Flowspec Indirection-id Redirect for SRv6

draft-ietf0-idr-srv6-flowspec-path-redirect-00

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FlowSpec Redirect to indirection-id Extended Community

➢ defined in draft-ietf-idr-flowspec-path-redirect for IPv4 as follows:

```
 0                   1                   2                   3
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|  Type (0x09)   |Sub-Type (0x00)| Flags(1 octet)|    ID-Type    |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                Generalized indirection_id (4 octets)          |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

➢ Define a new sub-type for SRv6:

```
 0                   1                   2                   3
 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|  Type (0x09)   |Sub-Type (0x01)| Flags(1 octet)|    ID-Type    |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                Generalized indirection_id (16 octets)         |
~                                                               ~
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

Where :
- ✓ Type and Flags are the same as before
- ✓ Sub-Type is a new value TBD (0x01?)
- ✓ Indirection ID is 16 bytes instead of 4
- ✓ ID-Type for SRv6

ID-Type for SRv6

ID-Type :

- ✓ 6 - Node ID with SID/index in SRv6 (indirection-id is mapped to an SRv6 SID using the indirection-id as global SRv6 SID/index)
- ✓ 7 - Binding SID with SID/index in SRv6 (indirection-id is mapped to an SRv6 binding SID using the indirection-id as index for global offset in the SID space)
- ✓ 8 - Binding SID with SID/index in SRv6 (indirection-id is mapped to an SRv6 binding SID using indirection-id as global SRv6 SID)

Next Step

Request for adoption