

## EVPN Multihoming

EVPN with Multihoming is intended as a replacement for MC-LAG.

Customer Edge (CE) device connects to more than one Provider Edge (PE) devices. Multihoming ensures redundant connectivity. The redundant PE device ensures that there is no traffic disruption when there is a network link failure to one of PEs. It is a standards-based replacement for Multi-Chassis LAG (MC-LAG) in Data Centers (DC) deploying CLOS Network Topologies.

Multihoming with L2 EVPN

Topology:

mceclip0.png

Pre-configuration:

Remove INTERFACE and BGP\_NEIGHBORS from default config\_db.json.(refer to [Edgecore SONiC] FRRouting and config initialization). Users can ignore this step if the version is in the 202111 branch or above version 202012.3, as the factory default configurations are advanced.

Init FRR to split mode and modify the hostname.(refer to [Edgecore SONiC] FRRouting and config initialization). Users can ignore this step if the version is in the 202111 branch or above version 202012.3, as the factory default configurations are advanced.

Create PortChannel01 and add Ethernet0 as member on LEAF01 and LEAF02.(refer to [Edgecore SONiC] LAG (Link Aggregation)

Create VLAN100 on LEAF01, LEAF02 and LEAF03 as shown on above topology. Add VLAN100 "tagged" member to PortChannel1 on LEAF01 and LEAF02. Add VLAN 100 "untagged" member to Ethernet0 on LEAF03. (refer to [Edgecore SONiC] VLAN & Inter-VLAN Routing)

Config Loopback0 IP address on all switches as shown above topology. (refer to [Edgecore SONiC] Management and front port IPv4/IPv6 Address)

Expect result:

H1 establish LACP port channel properly with LEAF01 and LEAF02.

The communication between H1 & H2 is no problem though PortChannel and EVPN-VxLAN network.

Procedure:

Steps 1. Config IPv4 underlay networking with unnumbered(refer to [Enterprise SONiC] BGP Unnumbered) and announce the LOOPBACK0 host route.

LEAF01:

```
LEAF01# configure terminal
LEAF01(config)# router bgp 4210001
LEAF01(config-router)# bgp router-id 1.1.1.1
LEAF01(config-router)# no bgp ebgp-requires-policy
LEAF01(config-router)# bgp bestpath as-path multipath-relax
LEAF01(config-router)# neighbor Ethernet48 interface remote-as external
LEAF01(config-router)# neighbor Ethernet52 interface remote-as external
LEAF01(config-router)# address-family ipv4
LEAF01(config-router-af)# network 1.1.1.1/32
LEAF01(config-router-af)# end
LEAF01# exit
```

LEAF02:

```
LEAF02# configure terminal
LEAF02(config)# router bgp 4210002
LEAF02(config-router)# bgp router-id 2.2.2.2
LEAF02(config-router)# no bgp ebgp-requires-policy
LEAF02(config-router)# bgp bestpath as-path multipath-relax
LEAF02(config-router)# neighbor Ethernet48 interface remote-as external
```

```
LEAF02(config-router)# neighbor Ethernet52 interface remote-as external
LEAF02(config-router)# address-family ipv4
LEAF02(config-router-af)# network 2.2.2.2/32
LEAF02(config-router-af)# end
LEAF02# exit
```

LEAF03:

```
LEAF03# configure terminal
LEAF03(config)# router bgp 4210003
LEAF03(config-router)# bgp router-id 3.3.3.3
LEAF03(config-router)# no bgp ebgp-requires-policy
LEAF03(config-router)# bgp bestpath as-path multipath-relax
LEAF03(config-router)# neighbor Ethernet48 interface remote-as external
LEAF03(config-router)# neighbor Ethernet52 interface remote-as external
LEAF03(config-router)# address-family ipv4
LEAF03(config-router-af)# network 3.3.3.3/32
LEAF03(config-router-af)# end
LEAF03# exit
```

SPINE01:

```
SPINE01# configure terminal
SPINE01(config)# router bgp 65100
SPINE01(config-router)# bgp router-id 4.4.4.4
SPINE01(config-router)# no bgp ebgp-requires-policy
SPINE01(config-router)# bgp bestpath as-path multipath-relax
SPINE01(config-router)# neighbor Ethernet0 interface remote-as external
SPINE01(config-router)# neighbor Ethernet4 interface remote-as external
SPINE01(config-router)# neighbor Ethernet8 interface remote-as external
SPINE01(config-router)# address-family ipv4
SPINE01(config-router-af)# network 4.4.4.4/32
SPINE01(config-router-af)# end
SPINE01# exit
```

SPINE02:

```
SPINE02# configure terminal
SPINE02(config)# router bgp 65100
SPINE02(config-router)# bgp router-id 5.5.5.5
SPINE02(config-router)# no bgp ebgp-requires-policy
SPINE02(config-router)# bgp bestpath as-path multipath-relax
SPINE02(config-router)# neighbor Ethernet48 interface remote-as external
SPINE02(config-router)# neighbor Ethernet52 interface remote-as external
SPINE02(config-router)# neighbor Ethernet56 interface remote-as external
SPINE02(config-router)# address-family ipv4
SPINE02(config-router-af)# network 5.5.5.5/32
SPINE02(config-router-af)# end
SPINE02# exit
```

## Steps 2. Create VxLAN interface configuration

LEAF01:

```
admin@LEAF01:~$ sudo config vxlan add vtep 1.1.1.1
admin@LEAF01:~$ sudo config vxlan evpn_nvo add nvo vtep
admin@LEAF01:~$ sudo config vxlan map add vtep 100 1000
```

LEAF02:

```
admin@LEAF02:~$ sudo config vxlan add vtep 2.2.2.2
admin@LEAF02:~$ sudo config vxlan evpn_nvo add nvo vtep
admin@LEAF02:~$ sudo config vxlan map add vtep 100 1000
```

LEAF03:

```
admin@LEAF03:~$ sudo config vxlan add vtep 3.3.3.3
admin@LEAF03:~$ sudo config vxlan evpn_nvo add nvo vtep
admin@LEAF03:~$ sudo config vxlan map add vtep 100 1000
```

### Steps 3. Create ESI configuration

LEAF01:

```
admin@LEAF01:~$ sudo config vxlan evpn_es add PortChannel01 3 00:11:22:33:44:55
```

LEAF02:

```
admin@LEAF02:~$ sudo config vxlan evpn_es add PortChannel01 3 00:11:22:33:44:55
Caution: Before version 202012.4, it is a mistake that es-sys-mac is set to the
multicast MAC address, like 01:11:22:33:44:55, in the first octet, bit 0 has
been reserved for broadcast or multicast traffic. (After version 202012.4, it
could filter the invalid MAC address.)
```

