

IS-IS and OSPF extensions for BIER-TE (Tree Engineering for Bit Index Explicit Replication) with MPLS and non-MPLS Encapsulation draft-zwx-bier-te-extensions-02

BIER WG

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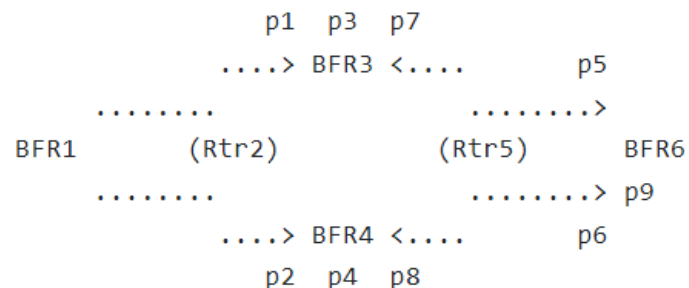
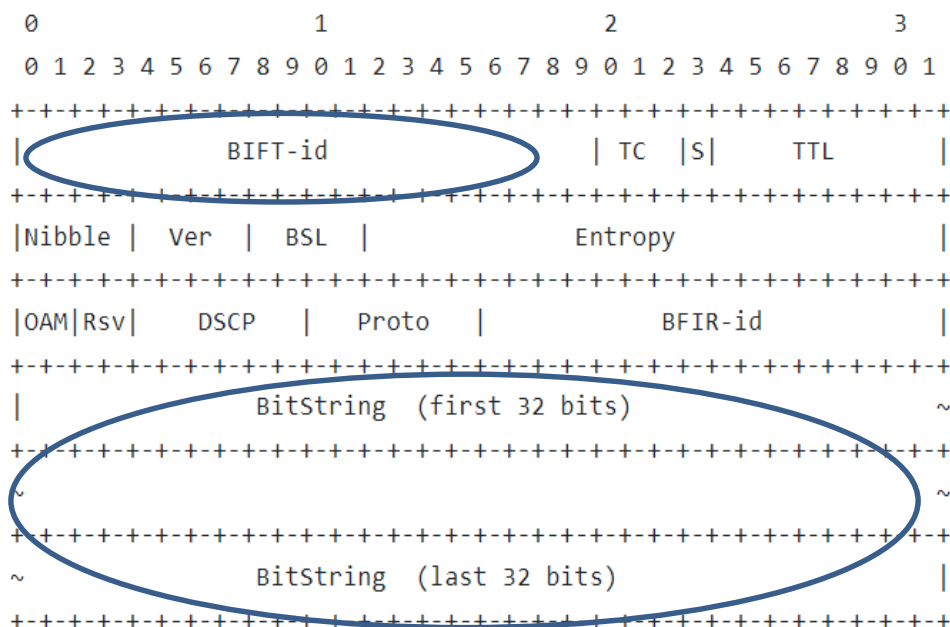
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BIER-TE (RFC9262) / RBS (draft-eckert-bier-rbs)



(simplified) BIER-TE Bit Index Forwarding Tables (BIFT):

```

BFR1:  p1 -> forward_routed() to BFR3
        p2 -> forward_routed() to BFR4

BFR3:  p3 -> local_decap()
        p5 -> forward_routed() to BFR6

```

- BIER-TE and RBS use link BitPosition to indicate the adjacency. The link BP is encapsulated in the BitString of BIER-TE/RBS packet.
- The BIFT-id is allocated per SD:BSL.
- Same as BIER forwarding, the BIFT-id is used for BIFT location.
- The BIFT-id can be allocated by Controller (BIER-TE YANG), or distributed by IGP protocols.

BIFT-id signaling

- If the BIFT-id is advertised as sub-tlv of link BP, too may duplicated BIFT-ids are advertised because many link BPs use a same BIFT-id.
- The BIFT-id is advertised as sub-tlv associated with BIER-info sub-tlv, like the advertisement for BIER.
- The advertisement of IS-IS, OSPF and OSPFv3 are similar.
- The signaling includes mpls and non-mpls encapsulation.

- Any comments 😊
- Thanks!