draft

• Flex-Algo ID is reused as the control plane identifier of a VTN
  • Use Flex-Algo to describe the topology constraints for a VTN
  • Use IS-IS SR to advertise algorithm-specific prefix SIDs/SRv6 Locators

• Extend IS-IS L2 bundle to advertise the TE attributes associated with VTN
  • IS-IS L2 bundle is extended for both virtual and physical member links

• Each VTN is associated with one virtual or physical member link in the bundle
  • Use an Admin Group (color) to correlate the Flex-Algo and the member link
  • The TE attributes and SR SIDs of the member links belong to the VTN
Updates in -02 version

• Clarifies the limitations in the usage of Admin Group constraints in Flex-Algo Definition when a Flex-Algo ID is used to identify a VTN
  • Only the Include-Any Admin Group rule can be used

• Add descriptions about the usage of the V-flag

• Updates the reference to draft-ietf-spring-sr-for-enhanced-vpn
  • That document has been adopted in SPRING WG recently

• Some editorial changes
Next Steps

- The mechanisms and content of this draft are stable
- All the comments received have been resolved
- Authors would like to ask for WG adoption of this document
Thank You