Yang Model for GRE

draft-zheng-intarea-gre-yang-00

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Motivation

- Defines the data model for GRE configuration and management

- YANG represents a very popular choice for configuration and management

What's addressed in rev-00

- Defines Yang data model based on RFC 2784

- Defines Yang data model based on RFC 2890 (Key and Sequence Number)

- Defines Yang data model based on RFC 7676 (IPv6) and RFC 7588 (MTU)

What is not addressed in rev-00

- Vendor proprietary features (not in scope, could be supported by augment)

- State information (will be added in rev-01)…

Yang Model

- Support delivery protocol configuration

- Support Path MTU enable/disable

- Support fragmentation enable/disable

- Support checksum enable/disable

- Support key enable/disable and key value configuration

- Support sequence number enable/disable

Data Hierarchy

```
module: ietf-gre
   +--rw gre-tunnel
      +--rw gre-tunnel* [tunnel-name]
         +--rw tunnel-name                  string
         +--rw (delivery-protocol)?
         |  +--:(ipv4)
         |  |  +--rw source-ipv4-address?      inet:ipv4-address
         |  |  +--rw dest-ipv4-address?        inet:ipv4-address
         |  +--:(ipv6)
         |     +--rw source-ipv6-address?      inet:ipv6-address
         |     +--rw dest-ipv6-address?        inet:ipv6-address
         +--rw pmtud-enable?              boolean
         +--rw fragmentation-enable?      boolean
         +--rw checksum-enable?           boolean
         +--rw key-enable?               boolean
         +--rw key?                      uint32
         +--rw sequence-number-enable?    boolean
```

Next Steps

- Get comments and seek contributions & collaborations

- Eventual WG adoption