SR for SDWAN:
OTT VPN with SLA Underlay
draft-dukes-spring-sr-for-sdwan-00
(formerly draft-dukes-sr-for-sdwan)

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I E T F®

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History

New in draft-dukes-spring-sr-for-sdwan-00

- IETF 100
  - Presented draft-dukes-sr-for-sdwan-00
- Rename to draft-dukes-spring-sr-for-sdwan-00
- added:
  - Single Provider Example Using End.BM With an MPLS Core
  - Single Provider Example Using SRMPLS Over UDP For CE to PE **Not Directly Connected Over Internet**

Overview

SR for SDWAN

- Underlay Service Level Agreements (SLA) to an OTT VPN with scale and security while ensuring service opacity.

- i.e. for SDWAN: Allows selection and use of non-default paths between SDWAN Edge (CE) Nodes over Internet.

SDWAN Edge Nodes use Binding SIDs to select a non-default path

- IPv6: SRv6 Binding SID
- IPv4: MPLS Binding SID over UDP

Binding SIDs: per customer, per SLA per endpoints

- Instantiated at a PE Node attached or close to SDWAN Edge (CE) Nodes

How does a SP provision binding SIDs?

On demand

- SDWAN Controller
  - Requests a binding SID per SLA per endpoints (SDWAN Edge nodes).

- SP Controller
  - Provisions an SR Policy at the closest PE node and assigns a Binding SID to the SR Policy (RFC5440).

Current Status

- SRv6 Binding SIDs
  - draft-ietf-6man-segment-routing-header

- MPLS Binding SIDs
  - RFC7510

- Directly connected CE to PE

- Not Directly connected CE to PE (i.e. via third party network)

Next Steps

- Not Directly Connected CE to PE with SRv6

- SDWAN Controller to SP Controller Protocols and Extensions

- Discussion and Collaboration!

Thank You!