A YANG Model for Network and VPN Service Performance Monitoring

draft-ietf-opsawg-yang-vpn-service-pm-01

OPSAWG WG
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Bo Wu (presenting on behalf the authors)
Background

• WG adoption in IETF 110
• The draft proposes a performance monitoring module that can work with service, such as Layer 3 VPN and Layer 2 VPN, or network models to monitor network performance or Service Level Agreements (SLA).

Figure 1: Reference Architecture
Updates Summary

• Addressed issues:
  • https://github.com/IETF-OPSAWG-WG/lxnm/issues?q=is%3Aissue+is%3Aclosed+label%3Aservice-pm

• Mainly resolves the issues on the WG adoption from the mailing list:
  • Revise the YANG model, and add a container of L2VPN MAC entry counter and a leaf of “pm-source” to indicate the source of PM metrics
  • Use definitions of ietf-opsawg-vpn-common, and add it as a normative reference
  • Add an example of how percentile is used in the appendix
**YANG model updates**

- Add a container of "mac-num" for L2VPN counters
- Add a leaf of "pm-source" for OAM protocol used or other possible performance monitoring source

```yang
augment /nw:networks/nw:network/nw:node:
  +--rw pm-attributes
    +--rw node-type? identityref
    +--rw role? identityref
    +--ro vpn-summary-statistics
      +--ro ipv4
        | +--ro maximum-routes? uint32
        | +--ro total-active-routes? uint32
        +--ro ipv6
          | +--ro maximum-routes? uint32
          | +--ro total-active-routes? uint32
      +--ro mac-num
        +--ro mac-num-limit? uint32
        +--ro total-active-mac-num? uint32
```

```yang
augment /nw:networks/nw:network/nt:link:
  +--rw pm-attributes
    +--rw low-percentile? percentile
    +--rw middle-percentile? percentile
    +--rw high-percentile? percentile
    +--ro pm-source? string
    +--ro reference-time? yang:date-and-time
    +--ro measurement-interval? uint32
    +--ro pm-statistics
      ...........
  +--ro protocol-type? identityref
```
Next Step

• Work with Lxnm DT
• Solicit more comments and reviews from WG
Backup