### Steps 4. Configure L2 EVPN address-family

LEAF01:

```
LEAF01# configure terminal
LEAF01(config)# router bgp 4210001
LEAF01(config-router)# address-family l2vpn evpn
LEAF01(config-router-af)# neighbor Ethernet48 activate
LEAF01(config-router-af)# neighbor Ethernet52 activate
LEAF01(config-router-af)# advertise-all-vni
LEAF01(config-router-af)# end
LEAF02:
```

```
LEAF02# configure terminal
LEAF02(config)# router bgp 4210002
LEAF02(config-router)# address-family l2vpn evpn
LEAF02(config-router-af)# neighbor Ethernet48 activate
LEAF02(config-router-af)# neighbor Ethernet52 activate
LEAF02(config-router-af)# advertise-all-vni
LEAF02(config-router-af)# end
```

LEAF03:

```
LEAF03# configure terminal
LEAF03(config)# router bgp 4210003
LEAF03(config-router)# address-family l2vpn evpn
LEAF03(config-router-af)# neighbor Ethernet48 activate
LEAF03(config-router-af)# neighbor Ethernet52 activate
LEAF03(config-router-af)# advertise-all-vni
LEAF03(config-router-af)# end
```

SPINE01:

```
SPINE01# configure terminal
```

```
SPINE01(config)# router bgp 65100
SPINE01(config-router)# address-family l2vpn evpn
SPINE01(config-router-af)# neighbor Ethernet0 activate
SPINE01(config-router-af)# neighbor Ethernet4 activate
SPINE01(config-router-af)# neighbor Ethernet8 activate
SPINE01(config-router-af)# end
```

SPINE02:

```
SPINE02# configure terminal
SPINE02(config)# router bgp 65100
SPINE02(config-router)# address-family l2vpn evpn
SPINE02(config-router-af)# neighbor Ethernet48 activate
SPINE02(config-router-af)# neighbor Ethernet52 activate
SPINE02(config-router-af)# neighbor Ethernet56 activate
SPINE02(config-router-af)# end
```

Steps 5. Configure ESI relative parameter

LEAF01:

```
LEAF01# configure terminal
LEAF01(config)# interface PortChannel01
LEAF01(config-if)# evpn mh es-id 3
LEAF01(config-if)# evpn mh es-sys-mac 00:11:22:33:44:55
LEAF01(config-if)# end
```

LEAF02:

```
LEAF02# configure terminal
LEAF02(config)# interface PortChannel01
LEAF02(config-if)# evpn mh es-id 3
LEAF02(config-if)# evpn mh es-sys-mac 00:11:22:33:44:55
LEAF02(config-if)# end
```

Caution:

Before version 202012.4, it is a mistake that es-sys-mac cannot be set to the multicast MAC address, like 01:11:22:33:44:55. (After version 202012.4, it could filter the invalid MAC address.)

Above 202111.2, users can skip this steps. The FRR configurations will be applied automatically when users perform the Steps 3 configurations. However, please remember to save the FRR configurations, or the configurations will be missing after rebooting.

Steps 6. Config ES uplink

LEAF01:

```
LEAF01# configure terminal
LEAF01(config)# interface Ethernet48
LEAF01(config-if)# evpn mh uplink
LEAF01(config-if)# interface Ethernet52
LEAF01(config-if)# evpn mh uplink
```

LEAF02:

```
LEAF02# configure terminal
LEAF02(config)# interface Ethernet48
LEAF02(config-if)# evpn mh uplink
LEAF02(config-if)# interface Ethernet52
LEAF02(config-if)# evpn mh uplink
```

Result:

(SONiC-CLI) Check underlay routing

LEAF01:

```
admin@LEAF01:~$ show ip route
Codes: K - kernel route, C - connected, S - static, R - RIP,
        O - OSPF, I - IS-IS, B - BGP, E - EIGRP, N - NHRP,
        T - Table, v - VNC, V - VNC-Direct, A - Babel, F - PBR,
        f - OpenFabric,
        > - selected route, * - FIB route, q - queued, r - rejected, b - backup
        t - trapped, o - offload failure
```

```
C>* 1.1.1.1/32 is directly connected, Loopback0, 00:43:32
B>* 2.2.2.2/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:59
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:59
B>* 3.3.3.3/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:53
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:53
B>* 4.4.4.4/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:11:14
B>* 5.5.5.5/32 [20/0] via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:11:03
C>* 188.188.0.0/16 is directly connected, eth0, 00:00:30
LEAF02:
```

```
admin@LEAF02:~$ show ip route
Codes: K - kernel route, C - connected, S - static, R - RIP,
        O - OSPF, I - IS-IS, B - BGP, E - EIGRP, N - NHRP,
        T - Table, v - VNC, V - VNC-Direct, A - Babel, F - PBR,
        f - OpenFabric,
        > - selected route, * - FIB route, q - queued, r - rejected, b - backup
        t - trapped, o - offload failure
```

```
B>* 1.1.1.1/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:59
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:59
C>* 2.2.2.2/32 is directly connected, Loopback0, 00:43:32
B>* 3.3.3.3/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:52
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:52
B>* 4.4.4.4/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:11:10
B>* 5.5.5.5/32 [20/0] via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:59
C>* 188.188.0.0/16 is directly connected, eth0, 00:00:27
LEAF03:
```

```
admin@LEAF03:~$ show ip route
Codes: K - kernel route, C - connected, S - static, R - RIP,
        O - OSPF, I - IS-IS, B - BGP, E - EIGRP, N - NHRP,
        T - Table, v - VNC, V - VNC-Direct, A - Babel, F - PBR,
        f - OpenFabric,
        > - selected route, * - FIB route, q - queued, r - rejected, b - backup
        t - trapped, o - offload failure
```

```
B>* 1.1.1.1/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:53
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:53
```

```

B>* 2.2.2.2/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:10:53
*
via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:53
C>* 3.3.3.3/32 is directly connected, Loopback0, 00:26:38
B>* 4.4.4.4/32 [20/0] via fe80::82a2:35ff:fe46:799, Ethernet48, weight 1,
00:11:08
B>* 5.5.5.5/32 [20/0] via fe80::82a2:35ff:fe4f:4f40, Ethernet52, weight 1,
00:10:53
C>* 188.188.0.0/16 is directly connected, eth0, 00:00:28
SPINE01:

```

```

admin@SPINE01:~$ show ip route
Codes: K - kernel route, C - connected, S - static, R - RIP,
       O - OSPF, I - IS-IS, B - BGP, E - EIGRP, N - NHRP,
       T - Table, v - VNC, V - VNC-Direct, A - Babel, F - PBR,
       f - OpenFabric,
       > - selected route, * - FIB route, q - queued, r - rejected, b - backup
       t - trapped, o - offload failure

```

```

B>* 1.1.1.1/32 [20/0] via fe80::6f8:f8ff:fe6b:3e91, Ethernet0, weight 1,
00:11:14
B>* 2.2.2.2/32 [20/0] via fe80::6f8:f8ff:fe8d:81e1, Ethernet4, weight 1,
00:11:10
B>* 3.3.3.3/32 [20/0] via fe80::82a2:35ff:fed2:3bb5, Ethernet8, weight 1,
00:11:07
C>* 4.4.4.4/32 is directly connected, Loopback0, 00:43:32
C>* 188.188.0.0/16 is directly connected, eth0, 00:00:30
SPINE02:

