Configure and Verify EVPN/VxLAN in Multisite Environment

Contents

Introduction

This document describes how to configure and verify Ethernet VPN/ Virtual Extensible LAN Multisite Environment with Cisco Nexus 9000 series switches.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Multiprotocol Label Switching (MPLS) Layer 3 VPN
- Multiprotocol- Border Gateway Protocol (MP-BGP)
- Ethernet VPN (EVPN)

Components Used

The information in this document is based on these software and hardware versions:

leaf1#	N5K-C5672UP-16G-SUP	system: version 7.3(0)N1(1)
leaf2#	N9K-C92160YC-X	NXOS: version 9.2(3)
spine1#	N9K-C9396PX	NXOS: version 9.2(3)
spine2#	N9K-C9396PX	NXOS: version 9.2(3)
MultisiteBG1#	N9K-C93108TC-EX	NXOS: version 9.2(3)
MultisiteBG2#	N9K-C93108TC-FX	NXOS: version 9.3(1)
multisitespine2#	N9K-C9372TX-E	NXOS: version 9.2(3)
Multistespine1#	N9K-C92160YC-X	NXOS: version 9.2(3)

MultisteLeaf1#	N9K-C93108TC-EX	NXOS: version 7.0(3)I7(5)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Related Products

Minimum software and hardware requirements EVPN Multi-Site border gateway.

Item	Requirement
Cisco Nexus hardware	â—� Cisco Nexus 9300 EX platform
	â—� Cisco Nexus 9300 FX platform
	â—� Cisco Nexus 9332C platform
	â—� Cisco Nexus 9364C platform
	â—� Cisco Nexus 9500 platform with X9700-EX line card
	â—� Cisco Nexus 9500 platform with X9700-FX line card
Cisco NX-OS Software	Cisco NX-OS Software Release 7.0(3)I7(1) or later

The hardware and software requirements for the Site-Internal nodes of a Virtual Extensible LAN (VXLAN) BGP EVPN site remain the same as those without the EVPN Multi-Site BGW

Background Information

The data center is a resource pool that contains - computational power, storage, and necessary applications to support any business environment. Proper planning of the data center infrastructure design is vital. Now see what are the critical requirements and how they overcome. Modern IT infrastructure and data center deployments are in need of HA, ability to scale at a faster rate, high performance, and always ON.

A few explored vital requirements in DC Design/Architecture space:

- Port Density, is improved by FEX.

- Compute Capacity is improved by Hardware Virtualization (UCS).

- Access layer uplink bandwidth is improved by FI, Port-Channel.

- Chassis-Level Redundancy is improved by vPC.

- SDN fabric is improved by ACI - automating underlay and overlay in a fabric.

- Rapid deployment and supporting new services are improved by DCNM.

- The bandwidth requirement for long haul applications is improved by dark fiber or wavelength service.

- Over all geographical redundancy and scaling are key attributes for throbbing/scaling out data center environment, Multi-Site VxLAN/EVPN helps us to have better DCI solutions.

How is Multi-Site Helpful

External connectivity includes the connection of the data center to the rest of the network: to the Internet, the WAN, or the campus. All options provided for external connectivity are multitenant aware and focus on Layer 3 transport to the external network domains.

- EVPN is a next-generation all-in-one VPN solution.

- It not only does the job of many other VPN technologies but is better too.

- Integration with Legacy Networks.

- Selective Advertisement/Extension:
    - Extend the only L2 - Specific VLANs/Subnets that can be extended using Type-2 routes.
    - Extend the only L3 - Specific L3 domains can be extended using Type-5 routes.
- Auto-discovery of redundancy group using Type-4 routes.
- Aliasing, Mass Withdraw of addresses, SH/AA MH Indication using Type-1 routes.
- Auto-discovery of multicast tunnel endpoints and MCAST tunnel type using Type-3 routes.

Other Benefits

• Workload Balancing across data centers and clouds.

• Proactive response to disruptions – mitigates risks of Approaching disasters, viz. hurricanes, floods, and so on.
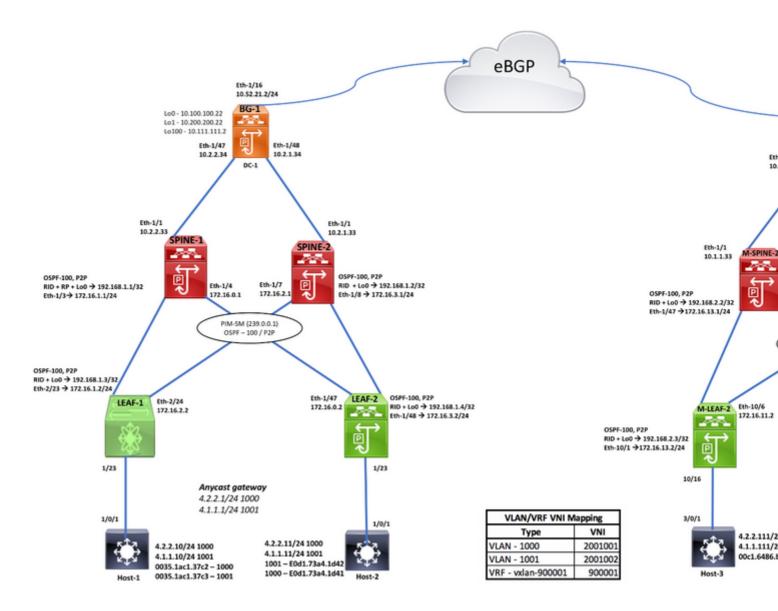
• Data center maintenance and migrations - Planned events scheduled over a period of time, Integration with Legacy Networks.

• Backup and Disaster Recovery aaS.

