YANG Data model for BIER
draft-ietf-bier-bier-yang-04

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What's about the latest version?

- Add the ethernet and ipv6 encapsulation type.
- Change the igp-type to underlay-protocol-type to allow BGP.
- Add ipa and bar in the sub-domain.
- Change the bier-mpls-label-range-size to max si
.

Data Configure Tree Structure

```
module: ietf-bier
augment /rt:routing:
   +--rw bier
   |   +--rw bier-global
   |       +--rw encapsulation-type?         identityref
   |       +--rw bitstringlength?            bsl
   |       +--rw bfr-id?                     bfr-id
   |       +--rw ipv4-bfr-prefix?            inet:ipv4-prefix
   |       +--rw ipv6-bfr-prefix?            inet:ipv6-prefix
   |       +--rw sub-domain* [sub-domain-id]
   |           +--rw sub-domain-id            sub-domain-id
   |           +--rw underlay-protocol-type?  underlay-protocol-type
   |           +--rw mt-id?                    mt-id
   |           +--rw bfr-id?                   bfr-id
   |           +--rw bitstringlength?          bsl
   |           +--rw igp-algorithm?            ipa
   |           +--rw bier-algorithm?           bar
   |           +--rw af
   |               +--rw ipv4* [bitstringlength bier-mpls-label-base]
   |               |   +--rw bitstringlength            uint16
   |               |   +--rw bier-mpls-label-base       rt-types:mpls-label
   |               |   +--rw max-si?                    max-si
   |               +--rw ipv6* [bitstringlength bier-mpls-label-base]
   |
   |                   +--rw bitstrin+--glength       uint16
   |                   +--rw bier-mpls-label-base      rt-types:mpls-label
   |                   +--rw max-si?                   max-si
```

Control Plane Configuration

- Protocol extensions:

```
augment /rt:routing/rt:control-plane-protocols/rt:control-plane-protocol/ospf:ospf:
 +--rw bier-ospf-cfg
    +--rw mt-id          mt-id
    +--rw bier-global
       +--rw enable?      boolean
       +--rw advertise?   boolean
       +--rw receive?     boolean

augment /rt:routing/rt:control-plane-protocols/rt:control-plane-protocol/isis:isis:
 +--rw bier-isis-cfg
    +--rw mt-id          mt-id
    +--rw bier-global
       +--rw enable?      boolean
       +--rw advertise?   boolean
       +--rw receive?     boolean
```

Operational State Structure

```
+--ro bier-state
   +---bier-global-state
   |     +--ro encapsulation-type?    identityref
   |     +--ro bitstringlength?       bsl
   |     +--ro bfr-id?                bfr-id
   |     +--ro ipv4-bfr-prefix?       inet:ipv4-prefix
   |     +--ro ipv6-bfr-prefix?       inet:ipv6-prefix
   |     +--ro sub-domain* [sub-domain-id]
   |     +--ro sub-domain-id          sub-domain-id
   |     +--ro underlay-protocol-type  underlay-protocol-type
   |     +--ro mt-id?                 mt-id
   |     +--ro bfr-id?                bfr-id
   |     +--rw bitstringlength?       bsl
   |        +--rw igp-algorithm?         ipa
   |     +--rw bier-algorithm?        bar
   |     +--ro ipv4* [bitstringlength bier-mpls-label-base]
   |     |   +--ro bitstringlength               uint16
   |     |   +--ro bier-mpls-label-base          rt-types:mpls-label
   |     |   +--ro max-si?                       max-si
   |     +--ro ipv6* [bitstringlength bier-mpls-label-base]
   |         +--ro bitstringlength               uint16
   |         +--ro bier-mpls-label-base          rt-types:mpls-label
   |         +--ro max-si?                       max-si
   +--ro birts-state
      +--ro birt* [sub-domain-id]
         +--ro sub-domain-id          sub-domain-id
         +--ro birt-bitstringlength* [bitstringlength]
            +--ro bitstringlength    uint16
            +--ro birt-si* [si]
               +--ro si                     si
               +--ro f-bm?                  uint16
               +--ro bier-mpls-in-label?    rt-types:mpls-label
               +--ro bfr-nbr?               inet:ip-address
               +--ro bier-mpls-out-label?   rt-types:mpls-label
```

Notifications

```
notifications:
   +---n bfr-id-collision
   |  +--ro bfr-id?    bfr-id
   +---n bfr-zero
   |  +--ro ipv4-bfr-prefix?   inet:ipv4-prefix
   |  +--ro ipv6-bfr-prefix?   inet:ipv6-prefix
   +---n sub-domain-id-collision
      +--ro sub-domain-id?   sub-domain-id
      +--ro mt-id?           uint16
```

Next Step

- Comments welcome.
- Seeking for Workgroup last call.

Thanks!

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