Splitting
Flow Specification V2
draft-ietf-idr-flowspec-v2
draft-hares-idr-flowspec-v2-DDOS

Susan Hares
Co-authors: Donald Eastlake, Chaitanya Yadlapalli, Sven Maduschke
History

• WG said FSv1
  • Use case: only DDOS
  • Packet Format: no header changes

• WG FSv2 – two use cases DDOS + directed Filters
  • Matches – TLVs with User Ordering of matches (groups of prefixes)
  • Actions in Extended Communities – limited
  • Action in “Community Container” in Wide Community draft – new Type
  • Yang modules for responses or errors

• IDR Wide Communities – returned to WG
Why Split

• Feedback from Implementations too much to implement at once
  • Will keep WG draft as full source
  • Will do splits based on feedback from implementers

• Highest priority – DDOS enhanced
  • TLV format for types
  • Actions - Only Extended Community Matches – Redirect *

• Questions
  • What happens if match fails – DDOS case + Direct Filters cae
FSv1 - AFI/SAFI based

FSv2 - AFI/SAFI for IPv4, IPv6 + VPNS

SFC (standardized)

FSv2 types: now application

1 - IP traffic rules -
2 - L2VPN
3 - SFC filters
4 - SFC VPN traffic Rules
5 - BGP/MPLS VPN IP Traffic
6 - BGP/MPLS VPN L2 Traffic

+---------------------------+
| length (2 octets)         |
+---------------------------+
| Sub-TLVs by service       |
| +---------------------------+
| | order (4 octets)         |
| +---------------------------+
| | type (2 octets)          |
| +---------------------------+
| | length-Subtlv (2 octets) |
| +---------------------------+
| | FSv1 components          |
| +---------------------------+
| | TLVs with FS components  |
| | multiple destinations    |
| | groupings                |
| +---------------------------+
Need input for implementers

• Must get top-level correct
• Trade-offs depend on implementation
  • Open source
  • FSv1 → FSv2 vendors