

BGP Flowspec Extensions for

- Layer 2 / L2VPN
- Tunneled Traffic

draft-ietf-idr-flowspec-l2vpn-13

draft-ietf-idr-flowspec-nvo3-08

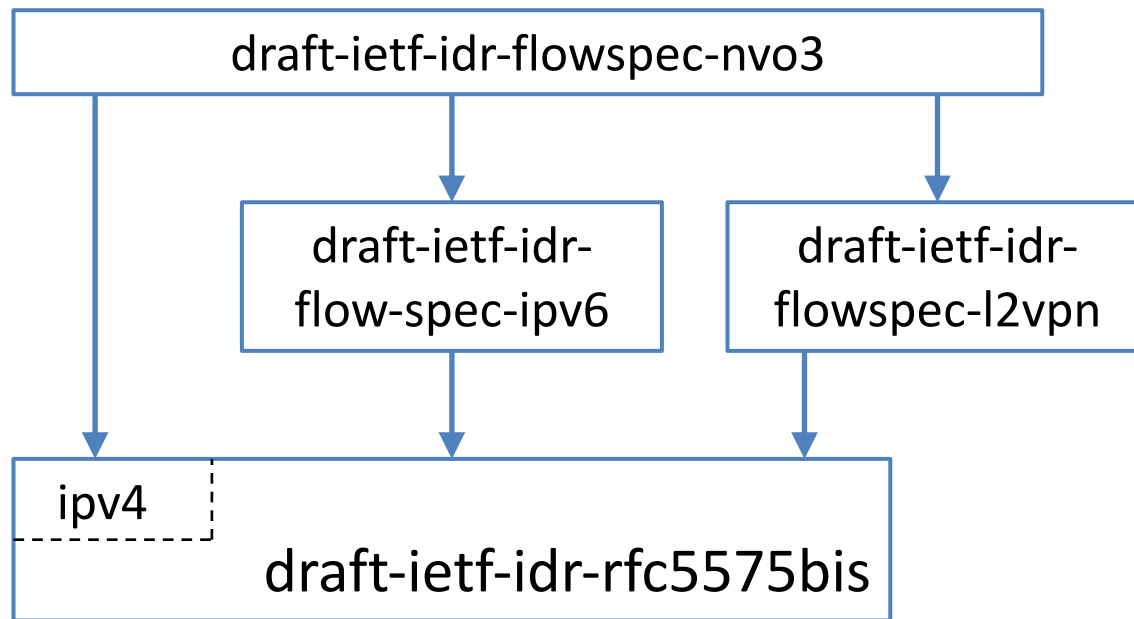
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L2 and Tunneled Flowspec Extensions

Document Dependencies



draft-ietf-idr-flowspec-l2vpn-13

- Despite file name, covers both non-VPN and VPN cases.
- **Changes from version -12 to -13**
 - To avoid problems with the non-extensibility of the base set of flow spec components and for simplicity, uses a new registry for L2 flow spec components.
 - Includes component to test bottom nibble of bits in first octet of MAC address.
 - Add ability to also test a following L3 header.
 - Editorial improvements

flowspec-l2vpn-13 NLRI

Overall Length
Routing Discriminator If SAFI = 134, omitted if SAFI=133
L3 AFI
Length Information
L2 Flowspec (may be null)
L3 Flowspec (may be null)

