RIFT YANG

- This data model is defined according to [draft-ietf-rift-rift].

- This model includes protocol configuration, state information, some notifications. Some features are added to enhance protocol.

- Acknowledgement to Bruno Rijsman, Tony Przygienda for their detailed review and comments.
RIFT YANG update 01 version

- Editorial modification according to RFC8407.
- YANG model updates according implementation experience.
- The 01 version is not the final version. It'll be updated again in a few days.
RIFT configuration

module: ietf-rift
augment /rt:routing/rt:control-plane-protocols/rt:control-plane-protocol:
  +--rw rift!
    +--rw node* [name]
      +--rw name                string
      +--rw system-id           system-id
      +--rw pod?                uint32
      +--rw configured-level?   level
      +--rw overload?           boolean
      +--rw flood-reduction?    boolean
      +--rw nonce-increasing-interval?   uint16
      +--rw maximum-nonce-delta? uint8 {nonce-delta-adjust}?
      +--rw rx-lie-multicast-address
        |  +--rw ipv4?   inet:ipv4-address
        |  +--rw ipv6?   inet:ipv6-address
      +--rw tx-lie-multicast-address
        |  +--rw ipv4?   inet:ipv4-address
        |  +--rw ipv6?   inet:ipv6-address
      +--rw lie-tx-port?         inet:port-number
      +--rw global-link-capabilities
        |  +--rw bfd?           boolean
        |  +--rw v4-forwarding-capable?   boolean
      +--rw rx-flood-port?       inet:port-number
      +--rw holdtime?            rt-types:timer-value-seconds16
      +--rw tide-generation-interval?   rt-types:timer-value-seconds16
      +--rw tie-security-key-id?  uint32
        ......

- Multiple RIFT instances supported
- Keys to the nodes: name, system-id, level, etc.
- Configurable variables: pod, level, flood-reduction, link-capabilities, timers, security items, etc.
- Especial configuration: different multicast address or port can be used for different instances, etc.

......
  +--rw interface* [name]
    |  +--rw name               if:interface-ref
    |  +--rw cost?              uint32
    |  +--rw advertised-source-addresses
    |    |  +--rw ipv4?    inet:ipv4-address
    |    |  +--rw ipv6?    inet:ipv6-address
    |  +--rw rx-flood-port?     inet:port-number
    |  +--rw holdtime?          rt-types:timer-value-seconds16
    +--rw instance-label?      uint32
RIFT state

module: ietf-rift
augment /rt:routing/rt:control-plane-protocols/rt:control-plane-protocol:
  +--rw rift!
  +--rw node* [name]
      +--rw name string
      +--ro level? level
      +--ro protocol-minor-version uint16
      +--ro hierarchy-indications? enumeration
      +--rw interface* [name]
          ......
          | +--ro state enumeration
          | +--ro neighbor
              ......
              +--ro miscabled-links* linkid-type
              +--ro hal? level
              +--ro database
              | +--ro ties* [direction-type originator tie-type tie-number]
              ......
      +--ro kv-store
      ......

Except all the read-write nodes, there are many
nodes that can only be read, such as the level
and version of the node, state, neighbor,
database, etc.
RIFT notification

Unexpected TIE and neighbor's error should be notified.
• Any comments welcomed 😊

Thanks!