Supported Topologies

- BGW-to-Cloud model
- BGWs between Spine and Super-Spine model
- BGWs on Spine model
- BGWs Back-to-Back model

Topology

Configure

DC-1, LEAF-1 CONFIGURATION

Enable Features	VLAN-VNI Mapping	VTEP Config	LEAF to SPINE interfaces/OSPF Config
	vlan 1	interface nve1	interface Ethernet2/23
install feature-set fabric	vlan 101	no shutdown	no switchport
feature-set fabric	vn-segment 900001	source-interface loopback0	ip address 172.16.1.2/24
hostname leaf1	vlan 1000	host-reachability protocol bgp	ip ospf network point-to-point
feature fabric forwarding	vn-segment 2001002	member vni 900001 associate-vrf	ip router ospf 100 area 0.0.0.0
nv overlay evpn	vlan 1001	member vni 2001001	ip pim sparse-mode
feature ospf	vn-segment 2001001	suppress-arp	
feature bgp		mcast-group 239.0.0.1	interface Ethernet2/24
feature pim	**VLAN Config**	member vni 2001002	no switchport
feature interface-vlan	interface Vlan101	suppress-arp	ip address 172.16.2.2/24
feature fabric access	no shutdown	mcast-group 239.0.0.1	ip ospf network point-to-point
feature nv overlay	vrf member vxlan-900001		ip router ospf 100 area 0.0.0.0
feature vn-segment-vlan-based	ip forward		ip pim sparse-mode
	interface Vlan1000		interface loopback0
	no shutdown		ip address 192.168.1.3/24
Enabling Store-and-Forward Switching	mtu 9216		ip router ospf 100 area 0.0.0.0
switching-mode store-forward	vrf member vxlan-900001		ip pim sparse-mode
	ip address 4.2.2.1/24		
	ipv6 address 4:2:0:1::1/64		
Interface towards HOST	fabric forwarding mode anycast-gateway		router ospf 100
interface Ethernet1/23			router-id 192.168.1.3
switchport mode trunk	interface Vlan1001		
switchport trunk allowed vlan 1000-1001	no shutdown		
speed 1000	mtu 9216		
	vrf member vxlan-900001		
	ip address 4.1.1.1/24		
	ipv6 address 4:1:0:1::1/64		
	fabric forwarding mode anycast-gateway		
	Anycast GW mapping		
	fabric forwarding anycast-gateway-mac 0000.2222.3333		
	Static RP Config		
	ip pim rp-address 192.168.1.1 group-list 224.0.0.0/4		
	ip pim rp-address 192.168.1.2 group-list 224.0.0.0/4		
	ip pim ssm range 232.0.0.0/8		
	ip multicast multipath none		

DC-1 SPINE -1 Configuration

Enabling Features, RP Config	OSPF Configuration	BGP/EVPN Configuration
hostname spine1	interface Ethernet1/1	router bgp 200
boot nxos bootflash:/nxos.9.2.3.bin	no switchport	router-id 192.168.1.1
	ip address 10.2.2.33/30	address-family ipv4 unicast
nv overlay evpn	ip ospf network point-to-point	address-family l2vpn evpn
feature ospf	ip router ospf 100 area 0.0.0.0	neighbor 10.100.100.22
feature bgp	ip pim sparse-mode	remote-as 200
feature pim	no shutdown	update-source loopback0
feature interface-vlan		address-family ipv4 unicast
feature vn-segment-vlan-based	interface Ethernet1/3	address-family l2vpn evpn
feature nv overlay	no switchport	send-community
	ip address 172.16.1.1/24	send-community extended
	ip ospf network point-to-point	route-reflector-client
ip pim rp-address 192.168.1.1 group-list 224.0.0.0/4	ip router ospf 100 area 0.0.0.0	neighbor 192.168.1.3
	ip pim sparse-mode	remote-as 200
	no shutdown	update-source loopback0
		address-family ipv4 unicast
	interface Ethernet1/4	send-community extended
	no switchport	route-reflector-client
	ip address 172.16.0.1/24	address-family l2vpn evpn
	ip ospf network point-to-point	send-community extended
	ip router ospf 100 area 0.0.0.0	route-reflector-client
	ip pim sparse-mode	neighbor 192.168.1.4
	no shutdown	remote-as 200
		update-source loopback0
	interface loopback0	address-family ipv4 unicast
	ip address 192.168.1.1/32	send-community extended
	ip router ospf 100 area 0.0.0.0	route-reflector-client
	ip pim sparse-mode	address-family l2vpn evpn
		send-community extended
	router ospf 100	route-reflector-client
	router-id 192.168.1.1	

DC-1 Border Gateway-1 Configuration

Enabling Features, RouteMap, B-G Config	VLAN,VNI,VTEP Config	OSPF Configuration	BGP/E
	VLAN-VNI Mapping	interface Ethernet1/47	router
	vlan 101	ip address 10.2.2.34/30	route
	vn-segment 900001	ip ospf network point-to-point	addre
	vlan 1000	ip router ospf 100 area 0.0.0.0	redi
	vn-segment 2001002	ip pim sparse-mode	neigh
	vlan 1001	evpn multisite fabric-tracking	rem
hostname MultisiteBG1	vn-segment 2001001	no shutdown	upd
boot nxos bootflash:/nxos.9.2.3.bin			addr
nv overlay evpn	interface Vlan101	interface Ethernet1/48	neigh
feature ospf	no shutdown	ip address 10.2.1.34/30	rem
feature bgp	mtu 9192	ip ospf network point-to-point	upd
feature pim	vrf member vxlan-900001	ip router ospf 100 area 0.0.0.0	ebg
feature fabric forwarding	ip forward	ip pim sparse-mode	peer
feature interface-vlan		evpn multisite fabric-tracking	addi
feature vn-segment-vlan-based	**VTEP Config**	no shutdown	ser
feature lldp	interface nve1		ser
feature nv overlay	no shutdown		rev
	host-reachability protocol bgp	interface loopback0	neigh
	source-interface loopback1	ip address 10.100.100.22/32 tag 54321	rem
evpn multisite border-gateway 200	multisite border-gateway interface loopback100	ip router ospf 100 area 0.0.0.0	upd
delay-restore time 300	member vni 900001 associate-vrf	ip pim sparse-mode	addi
	member vni 2001001		ser
	multisite ingress-replication	interface loopback1	ser
	ingress-replication protocol bgp	ip address 10.200.200.22/32 tag 54321	neigh
	member vni 2001002	ip router ospf 100 area 0.0.0.0	rem
	multisite ingress-replication	ip pim sparse-mode	upd
route-map RMAP-REDIST-DIRECT permit 10	ingress-replication protocol bgp		addi
match tag 54321		interface loopback100	ser
		ip address 10.111.111.2/32 tag 54321	ser
	Core-Facing Interface Config	ip router ospf 100 area 0.0.0.0	evpn
	interface Ethernet1/16		vni 2(
	mtu 9216	router ospf 100	rd a
	ip address 10.52.21.2/30 tag 54321	router-id 10.100.100.22	rout
	evpn multisite dci-tracking		rout
	no shutdown		vni 2(
			rd a
			rout
			rout
			vrf con
			rd au
			addre
			rout
			rout
			addre
			rout
			rout