```

```

admin@SPINE02:~$ show ip route
Codes: K - kernel route, C - connected, S - static, R - RIP,
       O - OSPF, I - IS-IS, B - BGP, E - EIGRP, N - NHRP,
       T - Table, v - VNC, V - VNC-Direct, A - Babel, F - PBR,
       f - OpenFabric,
       > - selected route, * - FIB route, q - queued, r - rejected, b - backup
       t - trapped, o - offload failure

```

```

B>* 1.1.1.1/32 [20/0] via fe80::6f8:f8ff:fe6b:3e91, Ethernet48, weight 1,
00:11:03
B>* 2.2.2.2/32 [20/0] via fe80::6f8:f8ff:fe8d:81e1, Ethernet52, weight 1,
00:10:59
B>* 3.3.3.3/32 [20/0] via fe80::82a2:35ff:fed2:3bb5, Ethernet56, weight 1,
00:10:53
C>* 5.5.5.5/32 is directly connected, Loopback0, 00:43:32
C>* 188.188.0.0/16 is directly connected, eth0, 00:00:31

```

(SONiC-CLI) The configuration status of Vxlan interface  
LEAF01:

```

admin@LEAF01:~$ show vxlan interface
VTEP Information:

```

```

VTEP Name : vtep, SIP : 1.1.1.1

```

```

NVO Name : nvo, VTEP : vtep
Source interface : Loopback0

```

LEAF02:

```

admin@LEAF02:~$ show vxlan interface
VTEP Information:

```

```
VTEP Name : vtep, SIP : 2.2.2.2
NVO Name : nvo, VTEP : vtep
Source interface : Loopback0
LEAF03:
```

```
admin@LEAF03:~$ show vxlan interface
VTEP Information:
```

```
VTEP Name : vtep, SIP : 3.3.3.3
NVO Name : nvo, VTEP : vtep
Source interface : Loopback0
```

```
(SONiC-CLI) The configuration status of ESI.
LEAF01:
```

```
admin@LEAF01:~$ show vxlan evpn es
Type: L local, R remote, N non-DF
```

ESI	Type	ES Interface	status	VTEPS
03:00:11:22:33:44:55:00:00:1e	LR	PortChannel01	up	2.2.2.2

```
Total count : 1
```

```
LEAF02:
```

```
admin@LEAF02:~$ show vxlan evpn es
Type: L local, R remote, N non-DF
```

ESI	Type	ES Interface	status	VTEPS
03:00:11:22:33:44:55:00:00:1e	LRN	PortChannel01	up	1.1.1.1

```
Total count : 1
```

```
LEAF03:
```

```
admin@LEAF03:~$ show vxlan evpn es
Type: L local, R remote, N non-DF
```

ESI	Type	ES Interface	status	VTEPS
03:00:11:22:33:44:55:00:00:1e	R			2.2.2.2
				1.1.1.1

```
Total count : 1
```

```
(SONiC-CLI) The configuration status of VLAN and VNI mapping.
LEAF01:
```

```
admin@LEAF01:~$ show vxlan vlanvni
```

VLAN	VNI
Vlan100	1000

```
Total count : 1
```

```
LEAF02:
```

```
admin@LEAF02:~$ show vxlan vlanvni
```

```
+-----+-----+
```

```

| VLAN      | VNI      |
+-----+-----+
| Vlan100   | 1000     |
+-----+-----+
Total count : 1
LEAF03:

```

```

admin@LEAF03:~$ show vxlan vlanvni
+-----+-----+
| VLAN      | VNI      |
+-----+-----+
| Vlan100   | 1000     |
+-----+-----+
Total count : 1

```

(SONiC-CLI) The operational status of Vxlan tunneling  
LEAF01:

```

admin@LEAF01:~$ show vxlan remotevtep
+-----+-----+-----+-----+
| SIP      | DIP      | Creation Source | OperStatus |
+-----+-----+-----+-----+
| 1.1.1.1  | 2.2.2.2  | EVPN            | oper_up    |
+-----+-----+-----+-----+
| 1.1.1.1  | 3.3.3.3  | EVPN            | oper_up    |
+-----+-----+-----+-----+
Total count : 2
LEAF02:

```

```

admin@LEAF02:~$ show vxlan remotevtep
+-----+-----+-----+-----+
| SIP      | DIP      | Creation Source | OperStatus |
+-----+-----+-----+-----+
| 2.2.2.2  | 1.1.1.1  | EVPN            | oper_up    |
+-----+-----+-----+-----+
| 2.2.2.2  | 3.3.3.3  | EVPN            | oper_up    |
+-----+-----+-----+-----+
Total count : 2
LEAF03:

```

```

admin@LEAF03:~$ show vxlan remotevtep
+-----+-----+-----+-----+
| SIP      | DIP      | Creation Source | OperStatus |
+-----+-----+-----+-----+
| 3.3.3.3  | 1.1.1.1  | EVPN            | oper_up    |
+-----+-----+-----+-----+
| 3.3.3.3  | 2.2.2.2  | EVPN            | oper_up    |
+-----+-----+-----+-----+
Total count : 2

```

(SONiC-CLI) Check local MAC learning on MAC address table.  
LEAF01:

```

admin@LEAF01:~$ show mac
No.      Vlan  MacAddress      Port                                     Type
-----
1        100   8c:ea:1b:30:d9:fc  VxLAN DIP: 3.3.3.3                    Static
2        100   8C:EA:1B:30:da:4f  PortChannel01                          Dynamic
3        100   00:11:22:33:44:55  ESI: 03:00:11:22:33:44:55:00:00:03    Static
4        100   04:f8:f8:8d:81:e1  VxLAN DIP: 2.2.2.2                    Static
Total number of entries 4
LEAF02:

```



```
admin@LEAF02:~$ show mac
```

No.	Vlan	MacAddress	Port	Type
1	100	04:f8:f8:6b:3e:91	VxLAN DIP: 1.1.1.1	Static
2	100	8c:ea:1b:30:d9:fc	VxLAN DIP: 3.3.3.3	Static
3	100	8C:EA:1B:30:da:4f	PortChannel01	Dynamic
4	100	8C:EA:1B:30:DA:78	ESI: 03:00:11:22:33:44:55:00:00:03	Static

Total number of entries 4

LEAF03:

```
admin@LEAF03:~$ show mac
```

No.	Vlan	MacAddress	Port	Type
1	100	8C:EA:1B:30:DA:2C	Ethernet0	Dynamic
2	100	04:f8:f8:8d:81:e1	VxLAN DIP: 2.2.2.2	Static
3	100	8C:EA:1B:30:da:4f	ESI: 03:00:11:22:33:44:55:00:00:03	Static
4	100	04:f8:f8:6b:3e:91	VxLAN DIP: 1.1.1.1	Static

Total number of entries 4

(SONiC-CLI) Check MAC learned which sync from remote vtep. (In 202111 branch, the MAC will be summarized using command 'show mac')