draft-ietf-idr-flowspec-nvo3-08

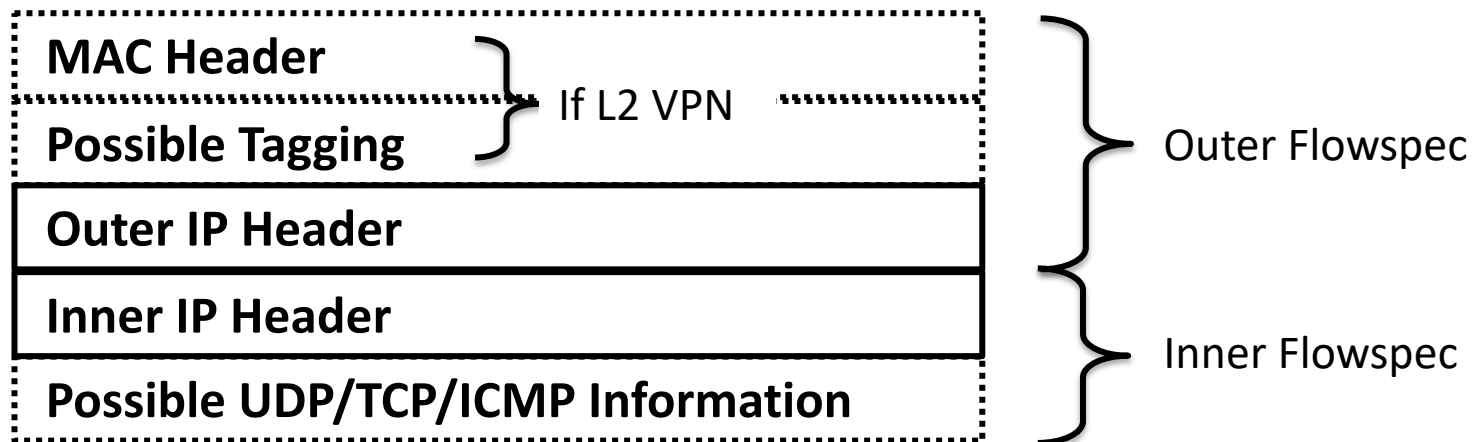
- Despite the file name, covers many tunnel types: VXLAN, VXLAN-GPE, NVGRE, L2TPv3, GRE, and IP-in-IP.
- **Changes from -07 to -08**
 - To avoid problems with the non-extensibility of the base set of flow spec components and for simplicity, uses a new registry for tunnel header flow spec components.
 - Tunnel header flow spec separated from flow spec for preceding / following headers.
 - Editorial improvements.

flowspec-nv03-08 NLRI

Overall Length
Tunnel Type / Flags
Optional Routing Discriminator
Outer Flow Spec + Length
Tunnel Header Flow Spec + Length
Optional Inner Flow Spec + Length + AFI