DC-2 Border Gateway-2 Configuration

Enabling Features, RouteMap, B-G Config	VLAN,VNI,VTEP Config	OSPF Configuration
boot nxos bootflash:/nxos.9.3.0.221.bin	interface Vlan101	interface Ethernet1/1
hostname MultisiteBG2	no shutdown	description SITE-INTERNAL INTERFACE
nv overlay evpn	vrf member vxlan-900001	mtu 9216
feature ospf	ip forward	medium p2p
feature bgp		ip address 10.1.1.34/30
feature pim		ip ospf network point-to-point
feature fabric forwarding	interface nve1	ip router ospf 100 area 0.0.0.0
feature interface-vlan	no shutdown	ip pim sparse-mode
feature vn-segment-vlan-based	host-reachability protocol bgp	evpn multisite fabric-tracking
feature lldp	source-interface loopback1	no shutdown
feature nv overlay	multisite border-gateway interface loopback100	
	member vni 900001 associate-vrf	interface Ethernet1/2
evpn multisite border-gateway 100	member vni 2001001	description SITE-INTERNAL INTERFACE
delay-restore time 300	multisite ingress-replication	mtu 9216
	ingress-replication protocol bgp	medium p2p
	member vni 2001002	ip address 10.1.2.34/30
	multisite ingress-replication	ip ospf network point-to-point
	ingress-replication protocol bgp	ip router ospf 100 area 0.0.0.0
vlan 1,101,1000-1001		ip pim sparse-mode
vlan 101	vrf context vxlan-900001	evpn multisite fabric-tracking
vn-segment 900001	vni 900001	no shutdown
vlan 1000	rd auto	
vn-segment 2001002	address-family ipv4 unicast	interface loopback0
vlan 1001	route-target both auto	description RID AND BGP PEERING
vn-segment 2001001	route-target both auto evpn	ip address 10.100.100.21/32 tag 54321
	address-family ipv6 unicast	ip router ospf 100 area 0.0.0.0
route-map RMAP-REDIST-DIRECT permit 10	route-target both auto	ip pim sparse-mode
match tag 54321	route-target both auto evpn	
		interface loopback1
interface Ethernet1/16		description NVE INTERFACE (PIP VTEP)
mtu 9216		ip address 10.200.200.21/32 tag 54321
ip address 10.52.21.1/30 tag 54321		ip router ospf 100 area 0.0.0.0
evpn multisite dci-tracking		ip pim sparse-mode
no shutdown		
		interface loopback100
		description MULTI-SITE INTERFACE (VIP VTEP)
		ip address 10.111.111.1/32 tag 54321
		ip router ospf 100 area 0.0.0.0
		router ospf 100
		router-id 10.100.100.21

DC-2 SPINE -1 Configuration

Enabling Features, RP Config	OSPF Configuration	BGP/EVPN Configuration
	interface Ethernet1/1	router bgp 100
boot nxos bootflash:/nxos.9.2.3.bin	mtu 9216	router-id 192.168.2.1
hostname Multistespine1	ip address 10.1.2.33/30	address-family ipv4 unicast
nv overlay evpn	ip ospf network point-to-point	address-family l2vpn evpn
feature ospf	ip router ospf 100 area 0.0.0.0	neighbor 10.100.100.21
feature bgp	ip pim sparse-mode	remote-as 100
feature pim	no shutdown	update-source loopback0
feature interface-vlan		address-family l2vpn evpn
feature vn-segment-vlan-based	interface Ethernet1/47	send-community
feature nv overlay	ip address 172.16.10.1/24	send-community extended
	ip ospf network point-to-point	route-reflector-client
	ip router ospf 100 area 0.0.0.0	neighbor 192.168.2.3
	ip pim sparse-mode	remote-as 100
ip pim rp-address 192.168.2.1 group-list 224.0.0.0/4	no shutdown	update-source loopback0
	interface Ethernet1/48	address-family ipv4 unicast
	ip address 172.16.11.1/24	send-community extended
	ip ospf network point-to-point	route-reflector-client
	ip router ospf 100 area 0.0.0.0	address-family l2vpn evpn
	ip pim sparse-mode	send-community extended
	no shutdown	route-reflector-client
		neighbor 192.168.2.4
		remote-as 100
	interface loopback0	update-source loopback0
	ip address 192.168.2.1/32	address-family ipv4 unicast
	ip router ospf 100 area 0.0.0.0	send-community extended
	ip pim sparse-mode	route-reflector-client
		address-family l2vpn evpn
	router ospf 100	send-community extended
	router-id 192.168.2.1	route-reflector-client

DC-2, LEAF -1 Configuration

Enabling Features, RP, VTEP Config	VLAN,VNI Configuration	OSPF Configuration
boot nxos bootflash:/nxos.7.0.3.I7.5.bin	vlan 101	interface Ethernet1/1
hostname MultisteLeaf1	vn-segment 900001	ip address 172.16.12.2/24
nv overlay evpn	vlan 1000	ip ospf network point-to-point
feature ospf	vn-segment 2001002	ip router ospf 100 area 0.0.0.0
feature bgp	vlan 1001	ip pim sparse-mode
feature pim	vn-segment 2001001	no shutdown
feature fabric forwarding		
feature interface-vlan	interface Vlan101	interface Ethernet1/6
feature vn-segment-vlan-based	no shutdown	ip address 172.16.10.2/24
feature lldp	vrf member vxlan-900001	ip ospf network point-to-point
feature nv overlay	ip forward	ip router ospf 100 area 0.0.0.0
		ip pim sparse-mode
	interface Vlan1000	no shutdown
fabric forwarding anycast-gateway-mac 0000.2222.3333	no shutdown	
ip pim rp-address 192.168.2.1 group-list 224.0.0.0/4	vrf member vxlan-900001	interface Ethernet1/16
	ip address 4.2.2.1/24	switchport
	ipv6 address 4:2:0:1::1/64	switchport mode trunk
	fabric forwarding mode anycast-gateway	no shutdown
interface nve1		
no shutdown	interface Vlan1001	interface loopback0
host-reachability protocol bgp	no shutdown	ip address 192.168.2.4/32
source-interface loopback0	vrf member vxlan-900001	ip router ospf 100 area 0.0.0.0
member vni 900001 associate-vrf	ip address 4.1.1.1/24	ip pim sparse-mode
member vni 2001001	ipv6 address 4:1:0:1::1/64	
suppress-arp	fabric forwarding mode anycast-gateway	
mcast-group 239.0.0.1		router ospf 100
member vni 2001002		router-id 192.168.2.4
suppress-arp	vrf context vxlan-900001	
mcast-group 239.0.0.1	vni 900001	
	rd auto	
	address-family ipv4 unicast	
	route-target both auto	
	route-target both auto evpn	
	address-family ipv6 unicast	
	route-target both auto	
	route-target both auto evpn	

