Two Ideas for RFC5575bis

draft-hares-idr-rfc5575bis-01.txt

Draft-hr-idr-5575bis-00.txt

Why drafts

- Adopted BGP-FS drafts for Version 1
  - Desire to have RFC5575bis that aligns
- 2 issues
  - Conflicting actions (IP redirect, Path Redirect) Requires ordering
  - Desired upgrades to security
    - draft-ietf-idr-flowspec-oid, ROA, BGP-SPEC
- 2 ideas:
  - Rules for conflicting actions
  - Filters based on bit mask

Idea 1 – 3 Traffic Rules + Editorial

- 3 traffic actions may interact for: Redirect actions, Traffic rate actions, Encapsulation
- Rules to handle
  1. All redirect actions are mutually exclusive. Presence of more than one results in no redirect
  2. If multiple rate actions are present, these are applied in ascending order of the sub-type.
  3. Some actions are unique, and may operate independently. For example, an MPLS push/pop action is unique.

Idea 1 – Requirements on Authors

- Authors of flow specification drafts must specify:
  - whether it is a redirect or rate action,
  - whether the action is unique or if it interferes with other actions,
- * If the action interferes with other actions, the handling must be specified if both the action and other interfering actions exist are associated with a Flow specification NLRI.

Idea 2

- Idea 1 + Add bit filter to RFC5575

Type 13 - Bit-Mask Filter

- Encoding: <type (1 octet), length (1 octet), value> where "value" is one or more tuples:
  - Length
  - Offset in packet
  - Bit field pattern (1-1024)

Choices

- Choose
  - Just Rules
  - New Bit Mask filter
  - Editorial style
- Previous authors
  - If agree with approach, choose co-author
  - I do not, choose