

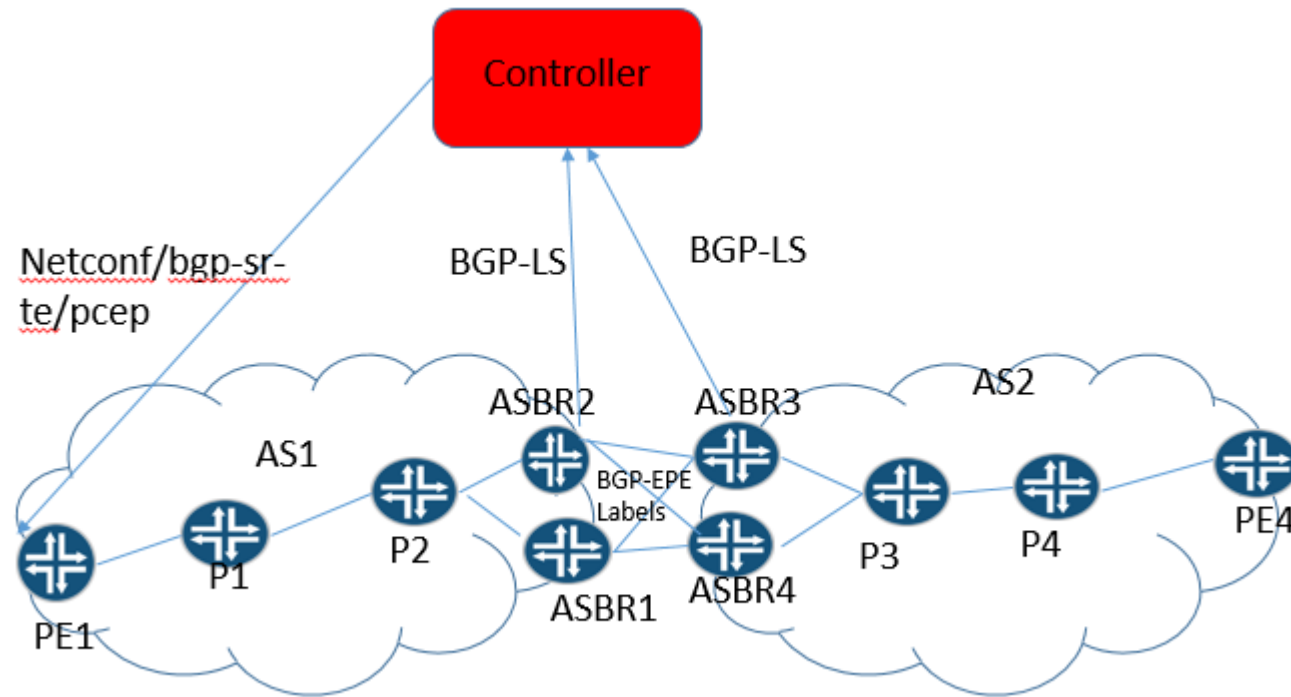
draft-hegde-mpls-spring-epe-oam

Shraddha Hegde

Kapil Arora

IETF-103

EPE Usecase



- draft-ietf-spring-segment-routing-central-epe defines SIDs for egress link selection
- New SID types
 - > BGP Peer node-SID
 - > BGP-Peer Adj-SID
 - > BGP- Peer set SID
- OAM Requirements
 - > Validate control plane/data plane
- Many cases the different ASes belong to same operator
 - > Cross AS fault localization is useful
- In case of diverse ownership, cross-AS OAM may not be desired