Verify

```
leaf1# show cdp neighbors
Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-
                  S - Switch, H - Host, I - IGMP, r - Repeater,
                  V - VoIP-Phone, D - Remotely-Managed-Device,
                  s - Supports-STP-Dispute


Device-ID            Local Intrfce Hldtme Capability  Platform
MX066-H-01-SW.cisco.com
                     mgmt0         142    S I         WS-C2960X-48T
ToLeaf1              Eth1/23       163    S I         WS-C3750X-24S
spine1(SAL1948U4Y1)
                     Eth2/23       156    R S s       N9K-C9396PX
spine2(SAL1949UELD)
                     Eth2/24       152    R S s       N9K-C9396PX
leaf1#


leaf1# sh ip int brief | exclude down
IP Interface Status for VRF "default"(1)
Interface        IP Address        Interface Status
Lo0              192.168.1.3       protocol-up/link-up/admin-up
Eth2/23          172.16.1.2        protocol-up/link-up/admin-up
Eth2/24          172.16.2.2        protocol-up/link-up/admin-up
leaf1#

leaf1# sh nve vrf
VRF-Name     VNI       Interface Gateway-MAC
------------ --------- --------- -----------------
vxlan-900001 900001    nve1      00de.fb01.9fc1

leaf1# sh nve vxlan-params
VxLAN Dest. UDP Port: 4789
```

```
leaf1# show ip pim rp
PIM RP Status Information for VRF "default"
BSR disabled
Auto-RP disabled
BSR RP Candidate policy: None
BSR RP policy: None
Auto-RP Announce policy: None
Auto-RP Discovery policy: None
RP: 192.168.1.1, (0),
    uptime: 3w1d   priority: 0,
RP-source: (local),
group ranges:
224.0.0.0/4
RP: 192.168.1.2, (0),
    uptime: 3w1d   priority: 0,
RP-source: (local),
group ranges:
224.0.0.0/4
leaf1#


leaf1# sh nve interface
Interface: nve1, State: Up, encapsulation: VXLAN
VPC Capability: VPC-VIP-Only [not-notified]
Local Router MAC: 00de.fb01.9fc1
Host Learning Mode: Control-Plane
Source-Interface: loopback0 (primary: 192.168.1.3, secondary: 0.

leaf1#
```

```
leaf1# sh nve peers
Interface Peer-IP
--------- -------------
nve1      10.111.111.2
nve1      10.200.200.22
nve1      192.168.1.4

leaf1#

leaf1# show nve vni
Codes: CP - Control Pla
       UC - Unconfigure
       SU - Suppress Un

Interface VNI      Mult
--------- -------- ----
nve1      900001   n/a
nve1      2001001  239
nve1      2001002  239

leaf1#


leaf1# sh vrf vxlan-900
VRF-Name: vxlan-900001,
  VPNID: unknown
  RD: 192.168.1.3:3
  VNI: 900001, State
  Max Routes: 0  Mid
  Table-ID: 0x800000
  Table-ID: 0x000000
```

CONTROL PLANE LEARNING: Destination Prefix is 4.2.2.100 <===> 00c8.8bf9.5f41 <===> Vlan1000 <===> VNI2001002

Destination Prefix is learnt on host-connected LEAF 192.168.2.4

```
MultisteLeaf1# sh ip route 4.2.2.100 vrf vxlan-900001
IP Route Table for VRF "vxlan-900001"
'*' denotes best ucast next-hop
'**' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
'%<string>' in via output denotes VRF <string>

4.2.2.100/32, ubest/mbest: 1/0, attached
    *via 4.2.2.100, Vlan1000, [190/0], 4w2d, hmm
MultisteLeaf1#
MultisteLeaf1# sh bgp l2vpn evpn summary
BGP summary information for VRF default, address family L2VPN EVPN
BGP router identifier 192.168.2.4, local AS number 100
BGP table version is 56, L2VPN EVPN config peers 2, capable peers 2
36 network entries and 50 paths using 7968 bytes of memory
BGP attribute entries [26/4160], BGP AS path entries [1/6]
BGP community entries [0/0], BGP clusterlist entries [2/8]


Neighbor     V   AS MsgRcvd MsgSent  TblVer InQ OutQ Up/Down  State/PfxRcd
192.168.2.1  4  100  44038   44029    56    0   0    4w2d 14
192.168.2.2  4  100  44037   44030    56    0   0    4w2d 14
MultisteLeaf1#
MultisteLeaf1# sh nve peers
Interface Peer-IP        State LearnType Uptime  Router-Mac
--------- -------------- ----- --------- ------- -----------------
nve1      10.111.111.1   Up    CP        4w2d    0200.0a6f.6f01
nve1      10.200.200.21  Up    CP        4w2d    n/a

MultisteLeaf1# show nve vni
Codes: CP - Control Plane      DP - Data Plane
       UC - Unconfigured       SA - Suppress ARP
       SU - Suppress Unknown Unicast
       Xconn - Crossconnect
       MS-IR - Multisite Ingress Replication

Interface VNI     Multicast-group  State Mode Type [BD/VRF]       Flags
--------- ------- ---------------- ----- ---- ------------------- -----
nve1      900001  n/a              Up    CP   L3 [vxlan-900001]
nve1      2001001 239.0.0.1        Up    CP   L2 [1001]           SA
nve1      2001002 239.0.0.1        Up    CP   L2 [1000]           SA
MultisteLeaf1#
```