LEAF01:

```
admin@LEAF01:~$ show vxlan remotemac all
```

VLAN VNI	MAC Type	RemoteVTEP	ESI
Vlan100 1000	00:11:22:33:44:55 dynamic		03:00:11:22:33:44:55:00:00:03
Vlan100 1000	04:f8:f8:8d:81:e1 dynamic	2.2.2.2	
Vlan100 1000	8c:ea:1b:30:d9:fc dynamic	3.3.3.3	
Vlan100 1000	8c:ea:1b:30:da:4f static		03:00:11:22:33:44:55:00:00:03

Total count : 4

LEAF02:

```
admin@LEAF02:~$ show vxlan remotemac all
```

VLAN VNI	MAC Type	RemoteVTEP	ESI
Vlan100 1000	00:11:22:33:44:55 dynamic		03:00:11:22:33:44:55:00:00:03

```

| Vlan100 | 04:f8:f8:6b:3e:91 | 1.1.1.1          |
1000 | dynamic |
+-----+-----+-----+-----+
+-----+-----+
| Vlan100 | 8c:ea:1b:30:d9:fc | 3.3.3.3          |
1000 | dynamic |
+-----+-----+-----+-----+
+-----+-----+
| Vlan100 | 8c:ea:1b:30:da:4f |                | 03:00:11:22:33:44:55:00:00:03 |
1000 | static  |
+-----+-----+-----+-----+
+-----+-----+
Total count : 4

```

LEAF03:

```

admin@LEAF03:~$ show vxlan remotemac all
+-----+-----+-----+-----+-----+
+-----+-----+
| VLAN    | MAC                      | RemoteVTEP      | ESI              |
VNI | Type |
+=====+=====+=====+=====+=====+
=====+=====+
| Vlan100 | 04:f8:f8:6b:3e:91 | 1.1.1.1          |                  |
1000 | dynamic |
+-----+-----+-----+-----+
+-----+-----+
| Vlan100 | 04:f8:f8:8d:81:e1 | 2.2.2.2          |                  |
1000 | dynamic |
+-----+-----+-----+-----+
+-----+-----+
| Vlan100 | 8c:ea:1b:30:da:4f |                | 03:00:11:22:33:44:55:00:00:03 |
1000 | dynamic |
+-----+-----+-----+-----+
+-----+-----+
Total count : 3

```

(SONiC-CLI) The operation status of PortChannel01  
LEAF01:

```

admin@LEAF01:~$ show interfaces portchannel
Flags: A - active, I - inactive, Up - up, Dw - Down, N/A - not available,
       S - selected, D - deselected, * - not synced
  No.  Team Dev          Protocol    Ports          Oper Key  Admin Key  Fast
Rate
-----
    01  PortChannel01  LACP(A)(Up) Ethernet0(S)      101  auto              false

```

```

admin@LEAF01:~$ show interfaces status PortChannel01
  Interface  Lanes  Speed  MTU  FEC  Alias  Vlan  Oper  Admin
Type  Asym PFC  Oper Speed
-----
PortChannel01  N/A    10G   9100  N/A   N/A   routed  up    up
N/A           N/A    10G

```

```

admin@LEAF01:~$ teamdctl PortChannel01 state dump
{
  "ports": {
    "Ethernet0": {
      "ifinfo": {

```

```

        "dev_addr": "00:11:22:33:44:55",
        "dev_addr_len": 6,
        "ifindex": 262,
        "ifname": "Ethernet0"
    },
    "link": {
        "duplex": "half",
        "speed": 0,
        "up": true
    },
    "link_watches": {
        "list": {
            "link_watch_0": {
                "delay_down": 0,
                "delay_up": 0,
                "down_count": 0,
                "name": "ethtool",
                "up": true
            }
        }
    },
    "up": true
},
"runner": {
    "actor_lacpdu_info": {
        "key": 0,
        "port": 1,
        "port_priority": 255,
        "state": 61,
        "system": "00:11:22:33:44:55",
        "system_priority": 65535
    },
    "aggregator": {
        "id": 262,
        "selected": true
    },
    "key": 0,
    "partner_lacpdu_info": {
        "key": 15,
        "port": 1,
        "port_priority": 255,
        "state": 61,
        "system": "8c:ea:1b:30:da:4f",
        "system_priority": 65535
    },
    "prio": 255,
    "selected": true,
    "state": "current"
}
},
"runner": {
    "active": true,
    "fallback": false,
    "fast_rate": false,
    "select_policy": "lacp_prio",
    "sys_prio": 65535
},
"setup": {
    "daemonized": true,
    "dbus_enabled": false,
    "debug_level": 1,
    "kernel_team_mode_name": "loadbalance",
    "pid": 25,
    "pid_file": "/var/run/teamd/PortChannel01.pid",

```

```

        "runner_name": "lACP",
        "zmq_enabled": false
    },
    "team_device": {
        "ifinfo": {
            "dev_addr": "00:11:22:33:44:55",
            "dev_addr_len": 6,
            "ifindex": 259,
            "ifname": "PortChannel01"
        }
    }
}

```

LEAF02:

admin@LEAF02:~\$ show interfaces portchannel

Flags: A - active, I - inactive, Up - up, Dw - Down, N/A - not available,  
S - selected, D - deselected, \* - not synced

No.	Team	Dev	Protocol	Ports	Oper	Key	Admin	Key	Fast
01	PortChannel01	LACP(A)(Up)	Ethernet0(S)	101	auto		false		

admin@LEAF02:~\$ show interfaces status PortChannel01

Interface	Lanes	Speed	MTU	FEC	Alias	Vlan	Oper	Admin
Type	Asym PFC	Oper Speed						
PortChannel01	N/A	10G	9100	N/A	N/A	routed	up	up
N/A	N/A	10G						

admin@LEAF02:~\$ teamdctl PortChannel01 state dump

```

{
  "ports": {
    "Ethernet0": {
      "ifinfo": {
        "dev_addr": "00:11:22:33:44:55",
        "dev_addr_len": 6,
        "ifindex": 130,
        "ifname": "Ethernet0"
      },
      "link": {
        "duplex": "half",
        "speed": 0,
        "up": true
      },
      "link_watches": {
        "list": {
          "link_watch_0": {
            "delay_down": 0,
            "delay_up": 0,
            "down_count": 0,
            "name": "ethtool",
            "up": true
          }
        }
      },
      "up": true
    },
    "runner": {
      "actor_lacpdu_info": {
        "key": 0,
        "port": 1,
        "port_priority": 255,

```

```

        "state": 61,
        "system": "00:11:22:33:44:55",
        "system_priority": 65535
    },
    "aggregator": {
        "id": 130,
        "selected": true
    },
    "key": 0,
    "partner_lacpdu_info": {
        "key": 15,
        "port": 2,
        "port_priority": 255,
        "state": 61,
        "system": "8c:ea:1b:30:da:4f",
        "system_priority": 65535
    },
    "prio": 255,
    "selected": true,
    "state": "current"
}
}
},
"runner": {
    "active": true,
    "fallback": false,
    "fast_rate": false,
    "select_policy": "lacp_prio",
    "sys_prio": 65535
},
"setup": {
    "daemonized": true,
    "dbus_enabled": false,
    "debug_level": 1,
    "kernel_team_mode_name": "loadbalance",
    "pid": 25,
    "pid_file": "/var/run/teamd/PortChannel01.pid",
    "runner_name": "lacp",
    "zmq_enabled": false
},
"team_device": {
    "ifinfo": {
        "dev_addr": "00:11:22:33:44:55",
        "dev_addr_len": 6,
        "ifindex": 129,
        "ifname": "PortChannel01"
    }
}
}
}

