# draft-litkowski-idr-flowspec-interfaceset-02
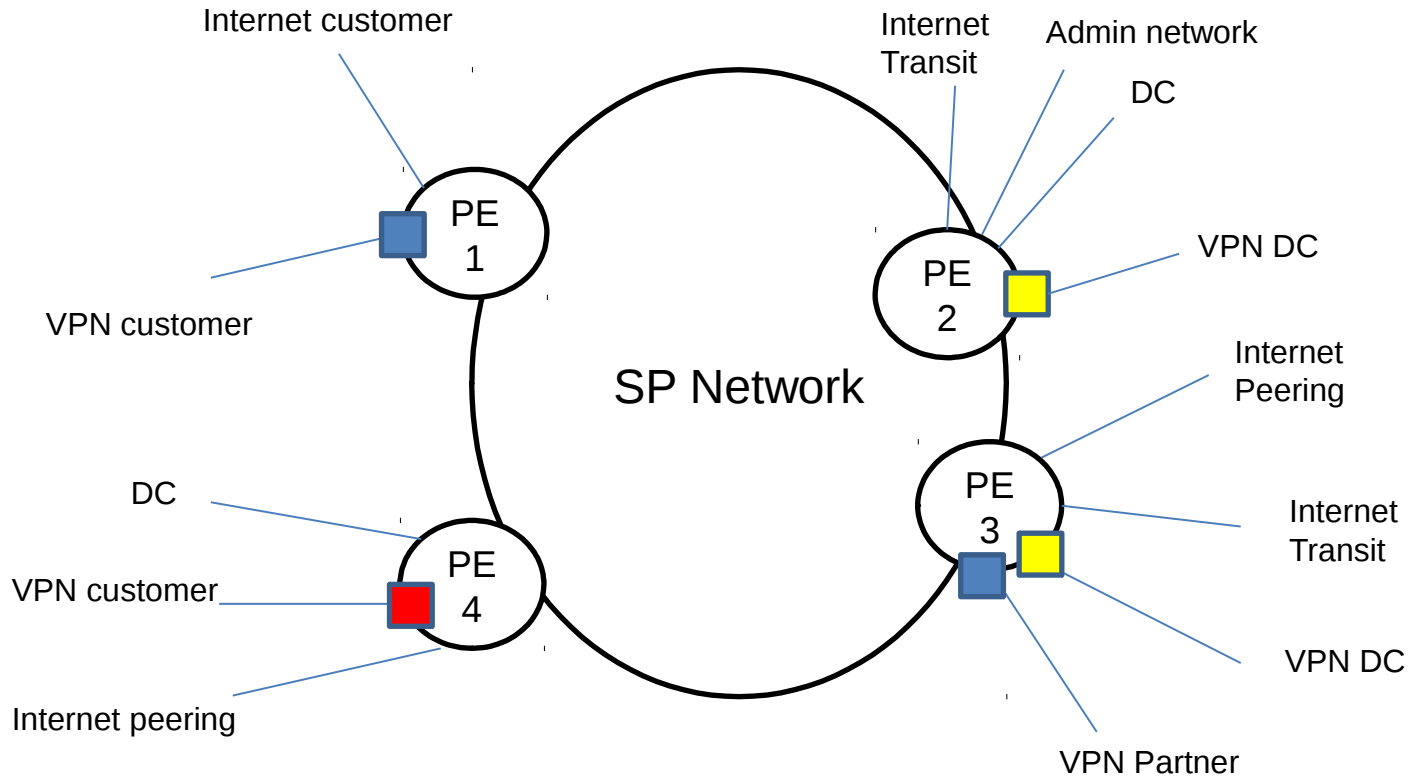
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# Problem statement



Internet customer

Internet Transit

Admin network

DC

PE 1

VPN DC

PE 2

VPN customer

SP Network

Internet Peering

DC

PE 3

VPN customer

PE 4

Internet Transit

Internet peering

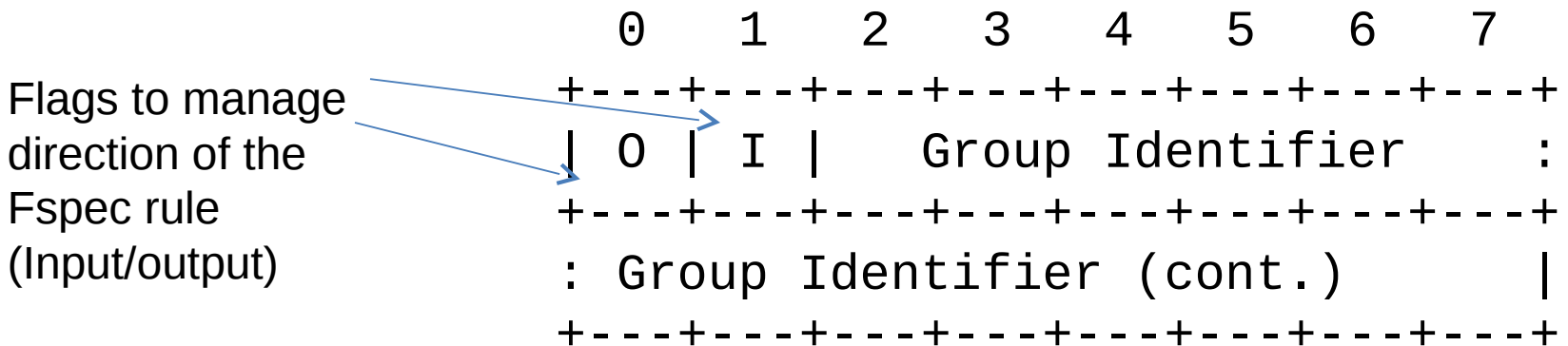VPN DC

VPN Partner

Multiple outside connections in the network

How to deploy <u>specific Flowspec rules</u> on a <u>specific set of interfaces ?</u>

# interface-set extended community

- Transitive 4-B AS-specific extended community
  - Global admin : ASN of the originating router

  - Local admin :

```
                0   1   2   3   4   5   6   7
              +---+---+---+---+---+---+---+---+
Flags to manage
direction of the  | O | I |    Group Identifier    :
Fspec rule        +---+---+---+---+---+---+---+---+
(Input/output)    : Group Identifier (cont.)       |
              +---+---+---+---+---+---+---+---+
```

- Multiple interface-set on the same Fspec NLRI means « match-any »

# WG discussions

- new NLRI instead vs EXTCT usage :
  - New NLRI may bring complexity in filtering at AS boundary (there is a high chance for intf groups to be local to an AS)
  - Use of EXTCT requires ADDPATH in some cases which is acceptable

- AS4Bytes extct vs RT :
  - We may need to define a transitive and non transitive version (to allow for better interAS management)
  - RT would allow for constrained route distribution
  - Reuse concepts described in MDCS draft ? (include/exclude RTs)
  - Do we define a new RT type ? (as for ES-Import) => we need to encode direction

# Next steps …

- Feedbacks expressed on the list shows that this extension is useful

- Need to reach consensus on encoding

- Update the draft accordingly