The IPv6 VPN Context Information Option

Draft-bonica-6man-vpn-dest-opt

R. Bonica, Juniper Networks
C. Lenart, Verizon
G. Presbury, Hughs Networks
N. So, F. Xu, Reliance Jio
G. Chen, Baidu
Y. Zhu, G. Yang, China Telecom
Y. Zhou, ByteDance
Anatomy Of A Virtual Private Network
Protocol Header Stack

IPv6

Compressed Routing Header

Destination Options With VPN Context Information Option

Payload

IPv6 Transport Tunnel

This is a Destination Option header carrying A Service SID

This is a CRH carrying Transport SIDs
Got Security?

IPv6 Transport Tunnel

Payload

Destination Options With VPN Context Information Option

AH or ESP

Compressed Routing Header (Optional)

IPv6

- This is a Destination Option header carrying A Service SID
- This is a CRH carrying Transport SIDs
VPN Context Information Option

- **Option Type** – VPN Context Information
  - Act bits - When not recognized, discard and send ICMP (10)
  - Chg bit – Do not modify (0)

- **Option Data Len** – Variable

- **Option Data** – VPN Context Information. Allocated, advertised and processed by egress PE.
Status

• Operators are expressing interest
• Prototypes under development
  • Forwarding plane
  • BGP Signaling
Next Steps

• Wide review in SPRING and 6man WGs
• Call for adoption in 6man WG