Host-Connected Leaf is advertising this prefix to its SPINE (192.168.2.1)

```
MultisteLeaf1# sh bgp l2vpn evpn neighbors 192.168.2.1 advertised-routes

Peer 192.168.2.1 routes for address family L2VPN EVPN:
BGP table version is 56, Local Router ID is 192.168.2.4
Status: s-suppressed, x-deleted, S-stale, d-dampened, h-history, *-valid, >-best
Path type: i-internal, e-external, c-confed, l-local, a-aggregate, r-redist, I-i
njected
Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath, & - backup

   Network          Next Hop         Metric    LocPrf   Weight Path
Route Distinguisher: 10.100.100.21:33767

Route Distinguisher: 10.100.100.21:33768

Route Distinguisher: 10.100.100.22:33767

Route Distinguisher: 10.100.100.22:33768

Route Distinguisher: 192.168.1.3:33767

Route Distinguisher: 192.168.1.3:33768

Route Distinguisher: 192.168.1.4:33767

Route Distinguisher: 192.168.1.4:33768

Route Distinguisher: 192.168.2.4:33767   (L2VNI 2001002)
*>l[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[0]:[0.0.0.0]:216
                       192.168.2.4          100      32768 i
*>l[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[32]:[4.2.2.100]:272
                       192.168.2.4          100      32768 i
Route Distinguisher: 192.168.2.4:33768   (L2VNI 2001001)
*>l[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[0]:[0.0.0.0]:216
                       192.168.2.4          100      32768 i
*>l[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[32]:[4.1.1.100]:272
                       192.168.2.4          100      32768 i
Route Distinguisher: 192.168.2.4:3       (L3VNI 900001)
MultisteLeaf1#
```

SPINE is advertising the same p

```
Multistespine1# sh bgp l2vp

Peer 10.100.100.21 routes f
BGP table version is 26, Lo
Status: s-suppressed, x-del
Path type: i-internal, e-ex
njected
Origin codes: i - IGP, e -
est2

   Network          Next
Route Distinguisher: 10.100

Route Distinguisher: 10.100

Route Distinguisher: 10.100

Route Distinguisher: 10.100

Route Distinguisher: 10.100

Route Distinguisher: 192.16

Route Distinguisher: 192.16

Route Distinguisher: 192.16

Route Distinguisher: 192.16

Route Distinguisher: 192.16
*>i[2]:[0]:[0]:[48]:[00c8.
                   192.1
*>i[2]:[0]:[0]:[48]:[00c8.
                   192.1
Route Distinguisher: 192.16
*>i[2]:[0]:[0]:[48]:[00c8.
                   192.1
*>i[2]:[0]:[0]:[48]:[00c8.
                   192.1
Multistespine1#
```

```
MultisiteBG2# sh bgp l2vpn evpn summary
BGP summary information for VRF default, address family L2VPN EVPN
BGP router identifier 10.100.100.21, local AS number 100
BGP table version is 60, L2VPN EVPN config peers 3, capable peers 3
43 network entries and 47 paths using 8160 bytes of memory
BGP attribute entries [37/6068], BGP AS path entries [1/6]
BGP community entries [0/0], BGP clusterlist entries [2/8]

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down  State/PfxRcd
10.100.100.22   4   200   44066   44039      60    0    0   4w2d 12
192.168.2.1     4   100   44050   44037      60    0    0   4w2d 4
192.168.2.2     4   100   44048   44037      60    0    0   4w2d 4


Neighbor        T   AS PfxRcd     Type-2     Type-3     Type-4     Type-5
10.100.100.22   E  200 12         10         2          0          0
192.168.2.1     I  100 4          4          0          0          0
192.168.2.2     I  100 4          4          0          0          0
MultisiteBG2#


MultisiteBG2# sh bgp ipv4 unicast summary
BGP summary information for VRF default, address family IPv4 Unicast
BGP router identifier 10.100.100.21, local AS number 100
BGP table version is 11, IPv4 Unicast config peers 1, capable peers 1
7 network entries and 8 paths using 1800 bytes of memory
BGP attribute entries [2/328], BGP AS path entries [1/6]
BGP community entries [0/0], BGP clusterlist entries [2/8]

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down  State/PfxRcd
10.52.21.2      4   200   44043   44041      11    0    0   4w2d 4
MultisiteBG2#


MultisiteBG2# sh bgp ipv4 unicast neighbors 10.52.21.2 advertised-routes
Peer 10.52.21.2 routes for address family IPv4 Unicast:
BGP table version is 11, Local Router ID is 10.100.100.21
Status: s-suppressed, x-deleted, S-stale, d-dampened, h-history, *-valid, >-best
Path type: i-internal, e-external, c-confed, l-local, a-aggregate, r-redist, I-i
njected
Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath, & - backup, 2 - b
est2

   Network           Next Hop         Metric     LocPrf   Weight Path
*>r10.52.21.0/30     0.0.0.0               0        100    32768 ?
*>r10.100.100.21/32  0.0.0.0               0        100    32768 ?
*>r10.111.111.1/32   0.0.0.0               0        100    32768 ?
*>r10.200.200.21/32  0.0.0.0               0        100    32768 ?
MultisiteBG2#
```

```
MultisiteBG1# sh bgp l2vpn evpn summary
BGP summary information for VRF default, ad
BGP router identifier 10.100.100.22, local
BGP table version is 82, L2VPN EVPN config
37 network entries and 45 paths using 7296
BGP attribute entries [37/6068], BGP AS pat
BGP community entries [0/0], BGP clusterli

Neighbor        V    AS MsgRcvd MsgSent   T
10.100.100.21   4   100   44126   44106
192.168.1.1     4   200   44122   44104
192.168.1.2     4   200   44121   44104


Neighbor        T   AS PfxRcd     Type-2
10.100.100.21   E  100 8          6
192.168.1.1     I  200 8          8
192.168.1.2     I  200 8          8
MultisiteBG1#


MultisiteBG1# sh bgp ipv4 unicast summary
BGP summary information for VRF default, ad
BGP router identifier 10.100.100.22, local
BGP table version is 11, IPv4 Unicast confi
7 network entries and 8 paths using 1692 by
BGP attribute entries [2/328], BGP AS path
BGP community entries [0/0], BGP clusterli

Neighbor        V    AS MsgRcvd MsgSent   T
10.52.21.1      4   100   44106   44105
MultisiteBG1#


MultisiteBG1# show bgp ipv4 unicast neighbo
Peer 10.52.21.1 routes for address family I
BGP table version is 11, Local Router ID is
Status: s-suppressed, x-deleted, S-stale, d
Path type: i-internal, e-external, c-confed
Origin codes: i - IGP, e - EGP, ? - incompl

   Network           Next Hop         N
*>r10.52.21.0/30     0.0.0.0
*>r10.100.100.22/32  0.0.0.0
*>r10.111.111.2/32   0.0.0.0
*>r10.200.200.22/32  0.0.0.0
MultisiteBG1#
```

