

A YANG Data Model for Static Route

draft-liang-rtgwg-staticrt-yang-cfg-00

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Background Introduction

- This draft defines a YANG data model that can be used to configure and manage the static route, and it include the following functions:
 - The basic model of static route.
 - The model of extension
 - FRR
 - BFD
 - etc

Design of Data Model

```
module: ietf-staticrt
  +--rw staticrt
    +--rw staticrt-cfg
      +--rw staticrt-topo* [VRF-name address-family topo-name]
        +--rw topo-name          string
        +--rw VRF-name           string
        +--rw address-family     identityref
        +--rw enable-FRR?       boolean
        +--rw staticrt-entries* [ip-prefix ip-prefix-mask output-i
          +--rw ip-prefix          inet:ip-address
          +--rw ip-prefix-mask     inet:ip-address
          .....
    +--ro staticrt-state
      +--ro staticrt-rib
        +--ro staticrt-route*
          .....
      +--ro staticrt-statistics
        +--ro staticrt-stats*
          +--ro topo-name?        string
          +--ro VRF-name?         string
          +--ro address-family?   string
          +--ro static-route-stats*
            .....
    +--rw BFD-paras-cfg
      .....
```

- Staticrt-cfg: The configuration of static route.
- Identified by VRF-name, Address Family, Topo Name, IP Prefix/Mask, Outgoing interface and nexthop.
- The basic parameter: Cost, Tag, Distance(Preference), etc.
- Some extensions: FRR support, BFD support.
- Staticrt-state.
- Staticrt-statistics.
- BFD-paras-cfg.

Next Steps

- Update for abstraction of basic static route.
- Update base on the DEVICE-MODEL and ROUTING-CFG model.
- Looking for cooperation.
- Welcome more comments.