

IDR FSv2 Interim Design Team 3+ 4

5/6/2024

Time: 10-11:30am



Agenda for Design Team 4

FSv2 for Basic IP (30 minutes)

Existing Non-IP Filtering + Actions

5. MPLS + SFC – Sue Hares [5 minutes]

draft-ietf-idr-flowspec-v2, RFC9015

6. FSv1 L2VPN– Donald Eastlake [15 minutes]

draft-ietf-idr-flowspec-l2vpn

7. FSv1 Tunnels – Donald Eastlake [15 minutes]

draft-ietf-idr-flowspec-nv03



Non-IP Filters – MPLS

FSv1 IP Component Numbers

- 1 - IP Destination prefix
- 2 - IP Source prefix
- 3 - IPv4 Protocol / IPv6 Upper Layer Protocol
- 4 - Port
- 5 - Destination Port
- 6 - Source Port
- 7 - ICMPv4 type / ICMPv6 type
- 8 - ICMPv4 code / ICPv6 code
- 9 - TCP Flags
- 10 - Packet length
- 11 - DSCP
- 12 - Fragment
- 13 - Flow Label

Allocation of Component IDs

- 15-63 Reserved for IP Extensions (standards action)
- 64-127 Reserved for Non-IP Filters (standards action)
- 128-191 Reserved (standards action)
- 192-249 FCFS
- 250-255 Reserved

IP Component numbers (in Extended IP Filters)

- 0/14 - TTL (option 2/option 1)
- 15 - SID in IPv6 Routing header
- 16 - NRP in Hop-by-Hop IPv6 header

Non-IP Component Numbers

- 64 MPLS Label Match-1
- 65 MPLS Label Match-2

L2 Components (AFI=25/SAFI=134)

- 01 L2 Ethernet
- 02 Source MAC
- 03 Destination MAC
- 04 DSAP
- 05 SSAP
- 06 Control in LLC
- 07 SNAP
- 08 VLAN ID
- 09 VLAN PCP
- 10 Inner VLAN ID

L2 Components (part2) (AFI=25/SAFI=134)

- 11 Inner VLAN PCP
- 12 VLAN DEI
- 13 Inner VALN DEI
- 14 Src Mac special bits
- 15 Dst Mac special bits

MPLS label match 2 – Experimental Bits

```
type(1 octet), length(1 octet), [operator,value]+
```

```
[operator, value]
```

- Defines a list of {operation, value} pairs used to match 3-bit exp field on the top label of packets (RFC3032)
- Values are encoded using a single byte, where the five most significant bits are zero and the three least significant bits contain the exp value.

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2. FSv1 L2VPN [15 minutes] – Donald Eastlake

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3 FSv1 Tunnels (nv03) – Donald Eastlake

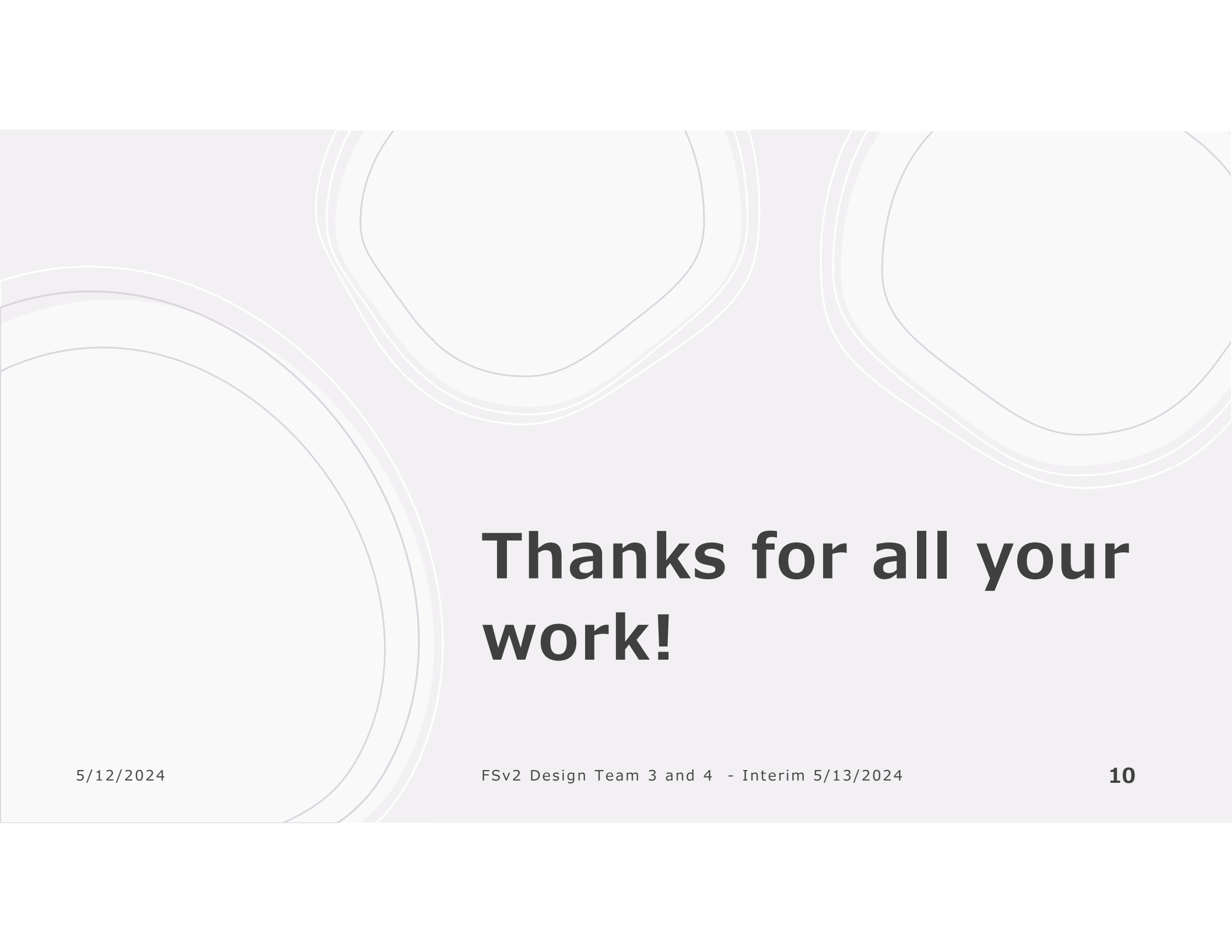
draft-ietf-idr-flowspec-nv03



**Non-IP Filters and
Actions: L2VPN
Donald Eastlake**



**Non-IP Filters and
Actions: Tunnels
Donald Eastlake**



**Thanks for all your
work!**

5/12/2024

FSv2 Design Team 3 and 4 - Interim 5/13/2024

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