```

(FRR) IPv4 address-family neighbor session status.  
LEAF01:

LEAF01# show bgp ipv4 summary

IPv4 Unicast Summary:  
BGP router identifier 1.1.1.1, local AS number 4210001 vrf-id 0  
BGP table version 5  
RIB entries 9, using 1656 bytes of memory  
Peers 2, using 1454 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	65100	42	44	0	0	0	00:13:13
3	5 N/A							

```
Ethernet52      4      65100      42      44      0      0      0 00:13:13
3      5 N/A
```

Total number of neighbors 2

LEAF02:

LEAF02# show bgp ipv4 summary

IPv4 Unicast Summary:

BGP router identifier 2.2.2.2, local AS number 4210002 vrf-id 0

BGP table version 5

RIB entries 9, using 1656 bytes of memory

Peers 2, using 1454 KiB of memory

Neighbor State/PfxRcd	V PfxSnt	AS Desc	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
Ethernet48 3      5 N/A	4	65100	40	43	0	0	0	00:12:34
Ethernet52 3      5 N/A	4	65100	40	43	0	0	0	00:12:34

Total number of neighbors 2

LEAF03:

LEAF03# show bgp ipv4 summary

IPv4 Unicast Summary:

BGP router identifier 3.3.3.3, local AS number 4210003 vrf-id 0

BGP table version 77

RIB entries 9, using 1656 bytes of memory

Peers 2, using 1454 KiB of memory

Neighbor State/PfxRcd	V PfxSnt	AS Desc	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
Ethernet48 3      5 N/A	4	65100	533	545	0	0	0	03:32:13
Ethernet52 3      5 N/A	4	65100	534	548	0	0	0	03:32:14

Total number of neighbors 2

SPINE01:

SPINE01# show bgp ipv4 summary

IPv4 Unicast Summary:

BGP router identifier 4.4.4.4, local AS number 65100 vrf-id 0

BGP table version 48

RIB entries 7, using 1288 bytes of memory

Peers 3, using 2181 KiB of memory

Neighbor State/PfxRcd	V PfxSnt	AS Desc	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
Ethernet0 1      4 N/A	4	4210001	618	601	0	0	0	00:13:12
Ethernet4 1      4 N/A	4	4210002	570	556	0	0	0	00:12:34
Ethernet8 1      4 N/A	4	4210003	535	531	0	0	0	03:28:28

Total number of neighbors 3

SPINE02:

SPINE02# show bgp ipv4 summary

IPv4 Unicast Summary:

BGP router identifier 5.5.5.5, local AS number 65100 vrf-id 0

BGP table version 48

RIB entries 7, using 1288 bytes of memory

Peers 3, using 2181 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	4210001	619	596	0	0	0	00:13:12
1	4 N/A							
Ethernet52	4	4210002	572	557	0	0	0	00:12:34
1	4 N/A							
Ethernet56	4	4210003	537	532	0	0	0	03:28:29
1	4 N/A							

Total number of neighbors 3

(FRR) L2 EVPN address-family neighbor session status.

LEAF01:

LEAF01# show bgp l2vpn evpn summary

BGP router identifier 1.1.1.1, local AS number 4210001 vrf-id 0

BGP table version 0

RIB entries 9, using 1656 bytes of memory

Peers 2, using 1454 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	65100	43	45	0	0	0	00:14:23
10	17 N/A							
Ethernet52	4	65100	43	45	0	0	0	00:14:23
10	17 N/A							

Total number of neighbors 2

LEAF02:

LEAF02# show bgp l2vpn evpn summary

BGP router identifier 2.2.2.2, local AS number 4210002 vrf-id 0

BGP table version 0

RIB entries 9, using 1656 bytes of memory

Peers 2, using 1454 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	65100	43	45	0	0	0	00:14:23
10	17 N/A							
Ethernet52	4	65100	43	45	0	0	0	00:14:23
10	17 N/A							

Total number of neighbors 2

LEAF03:

LEAF03# show bgp l2vpn evpn summary

BGP router identifier 3.3.3.3, local AS number 4210003 vrf-id 0

BGP table version 0

RIB entries 9, using 1656 bytes of memory  
Peers 2, using 1454 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	65100	530	542	0	0	0	03:29:39
14	17 N/A							
Ethernet52	4	65100	531	545	0	0	0	03:29:40
14	17 N/A							

Total number of neighbors 2  
SPINE01:

SPINE01# show bgp l2vpn evpn summary  
BGP router identifier 4.4.4.4, local AS number 65100 vrf-id 0  
BGP table version 0  
RIB entries 9, using 1656 bytes of memory  
Peers 3, using 2181 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet0	4	4210001	619	602	0	0	0	00:14:23
7	17 N/A							
Ethernet4	4	4210002	571	557	0	0	0	00:13:45
7	17 N/A							
Ethernet8	4	4210003	536	532	0	0	0	03:29:39
3	17 N/A							

Total number of neighbors 3  
SPINE02:

SPINE02# show bgp l2vpn evpn summary  
BGP router identifier 5.5.5.5, local AS number 65100 vrf-id 0  
BGP table version 0  
RIB entries 9, using 1656 bytes of memory  
Peers 3, using 2181 KiB of memory

Neighbor	V	AS	MsgRcvd	MsgSent	TblVer	InQ	OutQ	Up/Down
State/PfxRcd	PfxSnt	Desc						
Ethernet48	4	4210001	620	597	0	0	0	00:14:23
7	17 N/A							
Ethernet52	4	4210002	573	558	0	0	0	00:13:45
7	17 N/A							
Ethernet56	4	4210003	538	533	0	0	0	03:29:40
3	17 N/A							

Total number of neighbors 3

(FRR) Check PortChannel information  
LEAF01:

LEAF01# show interface PortChannel01  
Interface PortChannel01 is up, line protocol is up  
Link ups: 1 last: 2022/01/24 15:00:18.22  
Link downs: 1 last: 2022/01/24 15:00:13.12  
vrf: default  
index 259 metric 0 mtu 9100 speed 0  
flags: <UP,BROADCAST,RUNNING,MULTICAST>  
Type: Ethernet  
HWaddr: 00:11:22:33:44:55  
Interface Type bond  
Interface Slave Type Bridge  
Master interface: Bridge



EVPN-MH: ES id 3 ES sysmac 00:11:22:33:44:55  
protodown: off (n/a)  
LEAF02:

