

# BGP Flow Specification – V2?

## Draft-hares-idr-flowspec-v2-00.txt

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# Overview

- Review of RFC5575
- BGP FS Option 2 [draft-hares-idr-flowspec-v2]

# Flow Spec (RFC5575) Review

## RFC 5575 summary

- NLRI
  - For SAFI 133: IPv4 (AFI=1), IPv6 (AFI=2), L2VPN AFI=25)
  - For SAFI 134: IPv4 (AFI=1), IPv6 (AFI=2), L2VPN (AFI=25)
- Validation
  - Originator of flow spec = originator of best-match unicast route for destination embedded in NLRI,
  - No more specific unicast routes, when compared with Flow destination prefix, that have been received from different neighbor AS

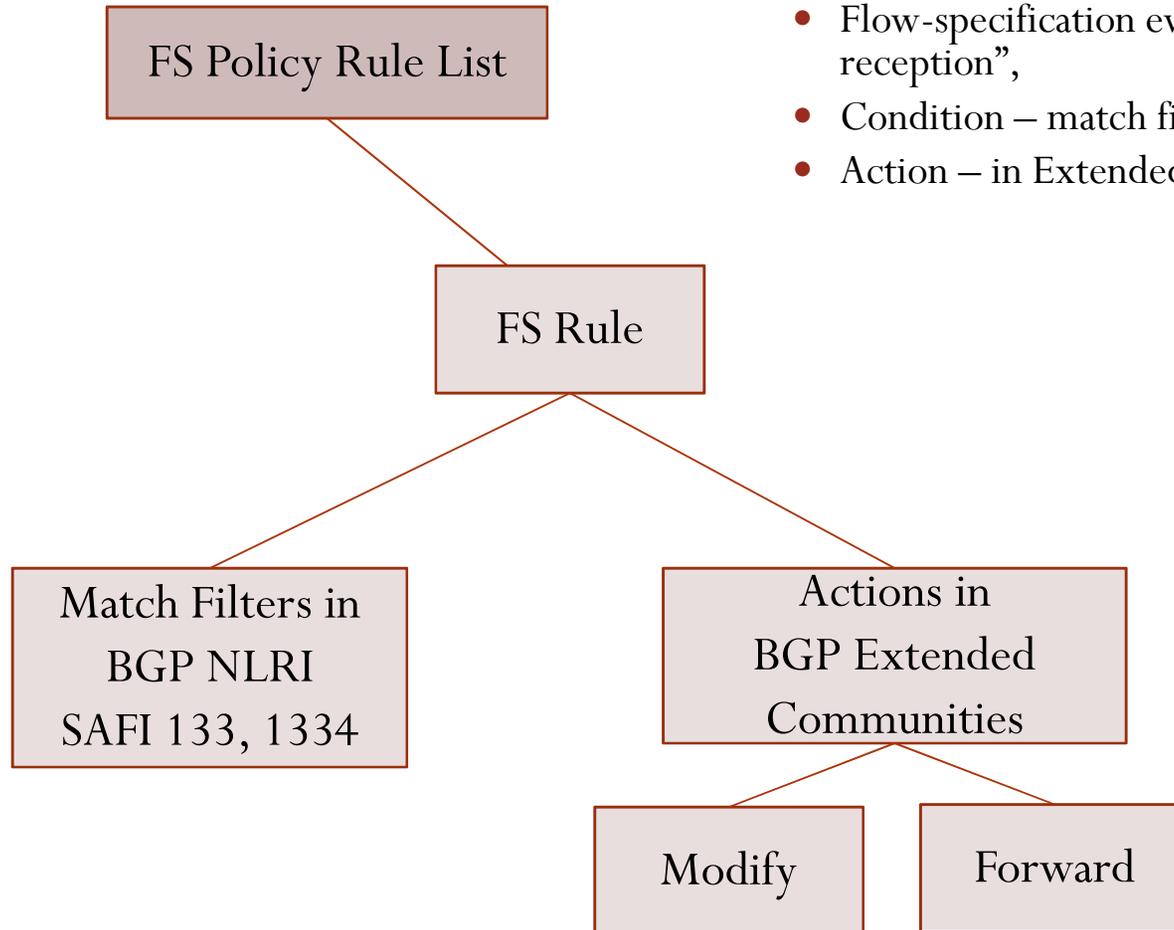
## Problems with RFC5575

- No user-based ordering for filters or actions
- Security could be
  - Added to by BGPSEC or ROA
  - Could be lessened within a single AS [draft-ietf-idr-flowspec-oid]

# Flow Specification Policy

- **ECA = Event –Condition - Action**

- Flow-specification event = “packet reception”,
- Condition – match filters in NLRI
- Action – in Extended communities



# New filter match with order

```
+-----+
|length (2 octets)      |
+-----+
| sub-TLVs (variable)  |
| +=====+           |
| | order (2 octets)   | |
| +-----+           | |
| | type (2 octets)    | |
| +-----+           | |
| | length (2 octets)  | |
| +-----+           | |
| | value (variable)   | |
| |[multiples of      | |
| | 2 octets]          | |
| +=====+           |
+-----+
```

Figure 16 - NRLI revision

# New Action atom for BGP Wide Communities

```
+-----+
| order (2 octets)      |
+-----+
| Action type (2 octets) |
+-----+
| Action length (2 octets) |
+-----+
| Action Values (variable) |
| (multiples of 2 octets) |
+-----+
```

Wide Community Atom

figure 17

# BGP-FS Atom added to

Wide Communities container (type 1) or

BGP Flow Specification container (type 2) (see below)

## BGP-FS Container type 2

```
+-----+
| Source AS Number (4 octets) |
+-----+
| list of atoms (variable)   |
+-----+
```