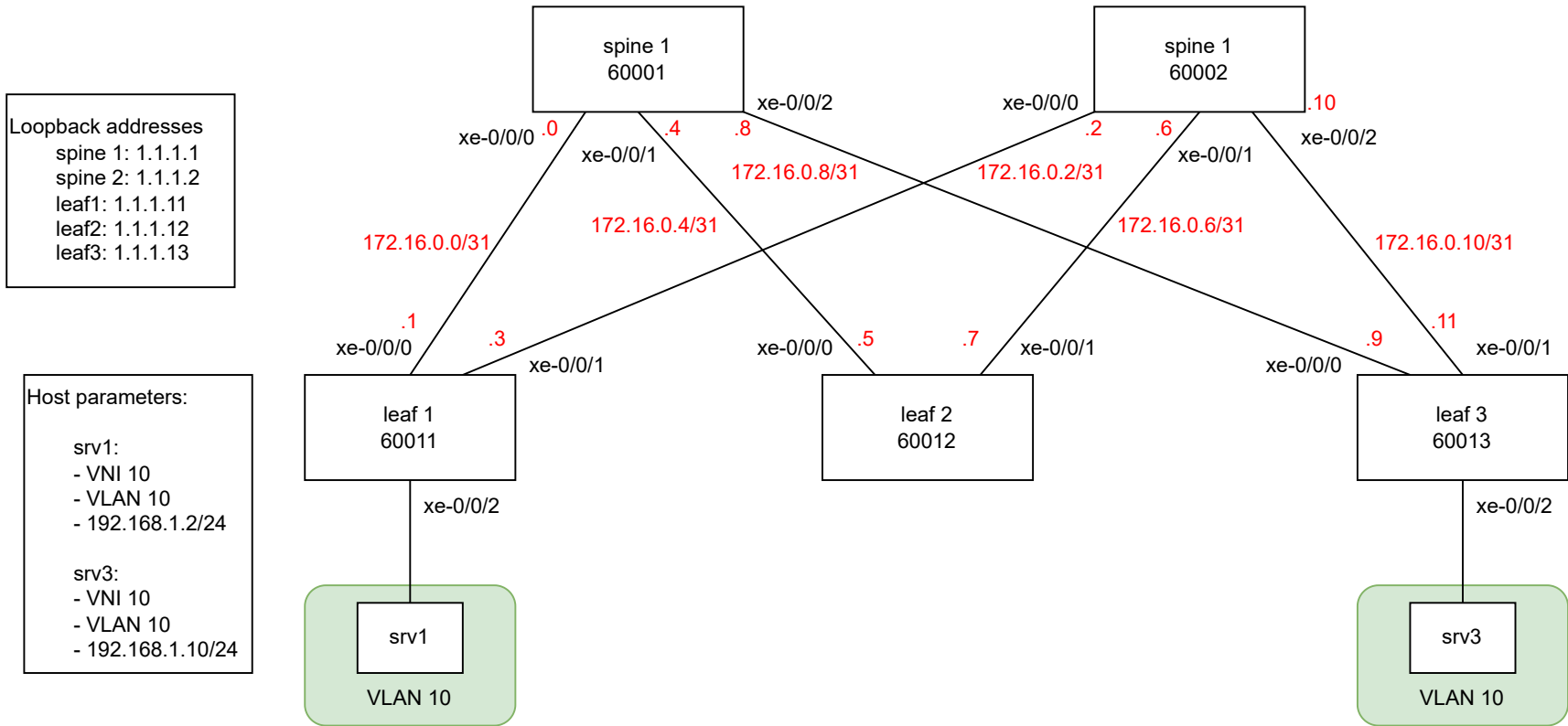


Sample EVPN-VXLAN Lab with Juniper vQFX

Underlay eBGP



Underlay configuration snippet

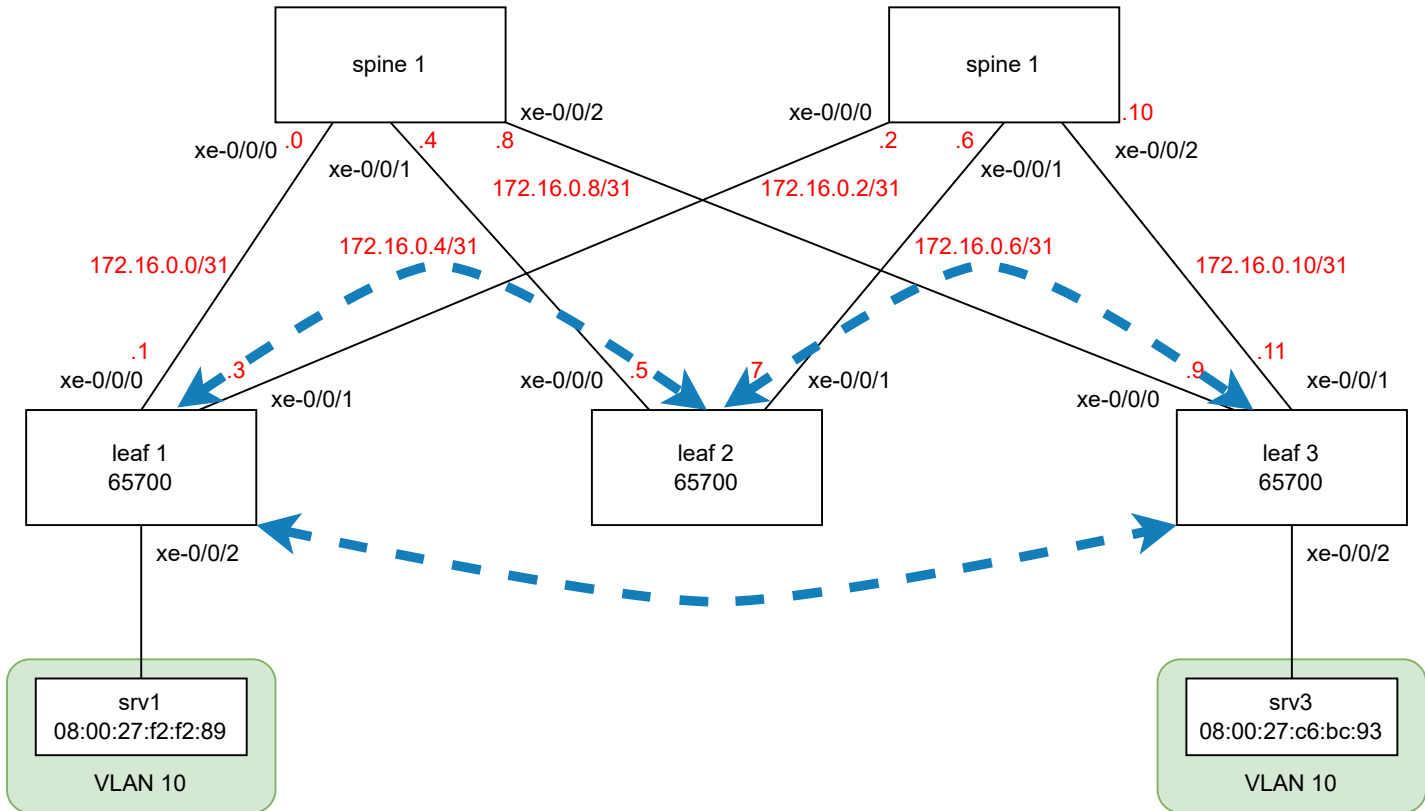
```
protocols {
  bgp {
    group underlay-ipfabric {
      type external;
      mtu-discovery;
      import bgp-ipclos-in;
      export bgp-ipclos-out;
      local-as 60013;
      multipath {
        multiple-as;
      }
      bfd-liveness-detection {
        minimum-interval 350;
        multiplier 3;
        session-mode automatic;
      }
      neighbor 172.16.0.8 {
        peer-as 60001;
      }
      neighbor 172.16.0.10 {
        peer-as 60002;
      }
    }
    log-updown;
    graceful-restart;
  }
  lldp {
    interface all;
  }
}
```