LEAF02# show interface PortChannel01  
Interface PortChannel01 is up, line protocol is up  
Link ups: 1 last: 2022/01/24 14:58:25.65  
Link downs: 1 last: 2022/01/24 14:57:39.81  
vrf: default  
index 129 metric 0 mtu 9100 speed 0  
flags: <UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST>  
Type: Ethernet  
HWaddr: 00:11:22:33:44:55  
Interface Type bond  
Interface Slave Type Bridge  
Master interface: Bridge  
EVPN-MH: ES id 3 ES sysmac 00:11:22:33:44:55  
protodown: off (n/a)

(FRR) Check EVPN ESI information.  
LEAF01:

LEAF01# show evpn es detail  
ESI: 03:00:11:22:33:44:55:00:00:03  
Type: Local,Remote  
Interface: PortChannel01  
State: up  
Bridge port: yes  
Ready for BGP: yes  
VNI Count: 1  
MAC Count: 1  
DF status: df  
DF preference: 32767  
Nexthop group: 536870913  
VTEPs:  
2.2.2.2 df\_alg: preference df\_pref: 32767 nh: 268435458  
LEAF02:

LEAF02# show evpn es detail  
ESI: 03:00:11:22:33:44:55:00:00:03  
Type: Local,Remote  
Interface: PortChannel01  
State: up  
Bridge port: yes  
Ready for BGP: yes  
VNI Count: 1  
MAC Count: 1  
DF status: non-df  
DF preference: 32767  
Nexthop group: 536870913  
VTEPs:  
1.1.1.1 df\_alg: preference df\_pref: 32767 nh: 268435458  
LEAF03:

LEAF03# show evpn es detail  
ESI: 03:00:11:22:33:44:55:00:00:03  
Type: Remote  
Interface: -  
Ready for BGP: no  
VNI Count: 0  
MAC Count: 1  
DF preference: 0  
Nexthop group: 536870913

VTEPs:  
1.1.1.1 nh: 268435458  
2.2.2.2 nh: 268435459

(FRR) Check the EVPN Mac address summary.  
LEAF01:

LEAF01# show evpn mac vni all

VNI 1000 #MACs (local and remote) 4

Flags: N=sync-neighs, I=local-inactive, P=peer-active, X=peer-proxy  
MAC Type Flags Intf/Remote ES/VTEP VLAN Seq #'s  
8c:ea:1b:30:d9:fc remote 3.3.3.3 0/0  
04:f8:f8:6b:3e:91 local Vlan100 0/0  
8c:ea:1b:30:da:4f local PI PortChannel01 100 0/0  
04:f8:f8:8d:81:e1 remote 2.2.2.2 1/0  
LEAF02:

LEAF02# show evpn mac vni all

VNI 1000 #MACs (local and remote) 4

Flags: N=sync-neighs, I=local-inactive, P=peer-active, X=peer-proxy  
MAC Type Flags Intf/Remote ES/VTEP VLAN Seq #'s  
8c:ea:1b:30:d9:fc remote 3.3.3.3 0/0  
04:f8:f8:6b:3e:91 remote 1.1.1.1 1/0  
8c:ea:1b:30:da:4f local PX PortChannel01 100 0/0  
04:f8:f8:8d:81:e1 local Vlan100 0/0  
LEAF03:

LEAF03# show evpn mac vni all

VNI 1000 #MACs (local and remote) 4

Flags: N=sync-neighs, I=local-inactive, P=peer-active, X=peer-proxy  
MAC Type Flags Intf/Remote ES/VTEP VLAN Seq #'s  
8c:ea:1b:30:d9:fc local Ethernet0 100 0/0  
04:f8:f8:6b:3e:91 remote 1.1.1.1 1/0  
8c:ea:1b:30:da:4f remote 03:00:11:22:33:44:55:00:00:03 1/0  
04:f8:f8:8d:81:e1 remote 2.2.2.2 1/0

(FRR) Check the EVPN type 3 route.  
LEAF01:

LEAF01# show bgp l2vpn evpn route type 3  
BGP table version is 11, local router ID is 1.1.1.1  
Status codes: s suppressed, d damped, h history, \* valid, > best, i - internal  
Origin codes: i - IGP, e - EGP, ? - incomplete  
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]  
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]  
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]  
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]  
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [3]:[0]:[32]:[1.1.1.1]					
	1.1.1.1			32768	i
	ET:8 RT:15697:1000				
Route Distinguisher: 2.2.2.2:2					

```

*> [3]:[0]:[32]:[2.2.2.2]
      2.2.2.2                                0 65100 4210002 i
      RT:15698:1000 ET:8
*   [3]:[0]:[32]:[2.2.2.2]
      2.2.2.2                                0 65100 4210002 i
      RT:15698:1000 ET:8
Route Distinguisher: 3.3.3.3:2
*   [3]:[0]:[32]:[3.3.3.3]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8
*> [3]:[0]:[32]:[3.3.3.3]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8

```

Displayed 3 prefixes (5 paths) (of requested type)  
LEAF02:

```

LEAF02# show bgp l2vpn evpn route type 3
BGP table version is 7, local router ID is 2.2.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [3]:[0]:[32]:[1.1.1.1]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
* [3]:[0]:[32]:[1.1.1.1]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [3]:[0]:[32]:[2.2.2.2]	2.2.2.2	32768			i
	ET:8 RT:15698:1000				
Route Distinguisher: 3.3.3.3:2					
*> [3]:[0]:[32]:[3.3.3.3]	3.3.3.3	0	65100	4210003	i
	RT:15699:1000 ET:8				
* [3]:[0]:[32]:[3.3.3.3]	3.3.3.3	0	65100	4210003	i
	RT:15699:1000 ET:8				

Displayed 3 prefixes (5 paths) (of requested type)  
LEAF03:

```

LEAF03# show bgp l2vpn evpn route type 3
BGP table version is 110, local router ID is 3.3.3.3
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
---------	----------	--------	--------	--------	------

```

Extended Community
Route Distinguisher: 1.1.1.1:2
*> [3]:[0]:[32]:[1.1.1.1]
      1.1.1.1                                0 65100 4210001 i
      RT:15697:1000 ET:8
* [3]:[0]:[32]:[1.1.1.1]
      1.1.1.1                                0 65100 4210001 i
      RT:15697:1000 ET:8
Route Distinguisher: 2.2.2.2:2
*> [3]:[0]:[32]:[2.2.2.2]
      2.2.2.2                                0 65100 4210002 i
      RT:15698:1000 ET:8
* [3]:[0]:[32]:[2.2.2.2]
      2.2.2.2                                0 65100 4210002 i
      RT:15698:1000 ET:8
Route Distinguisher: 3.3.3.3:2
*> [3]:[0]:[32]:[3.3.3.3]
      3.3.3.3                                32768 i
      ET:8 RT:15699:1000