Route exchange between Border Gateways (B.G-2 ===> B.G-1)	In DC-1, Route advertisemen

```
MultisiteBG2# sh bgp l2vpn evpn neighbors 10.100.100.22 advertised-routes
Peer 10.100.100.22 routes for address family L2VPN EVPN:
BGP table version is 60, Local Router ID is 10.100.100.21
Status: s-suppressed, x-deleted, S-stale, d-dampened, h-history, *-valid, >-best
Path type: i-internal, e-external, c-confed, l-local, a-aggregate, r-redist, I-i
njected
Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath, & - backup, 2 - b
est2

   Network              Next Hop            Metric     LocPrf    Weight Path
Route Distinguisher: 10.100.100.21:27001   (ES [0300.0000.0000.6400.0309 0])
*>l[4]:[0300.0000.0000.6400.0309]:[32]:[10.200.200.21]/136
                     10.200.200.21                 100        32768 i

Route Distinguisher: 10.100.100.21:33767   (L2VNI 2001002)
*>l[2]:[0]:[0]:[48]:[005d.738e.a337]:[0]:[0.0.0.0]/216
                     10.200.200.21                 100        32768 i
*>l[3]:[0]:[32]:[10.200.200.21]/88
                     10.200.200.21                 100        32768 i

Route Distinguisher: 10.100.100.21:33768   (L2VNI 2001001)
*>l[2]:[0]:[0]:[48]:[005d.738e.a337]:[0]:[0.0.0.0]/216
                     10.200.200.21                 100        32768 i
*>l[3]:[0]:[32]:[10.200.200.21]/88
                     10.200.200.21                 100        32768 i
Route Distinguisher: 10.100.100.22:33767
Route Distinguisher: 10.100.100.22:33768
Route Distinguisher: 192.168.1.3:33767
Route Distinguisher: 192.168.1.3:33768
Route Distinguisher: 192.168.1.4:33767
Route Distinguisher: 192.168.1.4:33768
Route Distinguisher: 192.168.2.4:33767
*>i[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[0]:[0.0.0.0]/216
                     192.168.2.4                   100           0 i
*>i[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[32]:[4.2.2.100]/272
                     192.168.2.4                   100           0 i
Route Distinguisher: 192.168.2.4:33768
*>i[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[0]:[0.0.0.0]/216
                     192.168.2.4                   100           0 i
*>i[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[32]:[4.1.1.100]/272
                     192.168.2.4                   100           0 i

Route Distinguisher: 10.100.100.21:3   (L3VNI 900001)
MultisiteBG2#
```

```
MultisiteBG1# sh bgp l2vpn evpn neighbors 192.16
Peer 192.168.1.1 routes for address family L2VPN
BGP table version is 82, Local Router ID is 10.1
Status: s-suppressed, x-deleted, S-stale, d-damp
Path type: i-internal, e-external, c-confed, l-i
Origin codes: i - IGP, e - EGP, ? - incomplete,

   Network              Next Hop            Metric
Route Distinguisher: 10.100.100.21:33767
*>e[2]:[0]:[0]:[48]:[005d.738e.a337]:[0]:[0.0.0
                     10.200.200.21

Route Distinguisher: 10.100.100.21:33768
*>e[2]:[0]:[0]:[48]:[005d.738e.a337]:[0]:[0.0.0
                     10.200.200.21

Route Distinguisher: 10.100.100.22:27001   (ES
*>l[4]:[0300.0000.0000.c800.0309]:[32]:[10.200.2
                     10.200.200.22

Route Distinguisher: 10.100.100.22:33767   (L2V
*>l[2]:[0]:[0]:[48]:[6cb2.ae91.38bf]:[0]:[0.0.0
                     10.200.200.22
*>l[3]:[0]:[32]:[10.200.200.22]/88
                     10.200.200.22

Route Distinguisher: 10.100.100.22:33768   (L2V
*>l[2]:[0]:[0]:[48]:[6cb2.ae91.38bf]:[0]:[0.0.0
                     10.200.200.22
*>l[3]:[0]:[32]:[10.200.200.22]/88
                     10.200.200.22
Route Distinguisher: 192.168.1.3:33767
Route Distinguisher: 192.168.1.3:33768
Route Distinguisher: 192.168.1.4:33767
Route Distinguisher: 192.168.1.4:33768
Route Distinguisher: 192.168.2.4:33767
*>e[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[0]:[0.0.0
                     10.111.111.1          2000
*>e[2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[32]:[4.2.2
                     10.111.111.1          2000
Route Distinguisher: 192.168.2.4:33768
*>e[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[0]:[0.0.0
                     10.111.111.1          2000
*>e[2]:[0]:[0]:[48]:[00c8.8bf9.5f42]:[32]:[4.1.1
                     10.111.111.1          2000
MultisiteBG1#
```

```
spine1# sh bgp ipv4 unicast summary
BGP summary information for VRF default, address family IPv4 Unicast
BGP router identifier 192.168.1.1, local AS number 200
BGP table version is 3, IPv4 Unicast config peers 3, capable peers 2
0 network entries and 0 paths using 0 bytes of memory
BGP attribute entries [0/0], BGP AS path entries [0/0]
BGP community entries [0/0], BGP clusterlist entries [0/0]

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down State/PfxRcd
10.100.100.22   4   200  43997   43988        0    0    0  4w2d 0 (No Cap)
192.168.1.3     4   200  43986   43984        3    0    0  4w2d 0
192.168.1.4     4   200  43990   43987        3    0    0  4w2d 0
spine1#
```

```
spine1# sh ip route 10.100.100.22
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
'**' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
'%<string>' in via output denotes VRF <string>

10.100.100.22/32, ubest/mbest: 1/0
    *via 10.2.2.34, Eth1/1, [110/41], 4w2d, ospf-100, intra