vagrant@leaf3> show route protocol bgp

inet.0: 15 destinations, 20 routes (15 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both

```
1.1.1.1/32    *[BGP/170] 00:13:39, localpref 100
              AS path: 60001 I, validation-state: unverified
              > to 172.16.0.8 via xe-0/0/0.0
[BGP/170] 00:13:39, localpref 100
              AS path: 60002 60011 60001 I, validation-state: unverified
              > to 172.16.0.10 via xe-0/0/1.0
1.1.1.2/32    *[BGP/170] 00:13:39, localpref 100
              AS path: 60002 I, validation-state: unverified
              > to 172.16.0.10 via xe-0/0/1.0
[BGP/170] 00:13:39, localpref 100
              AS path: 60001 60011 60002 I, validation-state: unverified
              > to 172.16.0.8 via xe-0/0/0.0
1.1.1.11/32   *[BGP/170] 00:13:39, localpref 100, from 172.16.0.8
              AS path: 60001 60011 I, validation-state: unverified
              > to 172.16.0.8 via xe-0/0/0.0
              > to 172.16.0.10 via xe-0/0/1.0
[BGP/170] 00:13:39, localpref 100
              AS path: 60002 60011 I, validation-state: unverified
              > to 172.16.0.10 via xe-0/0/1.0
1.1.1.12/32   *[BGP/170] 00:13:39, localpref 100, from 172.16.0.8
              AS path: 60001 60012 I, validation-state: unverified
              to 172.16.0.8 via xe-0/0/0.0
              > to 172.16.0.10 via xe-0/0/1.0
[BGP/170] 00:13:39, localpref 100
              AS path: 60002 60012 I, validation-state: unverified
              > to 172.16.0.10 via xe-0/0/1.0
192.168.2.0/24 *[BGP/170] 00:13:39, localpref 100, from 172.16.0.8
              AS path: 60001 60012 I, validation-state: unverified
              to 172.16.0.8 via xe-0/0/0.0
              > to 172.16.0.10 via xe-0/0/1.0
[BGP/170] 00:13:39, localpref 100
              AS path: 60002 60012 I, validation-state: unverified
              > to 172.16.0.10 via xe-0/0/1.0
```

Overlay iBGP



vagrant@leaf1> show bgp summary

Threading mode: BGP I/O

Groups: 2 Peers: 4 Down peers: 0

Table	Tot Paths	Act Paths	Suppressed	History	Damp	State	Pending
inet.0	8	8	0	0	0	0	
bgp.evpn.0	3	3	0	0	0	0	
Peer	AS	InPkt	OutPkt	OutQ	Flaps	Last Up/Dwn	State #Active/Received/Accepted/Damped...
1.1.1.12	65700	13	14	0	0	4:40	Establ
__default_evpn__	evpn.0: 0/0/0/0						
bgp.evpn.0	0/0/0/0						
default-switch.evpn.0	0/0/0/0						
1.1.1.13	65700	20	19	0	0	6:39	Establ
__default_evpn__	evpn.0: 0/0/0/0						
bgp.evpn.0	3/3/3/0						
default-switch.evpn.0	3/3/3/0						
172.16.0.0	60001	116	115	0	0	49:18	Establ
inet.0: 4/4/4/0							
172.16.0.2	60002	118	121	0	0	49:18	Establ
inet.0: 4/4/4/0							

vagrant@leaf1> show evpn database

Instance: default-switch

VLAN	DomainId	MAC address	Active source	Timestamp	IP address
10	08:00:27:c6:bc:93	1.1.1.13		Oct 19 14:34:12	192.168.1.10
10	08:00:27:f2:f2:89	xe-0/0/2.0		Oct 19 14:34:12	192.168.1.2

vagrant@leaf1> show ethernet-switching table

MAC flags (S - static MAC, D - dynamic MAC, L - locally learned, P - Persistent static
SE - statistics enabled, NM - non configured MAC, R - remote PE MAC, O - ovsdb MAC)

Ethernet switching table : 2 entries, 2 learned

Routing instance : default-switch

Vlan	MAC	MAC	Logical	Active
name	address	flags	interface	source
vlan10	08:00:27:c6:bc:93	D	vtep.32769	1.1.1.13
vlan10	08:00:27:f2:f2:89	D	xe-0/0/2.0	

Overlay configuration snippet

```
{
  group overlay {
    type internal;
    local-address 1.1.1.11;
    family evpn {
      signaling;
    }
    local-as 65700;
    multipath;
    neighbor 1.1.1.12;
    neighbor 1.1.1.13;
  }
}
```

VTEP, RD, VNI-VLAN mapping

```
switch-options {
  vtep-source-interface lo0.0;
  route-distinguisher 1.1.1.11:1;
  vrf-import LEAF-IN;
  vrf-target target:9999:9999;
}
vllans {
  vlan10 {
    vlan-id 10;
    vxlan {
      vni 10;
      ingress-node-replication;
    }
  }
}
```