```

Displayed 3 prefixes (5 paths) (of requested type)  
SPINE01:

```

SPINE01# show bgp l2vpn evpn route type 3
BGP table version is 110, local router ID is 4.4.4.4
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Extended Community					
Route Distinguisher: 1.1.1.1:2					
*> [3]:[0]:[32]:[1.1.1.1]					
	1.1.1.1			0	4210001 i
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [3]:[0]:[32]:[2.2.2.2]					
	2.2.2.2			0	4210002 i
	RT:15698:1000 ET:8				
Route Distinguisher: 3.3.3.3:2					
*> [3]:[0]:[32]:[3.3.3.3]					
	3.3.3.3			0	4210003 i
	RT:15699:1000 ET:8				

Displayed 3 prefixes (3 paths) (of requested type)  
SPINE02:

```

SPINE02# show bgp l2vpn evpn route type 3
BGP table version is 110, local router ID is 5.5.5.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Extended Community					

```

Route Distinguisher: 1.1.1.1:2
*> [3]:[0]:[32]:[1.1.1.1]
      1.1.1.1                                0 4210001 i
      RT:15697:1000 ET:8
Route Distinguisher: 2.2.2.2:2
*> [3]:[0]:[32]:[2.2.2.2]
      2.2.2.2                                0 4210002 i
      RT:15698:1000 ET:8
Route Distinguisher: 3.3.3.3:2
*> [3]:[0]:[32]:[3.3.3.3]
      3.3.3.3                                0 4210003 i
      RT:15699:1000 ET:8

```

Displayed 3 prefixes (3 paths) (of requested type)  
(FRR) Check the EVPN type 2 route.  
LEAF01:

```

LEAF01# show bgp l2vpn evpn route type 2
BGP table version is 11, local router ID is 1.1.1.1
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
Extended Community					
*> [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1	32768		i	
	ET:8 RT:15697:1000				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1	32768		i	
	ESI:03:00:11:22:33:44:55:00:00:03				
	ET:8 RT:15697:1000				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1	32768		i	
	ESI:03:00:11:22:33:44:55:00:00:03				
	ET:8 RT:15697:1000				
Route Distinguisher: 2.2.2.2:2					
*> [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2	0 65100	4210002	i	
	RT:15698:1000 ET:8				
* [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2	0 65100	4210002	i	
	RT:15698:1000 ET:8				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2	0 65100	4210002	i	
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2	0 65100	4210002	i	
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	2.2.2.2	0 65100	4210002	i	
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	2.2.2.2	0 65100	4210002	i	
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				

```

Route Distinguisher: 3.3.3.3:2
* [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]
    3.3.3.3                                0 65100 4210003 i
    RT:15699:1000 ET:8
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]
    3.3.3.3                                0 65100 4210003 i
    RT:15699:1000 ET:8
* [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]
    3.3.3.3                                0 65100 4210003 i
    RT:15699:1000 ET:8
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]
    3.3.3.3                                0 65100 4210003 i
    RT:15699:1000 ET:8

```

Displayed 8 prefixes (13 paths) (of requested type)  
LEAF02:

```

LEAF02# show bgp l2vpn evpn route type 2
BGP table version is 7, local router ID is 2.2.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2	32768			i
	ET:8 RT:15698:1000				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2	32768			i
	ESI:03:00:11:22:33:44:55:00:00:03				
	ET:8 RT:15698:1000 ND:Proxy				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	2.2.2.2	32768			i
	ESI:03:00:11:22:33:44:55:00:00:03				
	ET:8 RT:15698:1000 ND:Proxy				

```

Route Distinguisher: 3.3.3.3:2
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8
*   [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8
*   [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]
      3.3.3.3                                0 65100 4210003 i
      RT:15699:1000 ET:8

```

Displayed 8 prefixes (13 paths) (of requested type)  
LEAF03:

```

LEAF03# show bgp l2vpn evpn route type 2
BGP table version is 110, local router ID is 3.3.3.3
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1	0	65100	4210001	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8				
* [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2	0	65100	4210002	i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]					

```

2.2.2.2 0 65100 4210002 i
ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0
RT:15698:1000 ET:8 ND:Proxy
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]
2.2.2.2 0 65100 4210002 i
ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0
RT:15698:1000 ET:8 ND:Proxy
* [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]
2.2.2.2 0 65100 4210002 i
ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0
RT:15698:1000 ET:8 ND:Proxy
Route Distinguisher: 3.3.3.3:2
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]
3.3.3.3 32768 i
ET:8 RT:15699:1000
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]
3.3.3.3 32768 i
ET:8 RT:15699:1000

```

Displayed 8 prefixes (14 paths) (of requested type)  
SPINE01:

```

SPINE01# show bgp l2vpn evpn route type 2
BGP table version is 110, local router ID is 4.4.4.4
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1			0	4210001 i
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1			0	4210001 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1			0	4210001 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2			0	4210002 i
	RT:15698:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2			0	4210002 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	2.2.2.2			0	4210002 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
Route Distinguisher: 3.3.3.3:2					
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]	3.3.3.3			0	4210003 i
	RT:15699:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]	3.3.3.3			0	4210003 i



RT:15699:1000 ET:8

Displayed 8 prefixes (8 paths) (of requested type)  
SPINE02:

SPINE02# show bgp l2vpn evpn route type 2

BGP table version is 110, local router ID is 5.5.5.5

Status codes: s suppressed, d damped, h history, \* valid, > best, i - internal

Origin codes: i - IGP, e - EGP, ? - incomplete

EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]

EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]

EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]

EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]

EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [2]:[0]:[48]:[04:f8:f8:6b:3e:91]	1.1.1.1			0	4210001 i
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	1.1.1.1			0	4210001 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	1.1.1.1			0	4210001 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15697:1000 ET:8				
Route Distinguisher: 2.2.2.2:2					
*> [2]:[0]:[48]:[04:f8:f8:8d:81:e1]	2.2.2.2			0	4210002 i
	RT:15698:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]	2.2.2.2			0	4210002 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
*> [2]:[0]:[48]:[8c:ea:1b:30:da:4f]:[128]:[fe80::8eea:1bff:fe30:da4f]	2.2.2.2			0	4210002 i
	ESI:03:00:11:22:33:44:55:00:00:03 VNI: 0				
	RT:15698:1000 ET:8 ND:Proxy				
Route Distinguisher: 3.3.3.3:2					
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]	3.3.3.3			0	4210003 i
	RT:15699:1000 ET:8				
*> [2]:[0]:[48]:[8c:ea:1b:30:d9:fc]:[128]:[fe80::8eea:1bff:fe30:d9fc]	3.3.3.3			0	4210003 i
	RT:15699:1000 ET:8				

Displayed 8 prefixes (8 paths) (of requested type)

(FRR) Check the EVPN type 1 route.