Target FEC stack definitions FOR EPE-SIDs

2.1. PeerNodeSID/PeerAdjSID

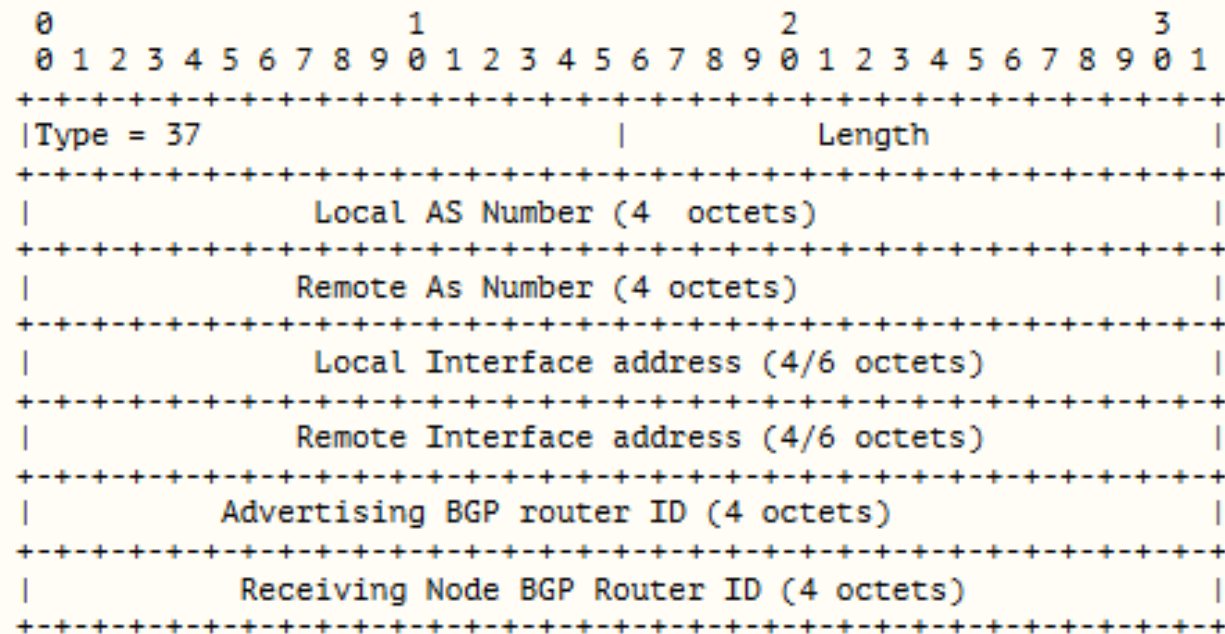


Figure 1: Peer Node/Adj Segment ID Sub TLV

Type: 37 (TBD)

Length: variable based on ipv4/ipv6 interface address

AS Number: 4 octet unsigned integer representing the AS number inside the Confederation. [RFC5065]

Interface Address: BGP session IPv4/IPv6 local/remote

BGP Router ID: 4 octet unsigned integer representing the BGP Router Identifier as defined in [RFC4271] and [RFC6286].

Peer Set SID

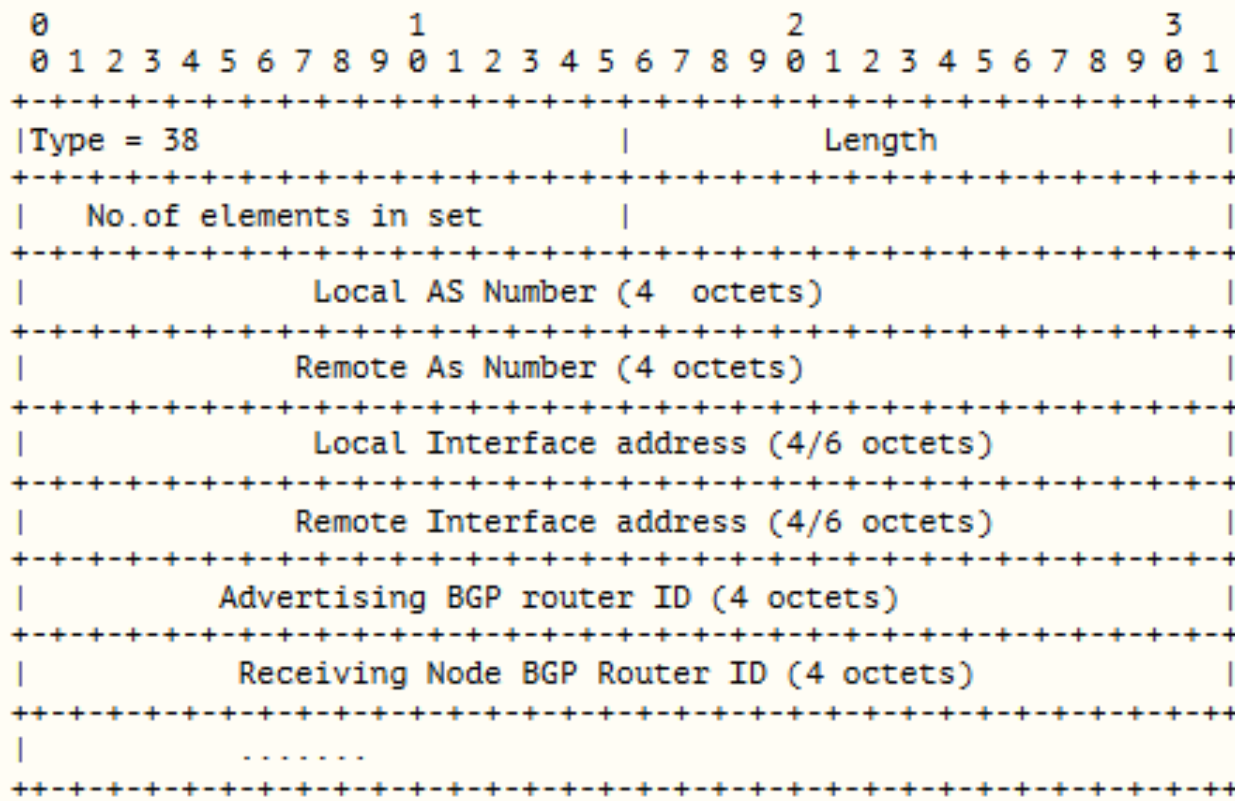


Figure 2: Peer set SID Segment ID Sub TLV

Type : 38 (TBD)

Length : variable based on ipv4/ipv6 interface address

No.of elements in set : Number of links in the set

AS Number : 4 octet unsigned integer representing the AS Number inside the Confederation.[RFC5065]

Interface Address : BGP session IPv4/IPv6 local/remote address

BGP Router ID : 4 octet unsigned integer representing the BGP Router Identifier as defined in [RFC4271] and [RFC6286]

Procedures for validation

- Local configuration to allow cross-AS validation
 - > Procedures same as defined in RFC 8287
- Local configuration disallows cross-AS validation
 - > The ASBR of the local AS validates the target FEC and sets return code as “egress”

Next steps

- Request Feedback from WG
- WG adoption?