spine1#
```

```
spine1# sh bgp l2vpn evpn summary
BGP summary information for VRF default, address family L2VPN EVPN
BGP router identifier 192.168.1.1, local AS number 200
BGP table version is 31, L2VPN EVPN config peers 3, capable peers 3
19 network entries and 19 paths using 4256 bytes of memory
BGP attribute entries [17/2788], BGP AS path entries [1/6]
BGP community entries [0/0], BGP clusterlist entries [0/0]

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down State/PfxRcd
10.100.100.22   4   200  44002   43993       31    0    0  4w2d 11
192.168.1.3     4   200  43991   43989       31    0    0  4w2d 4
192.168.1.4     4   200  43996   43992       31    0    0  4w2d 4
spine1#
```

```
spine1# sh bgp l2vpn evpn 00c8.8bf9.5f41
BGP routing table information for VRF default, address family L2VPN EVPN
Route Distinguisher: 192.168.2.4:33767
BGP routing table entry for [2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[0]:[0.0.0.0]/216,
 version 27
Paths: (1 available, best #1)
Flags: (0x000202) (high32 00000000) on xmit-list, is not in l2rib/evpn, is not i
n HW
Multipath: iBGP

  Advertised path-id 1
  Path type: internal, path is valid, is best path, no labeled nexthop
  AS-Path: 100 , path sourced external to AS
    10.111.111.2 (metric 41) from 10.100.100.22 (10.100.100.22)
      Origin IGP, MED 2000, localpref 100, weight 0
      Received label 2001002
      Extcommunity: RT:200:2001002 ENCAP:8

  Path-id 1 advertised to peers:
    192.168.1.3      192.168.1.4
BGP routing table entry for [2]:[0]:[0]:[48]:[00c8.8bf9.5f41]:[32]:[4.2.2.100]/2
72, version 29
Paths: (1 available, best #1)
Flags: (0x000202) (high32 00000000) on xmit-list, is not in l2rib/evpn, is not i
n HW
Multipath: iBGP

  Advertised path-id 1
  Path type: internal, path is valid, is best path, no labeled nexthop
  AS-Path: 100 , path sourced external to AS
    10.111.111.2 (metric 41) from 10.100.100.22 (10.100.100.22)
      Origin IGP, MED 2000, localpref 100, weight 0
      Received label 2001002 900001
      Extcommunity: RT:200:900001 RT:200:2001002 ENCAP:8 Router MAC:0200.0a6f.6f
2

  Path-id 1 advertised to peers:
    192.168.1.3      192.168.1.4

spine1#
```

```
leaf1# sh bgp
BGP summary in
BGP router ide
BGP table vers
36 network ent
BGP attribute
BGP community

Neighbor
192.168.1.1
192.168.1.2
leaf1#
```

```
leaf1# show bg
BGP routing ta
BGP routing ta
Paths: (1 avai
Flags: (0x0800
  vpn: version

  Advertised p
  Path type: i

32]:[4.2.2.100
  AS-Path: 100
    10.111.111
      Origin I
      Received
      Extcommun
        RT:2
        RT:2
        ENCA
        Route
      Originat

VRF advertisin
Path-id 1 no

VPN AF adver
Path-id 1 no
leaf1#
```

```
leaf1# show mac address-table | i 00c8.8bf9.5f41|"+"|Type
  VLAN    MAC Address      Type     age     Secure NTFY   Ports/SWID.SSID.LID
* 1000   00c8.8bf9.5f41   dynamic   0        F    F       nve1/10.111.111.2
leaf1#
```

```
leaf1# show ip interface bri vrf all
IP Interface Status for VRF "default"(1)
Interface           IP Address      Interface Status
Lo0                 192.168.1.3     protocol-up/link-up/admin-up
Eth1/18             1.1.1.1         protocol-down/link-down/admin-do
Eth2/23             172.16.1.2      protocol-up/link-up/admin-up
Eth2/24             172.16.2.2      protocol-up/link-up/admin-up

IP Interface Status for VRF "management"(2)
Interface           IP Address      Interface Status
mgmt0               10.31.121.19    protocol-up/link-up/admin-up

IP Interface Status for VRF "vxlan-900001"(3)
Interface           IP Address      Interface Status
Vlan101             forward-enabled protocol-up/link-up/admin-up
Vlan1000            4.2.2.1         protocol-up/link-up/admin-up
Vlan1001            4.1.1.1         protocol-up/link-up/admin-up

leaf1#
```

```
leaf1# show ip arp vrf vxlan-900001

Flags: * - Adjacencies learnt on non-active FHRP router
       + - Adjacencies synced via CFSoE
       # - Adjacencies Throttled for Glean
       D - Static Adjacencies attached to down interface

IP ARP Table for context vxlan-900001
Total number of entries: 2
Address       Age       MAC Address      Interface
4.1.1.10      00:03:56  0035.1ac1.37c3   Vlan1001
4.2.2.10      00:13:10  0035.1ac1.37c2   Vlan1000
leaf1#
```

```
leaf1# show ip route vrf vxl
IP Route Table for VRF "vxla
'*' denotes best ucast next-
'**' denotes best mcast next
'[x/y]' denotes [preference/
'%<string>' in via output de

4.2.2.100/32, ubest/mbest:
    *via 10.111.111.2%defaul
pls-vpn)segid 900001 tunnel:

leaf1#
```

```
leaf1# traceroute 10.111.11
traceroute to 10.111.111.2 (
 1  172.16.1.1 (172.16.1.1)
 2  10.111.111.2 (10.111.111
leaf1#
```

```
leaf1# show l2route evpn mac
Mac Address     Prod Host IP
--------------  ---- -------
0035.1ac1.37c2  HMM  4.2.2.10
00c8.8bf9.5f41  BGP  4.2.2.10
e0d1.73a4.1d41  BGP  4.2.2.10
leaf1#
```

```
leaf1# show nve internal bg
                             VNI    Peer-IP           Pe
                             900001 10.111.111.2      02
                             200100110.111.111.2      00
                             200100210.111.111.2      00
                             leaf1#