LEAF01:

LEAF01# show bgp l2vpn evpn route type 1

BGP table version is 12, local router ID is 1.1.1.1

Status codes: s suppressed, d damped, h history, \* valid, > best, i - internal

Origin codes: i - IGP, e - EGP, ? - incomplete

EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]

EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]

EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]

EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]

EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[128]:[::]	1.1.1.1	32768		i	
	ET:8 RT:15697:1000				
Route Distinguisher: 1.1.1.1:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[128]:[::]	1.1.1.1	32768		i	
	ET:8 ESI-label-Rt:AA RT:15697:1000				
Route Distinguisher: 2.2.2.2:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8				
* [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8				
Route Distinguisher: 2.2.2.2:3					
* [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8 ESI-label-Rt:AA				
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	65100	4210002	i
	RT:15698:1000 ET:8 ESI-label-Rt:AA				

Displayed 4 prefixes (6 paths) (of requested type)  
LEAF02:

```
LEAF02# show bgp l2vpn evpn route type 1
BGP table version is 8, local router ID is 2.2.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]
```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
* [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8				
Route Distinguisher: 1.1.1.1:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8 ESI-label-Rt:AA				
* [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	65100	4210001	i
	RT:15697:1000 ET:8 ESI-label-Rt:AA				
Route Distinguisher: 2.2.2.2:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[128]:[::]	2.2.2.2	32768		i	
	ET:8 RT:15698:1000				
Route Distinguisher: 2.2.2.2:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[128]:[::]	2.2.2.2	32768		i	
	ET:8 ESI-label-Rt:AA RT:15698:1000				

Displayed 4 prefixes (6 paths) (of requested type)  
LEAF03:

```
LEAF03# show bgp l2vpn evpn route type 1
BGP table version is 111, local router ID is 3.3.3.3
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]
```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1		0	65100	4210001 i
	RT:15697:1000 ET:8				
* [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1		0	65100	4210001 i
	RT:15697:1000 ET:8				
Route Distinguisher: 1.1.1.1:3					
* [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1		0	65100	4210001 i
	RT:15697:1000 ET:8 ESI-label-Rt:AA				
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1		0	65100	4210001 i
	RT:15697:1000 ET:8 ESI-label-Rt:AA				
Route Distinguisher: 2.2.2.2:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2		0	65100	4210002 i
	RT:15698:1000 ET:8				
* [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2		0	65100	4210002 i
	RT:15698:1000 ET:8				
Route Distinguisher: 2.2.2.2:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2		0	65100	4210002 i
	RT:15698:1000 ET:8 ESI-label-Rt:AA				
* [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2		0	65100	4210002 i
	RT:15698:1000 ET:8 ESI-label-Rt:AA				

Displayed 4 prefixes (8 paths) (of requested type)  
SPINE01:

```
SPINE01# show bgp l2vpn evpn route type 1
BGP table version is 111, local router ID is 4.4.4.4
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]
```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1		0	4210001	i
	RT:15697:1000 ET:8				
Route Distinguisher: 1.1.1.1:3					

```
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]
      1.1.1.1                                0 4210001 i
      RT:15697:1000 ET:8 ESI-label-Rt:AA
Route Distinguisher: 2.2.2.2:2
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]
      2.2.2.2                                0 4210002 i
      RT:15698:1000 ET:8
Route Distinguisher: 2.2.2.2:3
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]
      2.2.2.2                                0 4210002 i
      RT:15698:1000 ET:8 ESI-label-Rt:AA
```

Displayed 4 prefixes (4 paths) (of requested type)  
SPINE02:

```
SPINE02# show bgp l2vpn evpn route type 1
BGP table version is 111, local router ID is 5.5.5.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]
```

Network	Next Hop	Metric	LocPrf	Weight	Path
Extended Community					
Route Distinguisher: 1.1.1.1:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	4210001	i	
	RT:15697:1000 ET:8				
Route Distinguisher: 1.1.1.1:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	1.1.1.1	0	4210001	i	
	RT:15697:1000 ET:8 ESI-label-Rt:AA				
Route Distinguisher: 2.2.2.2:2					
*> [1]:[0]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	4210002	i	
	RT:15698:1000 ET:8				
Route Distinguisher: 2.2.2.2:3					
*> [1]:[4294967295]:[03:00:11:22:33:44:55:00:00:03]:[32]:[0.0.0.0]	2.2.2.2	0	4210002	i	
	RT:15698:1000 ET:8 ESI-label-Rt:AA				

Displayed 4 prefixes (4 paths) (of requested type)

(FRR) Check the EVPN type 4 route.  
LEAF01:

```
LEAF01# show bgp l2vpn evpn route type 4
BGP table version is 2, local router ID is 1.1.1.1
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]
```

Network	Next Hop	Metric	LocPrf	Weight	Path
Extended Community					
Route Distinguisher: 1.1.1.1:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					

```

1.1.1.1 32768 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)
Route Distinguisher: 2.2.2.2:3
* [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]
2.2.2.2 0 65100 4210002 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]
2.2.2.2 0 65100 4210002 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)

```

Displayed 2 prefixes (3 paths) (of requested type)  
LEAF02:

```

LEAF02# show bgp l2vpn evpn route type 4
BGP table version is 2, local router ID is 2.2.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					
1.1.1.1		0	65100	4210001	i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					
* [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					
1.1.1.1		0	65100	4210001	i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					
Route Distinguisher: 2.2.2.2:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]					
2.2.2.2		32768			i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					

Displayed 2 prefixes (3 paths) (of requested type)  
LEAF03:

```

LEAF03# show bgp l2vpn evpn route type 4
BGP table version is 34, local router ID is 3.3.3.3
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:3					
* [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					
1.1.1.1		0	65100	4210001	i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					

```

1.1.1.1 0 65100 4210001 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)
Route Distinguisher: 2.2.2.2:3
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]
2.2.2.2 0 65100 4210002 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)
* [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]
2.2.2.2 0 65100 4210002 i
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:
32767)

```

Displayed 2 prefixes (4 paths) (of requested type)  
SPINE01:

```

SPINE01# show bgp l2vpn evpn route type 4
BGP table version is 34, local router ID is 4.4.4.4
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					
1.1.1.1		0	4210001	i	
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					
Route Distinguisher: 2.2.2.2:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]					
2.2.2.2		0	4210002	i	
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					

Displayed 2 prefixes (2 paths) (of requested type)  
SPINE02:

```

SPINE02# show bgp l2vpn evpn route type 4
BGP table version is 34, local router ID is 5.5.5.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
Origin codes: i - IGP, e - EGP, ? - incomplete
EVPN type-1 prefix: [1]:[ESI]:[EthTag]:[IPlen]:[VTEP-IP]
EVPN type-2 prefix: [2]:[EthTag]:[MAClen]:[MAC]:[IPlen]:[IP]
EVPN type-3 prefix: [3]:[EthTag]:[IPlen]:[OrigIP]
EVPN type-4 prefix: [4]:[ESI]:[IPlen]:[OrigIP]
EVPN type-5 prefix: [5]:[EthTag]:[IPlen]:[IP]

```

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 1.1.1.1:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[1.1.1.1]					
1.1.1.1		0	4210001	i	
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					
Route Distinguisher: 2.2.2.2:3					
*> [4]:[03:00:11:22:33:44:55:00:00:03]:[32]:[2.2.2.2]					
2.2.2.2		0	4210002	i	
ET:8 ES-Import-Rt:00:11:22:33:44:55 DF: (alg: 2, pref:					
32767)					

Displayed 2 prefixes (2 paths) (of requested type)