Base YANG Data Model for NVO3 Protocols

draft-ietf-nvo3-yang-cfg-01.txt

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Introduction

• Motivation
  • To fill in the gap of the IETF NVO3 YANG
  • A base YANG that is common and reusable for NVO3 technologies, e.g. VXLAN, NVGRE, GENEVE, VXLAN-GPE, etc.
  • Compliant to the NVO3 architecture

• Current Status
  • Working group document since Sept. 27, 2019
  • Version 00: upload as a WG document
  • Version 01: cleaning some grammar errors
Overview of NVO3 base YANG

BGP control plane enabler

Peer NVEs configured statically

Multicast service node (RFC8293)

Multicast group per VNI basis

Statistic per VNI basis

Name of the NVE interface to which the vni-instance is attached

```
module: ietf-nvo3-base
  +++-rw nvo3
    +++-rw vni-instances
      +++-rw vni-instance* [vni-id]
        +++-rw vni-id uint32
        +++-rw vni-mode enumeration
        +++-rw source-vni if:interface-ref
        +++-rw protocol-bgp? boolean
        +++-rw status? vni-status-types
          +++-rw static-ipv4-peers
            +++-rw static-peer* [peer-ip]
              +++-rw peer-ip inst:ipv4-address-no-zone
          +++-rw static-ipv6-peers
            +++-rw static-ipv6-peer* [peer-ip]
              +++-rw peer-ip inst:ipv6-address-no-zone
          +++-rw flood-proxies
            +++-rw flood-proxy* [peer-ip]
              +++-rw peer-ip inst:ipv4-address-no-zone
          +++-rw mcast-groups
            +++-rw mcast-group* [mcast-ip]
              +++-rw mcast-ip inst:ipv4-address-no-zone
        +++-rw statistic
```

NVE as an interface

```
augment /if:interfaces/if:interface:
  +++-rw nvo3-nve
    +++-rw nvo3-config
      +++-rw source-vtep-ip? inst:ipv4-address-no-zone
      +++-rw source-vtep-ip6? inst:ipv6-address-no-zone
      +++-rw bypass-vtep-ip? inst:ipv4-address-no-zone
      +++-rw statistics
```

Multiple vni-instances can be attached to the same NVE interface
YANG validator Result

• Errors
  • Keywords: Not at the right place, will update them in the version 02
  • ietf-bgp-l3vpn: Not an RFC yet, but we augmented it in NVO3 based YANG. The draft is expired for now
Next steps

• Will contact the ietf-bgp-l3vpn authors to verify if they will keep working on the draft. If not, we will have to decouple from it.

• Comments are always welcome