```

```
              Host Reachability  Verification from DC-1 to DC-2
ToLeaf1#show ip int br | e down
Interface           IP-Address      OK? Method Status    Protocol
Vlan1000            4.2.2.10        YES NVRAM  up         up
Vlan1001            4.1.1.10        YES NVRAM  up         up
GigabitEthernet1/0/1 unassigned     YES unset  up         up
ToLeaf1#

ToLeaf1#ping 4.2.2.100
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 4.2.2.100, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/4/9 ms
ToLeaf1#

ToLeaf1#show ip arp 4.2.2.100
Protocol Address    Age (min) Hardware Addr   Type  Interface
Internet 4.2.2.100        54  00c8.8bf9.5f41  ARPA  Vlan1000
ToLeaf1#

toMultisiteLeaf1#sh ip interf bri | ex down
Interface           IP-Address      OK? Method Status    Protocol
Vlan1000            4.2.2.100       YES NVRAM  up         up
Vlan1001            4.1.1.100       YES NVRAM  up         up
GigabitEthernet2/0/1 unassigned     YES unset  up         up

toMultisiteLeaf1#sh ip arp 4.2.2.100
Protocol Address    Age (min) Hardware Addr   Type  Interface
Internet 4.2.2.100        -   00c8.8bf9.5f41  ARPA  Vlan1000
toMultisiteLeaf1#
```

```
Leaf-1 MAC Address Verification

leaf1# sh mac address-table vlan 1000                                    leaf1# show mac address-table vlan 1001
Legend:                                                                  Legend:
        * - primary entry, G - Gateway MAC, (R) - Routed MAC, O - Overlay MAC       * - primary entry, G - Gateway MAC, (R)
        age - seconds since last seen,+ - primary entry using vPC Peer-Link         age - seconds since last seen,+ - prima
   VLAN     MAC Address       Type      age     Secure NTFY  Ports/SWID.SSID.LID       VLAN     MAC Address       Type      age
---------+-----------------+--------+---------+------+----+------------------       ---------+-----------------+--------+---------+
* 1000    0000.2222.3333    static    0       F    F   sup-eth2               * 1001    0000.2222.3333    static    0
* 1000    0035.1ac1.37c2    dynamic   730     F    F   Eth1/23               * 1001    0035.1ac1.37c3    dynamic   630
* 1000    005d.738e.a337    static    0       F    F   nve1/10.111.111.2      * 1001    005d.738e.a337    static    0
* 1000    00c8.8bf9.5f41    dynamic   0       F    F   nve1/10.111.111.2      * 1001    00c8.8bf9.5f42    dynamic   0
* 1000    6cb2.ae91.38bf    static    0       F    F   nve1/10.200.200.22     * 1001    6cb2.ae91.38bf    static    0
* 1000    e0d1.73a4.1d41    dynamic   0       F    F   nve1/192.168.1.4       * 1001    e0d1.73a4.1d42    dynamic   0
leaf1#                                                                   leaf1#


leaf1# sh system internal l2rib event-history mac | i 0035.1ac1.37c2
[04/24/20 13:10:09.721 UTC 3 4173] Received MAC ROUTE msg: addr: (1000-0035.1ac1.37c2) vni: 0 admin_dist: 0 seq_num: 0 rt_flags: L soo: 0 dg_co
[04/24/20 13:10:09.721 UTC 6 4173] (1000,0035.1ac1.37c2,3):MAC route created with seq num:0, flags:L (), soo:0, peerid:0
[04/24/20 13:10:09.732 UTC c 4173] (1000,0035.1ac1.37c2,3):Encoding MAC best route (ADD, client id 4)
[04/24/20 13:10:09.871 UTC e 4173] (1000,0035.1ac1.37c2):Bound MAC-IP(4.2.2.10) to MAC, Total MAC-IP linked: 1

leaf1# show system internal l2rib event-history mac | i 0035.1ac1.37c3
[04/24/20 13:10:09.721 UTC 8 4173] Received MAC ROUTE msg: addr: (1001-0035.1ac1.37c3) vni: 0 admin_dist: 0 seq_num: 0 rt_flags: L soo: 0 dg_co
[04/24/20 13:10:09.721 UTC b 4173] (1001,0035.1ac1.37c3,3):MAC route created with seq num:0, flags:L (), soo:0, peerid:0
[04/24/20 13:10:09.732 UTC d 4173] (1001,0035.1ac1.37c3,3):Encoding MAC best route (ADD, client id 4)
[04/24/20 13:10:09.871 UTC f 4173] (1001,0035.1ac1.37c3):Bound MAC-IP(4.1.1.10) to MAC, Total MAC-IP linked: 1


leaf1# sh system internal l2rib event-history mac-ip | i 0035.1ac1.37c2
[04/24/20 13:10:09.871 UTC 2 4173] Received MAC-IP ROUTE msg: addr: (1000-0035.1ac1.37c2) host ip: 4.2.2.10 vni: 0 L3 info: 900001 rt_flags:
[04/24/20 13:10:09.871 UTC 3 4173] (1000,0035.1ac1.37c2,4.2.2.10):MAC-IP entry created
[04/24/20 13:10:09.871 UTC 4 4173] (1000,0035.1ac1.37c2,4.2.2.10,12):MAC-IP route created with flags 0, L3 vrf 900001, seq 0, admin dist 7, soo 0
[04/24/20 13:10:09.882 UTC 9 4173] (1000,0035.1ac1.37c2,4.2.2.10,12):Encoding MAC-IP best route (ADD, client id 4)
leaf1#


leaf1# show system internal l2rib event-history mac-ip | i 0035.1ac1.37c3
[04/24/20 13:10:09.871 UTC 6 4173] Received MAC-IP ROUTE msg: addr: (1001-0035.1ac1.37c3) host ip: 4.1.1.10 vni: 0 L3 info: 900001 rt_flags:
[04/24/20 13:10:09.871 UTC 7 4173] (1001,0035.1ac1.37c3,4.1.1.10):MAC-IP entry created
[04/24/20 13:10:09.871 UTC 8 4173] (1001,0035.1ac1.37c3,4.1.1.10,12):MAC-IP route created with flags 0, L3 vrf 900001, seq 0, admin dist 7, soo 0
[04/24/20 13:10:09.882 UTC a 4173] (1001,0035.1ac1.37c3,4.1.1.10,12):Encoding MAC-IP best route (ADD, client id 4)
leaf1#
```

Troubleshoot

In order to troubleshoot, refer to Troubleshoot EVPN/VxLAN in Multisite Environment

Related Information

- **VXLAN EVPN Multi-SiteDesign and Deployment White Paper**
- **Configuring VXLAN EVPN Multi-Site**