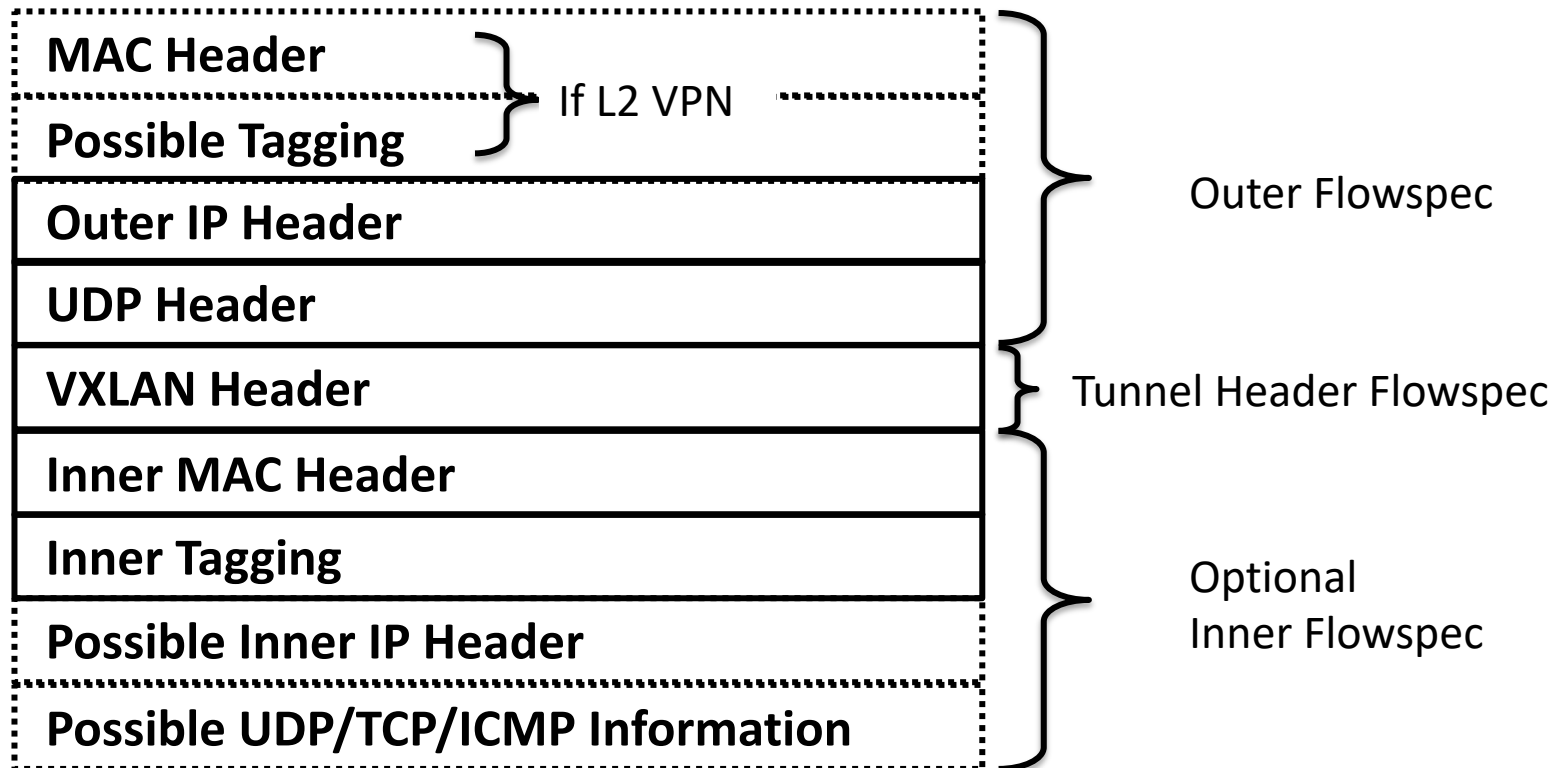
flowspec-nvo3-08 Example

- **IP in IP:**



flowspec-nvo3-08 Example

- VXLAN:**



L2 and Tunneled Flowspec Extensions

SAFI / AFI Summary

Draft	SAFI=133 Flow Spec	SAFI=134 VPN Flow Spec (includes Routing Discriminator)	SAFI=TBD Tunneled Flow Spec (optional Routing Discriminator for VPN)	Registry
draft-ietf-idr-rfc5575bis	AFI=1 IPv4	AFI=1 IPv4	—	Flow Spec Component Types
draft-ietf-idr-flow-spec-ipv6	AFI=2 IPv6	AFI=2 IPv6	—	Flow Spec IPv6 Component Types
draft-ietf-idr-flowspec-l2vpn	AFI=6 L2 (inner AFI = 1, 2 IPv4, IPv6)	AFI=25 L2 (inner AFI = 1, 2 IPv4, IPv6)	—	L2 Flow Spec Component Types
draft-ietf-idr-flowspec-nvo3	—	—	AFI = 1, 2, 6 outer IPv4, IPv6, L2 (inner AFI = 1, 2, 6 IPv4, IPv6, L2)	Tunnel Header Flow Spec Component Types

Next Steps

- **draf-ietf-idr-flowspec-l2vpn-13:**
 - Post -14 version
 - Working Group Last Call
- **draf-ietf-idr-flowspec-nvo3-08:**
 - Please look at version -08 and provide feedback

END

draft-ietf-idr-flowspec-l2vpn-13
draft-ietf-idr-flowspec-nvo3-08

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