BIER TE YANG

draft-zhang-bier-te-yang-01

BIER WG

IETF95# Buenos Aires

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BIER TE YANG

• According to draft-eckert-bier-te-arch

• Defines a YANG data model for BIER TE configuration and operation
BIER TE YANG

• BIER TE YANG is parallel with BIER YANG.
• Some common information is needed for BIER YANG and BIER TE YANG, such as sub-domain, BitStringLength, and so on.
• The combination YANG models may like this:

```
augment /rt: routing:
    + --rw bier-common
    ...... 
    + --rw bier
    ...... 
    + --rw bier-te 
    ...... 
```
Because the BitPosition is multi-semantic in different sub-domain and set identifier. The BIER TE forwarding is according to sub-domain.

The key characters of BIER TE are: ID of adjacency, bitstringlength, ecmp path and FRR item.

```yaml
module: ietf-bier-te
augment /rt:routing:
  +-rw bier-te-config
    +-rw te-subdomain* [subdomain-id]
    |  +-rw subdomain-id  sub-domain-id
    |  +-rw adj-id* [adjID]
    |     ...
    |  +-rw te-bsl* [fwd-bsl]
    |     ...
    +-rw ecmp-path* [index]
         ...
    +-rw btaft* [adj-index]
         ...
```
BIER TE YANG---detail

module: ietf-bier-te
augment /rt:routing:
  +--rw bier-te-config
    +--rw te-subdomain* [subdomain-id]
      +--rw subdomain-id  sub-domain-id
      +--rw adj-id* [adjID]
    | +--rw adjID    adjid
    | +--rw adj-if   uint32
    | +--rw (te-adjID-type)
    |   +--:(p2p)
    |   +--:(bfer)
    |   +--:(leaf-bfer)
    |   +--:(lan)
    |   +--:(spoke)
    |   +--:(ring-clockwise)
    |   +--:(ring-counterclockwise)
    |   +--:(ecmp)
    |   +--:(virtual-link)
    |   +--:(other)

• The adjacency ID type describes the ID allocation method.
• The TE adjacency type describes the character of link.
• The ECMP and FRR will be an important part of TE forwarding.
BIER TE YANG---notification and RPC

notifications:

+---n bier-te-notification
   +---ro adjID-is-zero* [if-index]
      +---ro if-index  uint32
      +---ro (te-adjID-type)
         +---:(p2p)
         +---:(bfer)
         +---:(leaf-bfer)
         +---:(lan)
         +---:(spoke)
         +---:(ring-clockwise)
         +---:(ring-counterclockwise)
         +---:(ecmp)
         +---:(virtual-link)
         +---:(other)

   • It is invalid when the adjacency ID is set to zero.
   • Other notifications may be done in the future.

The potential RPCs will be added in future version.
• Any comments are welcome 😊
Thanks!