A YANG Model for Network and VPN Service Performance Monitoring

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

OPSAWG WG

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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).

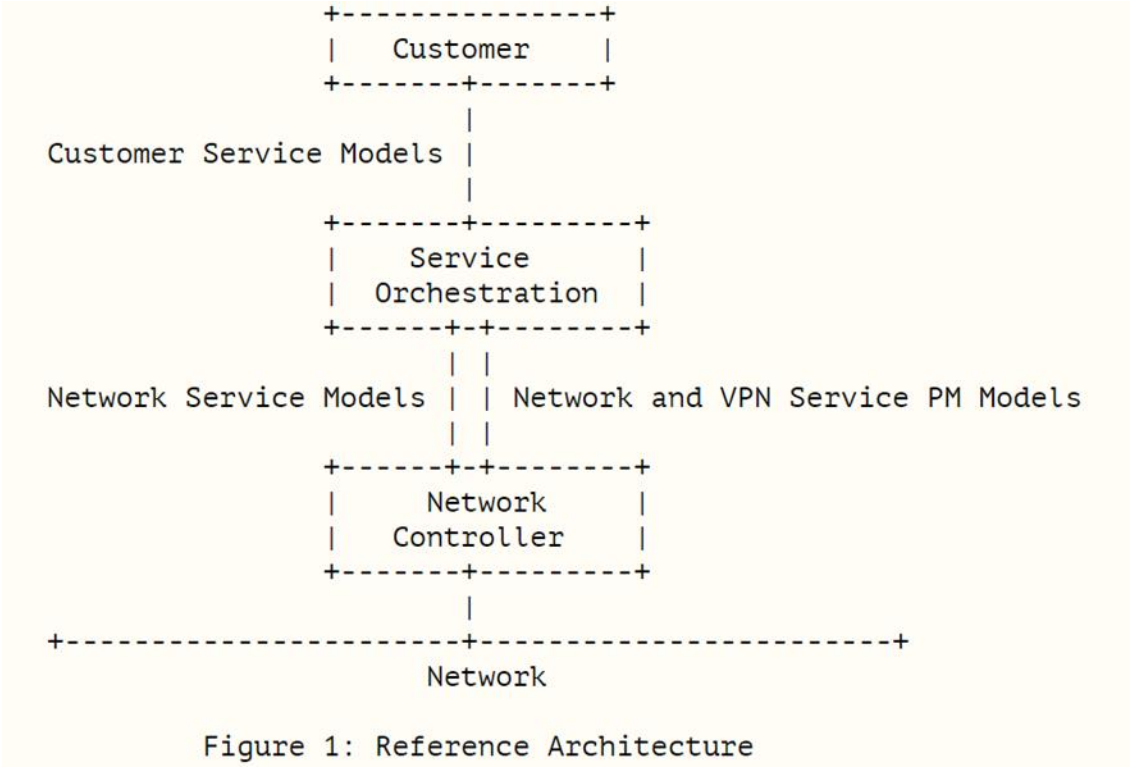

Figure 1: Reference Architecture

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

```
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
```

```
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