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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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!