

使用路由服务器配置Nexus EVPN-VXLAN多站点

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简介

本文档介绍如何在Cisco Nexus 9000交换机上配置和验证以太网VPN/虚拟可扩展LAN(EVPN/VxLAN)多站点环境。它涉及vPC枝叶节点中的虚拟交换矩阵对等。

对于站点到站点连接，说明路由服务器的概念。

先决条件

要求

Cisco 建议您了解以下主题：

- 多协议标签交换(MPLS)第3层VPN
- 多协议边界网关协议(MP-BGP)
- EVPN

使用的组件

本文档中的信息基于以下软件和硬件版本：

所有站点枝叶	N9K-C9336C-FX2	NXOS:10.2(3)
S1_Spine1	N9K-C9364C	NXOS:10.2(4)
S1_Spine2	N9K-C9364C	NXOS 9.3(5)
S1_Border Gateway1、 S2_Border Gateway2、 S2_Border Gateway1	N9K-C9332C	NXOS:9.3(9)
S1_边界网关2	N9K-C9332C	NXOS:10.2(4)
路由服务器	N9K-C9396PX	NXOS:9.2(2)
主机1	N3K-C3264C-E	NXOS:9.3(5)
主机2和主机3	N3K-C3264C-E	NXOS:9.2(2)

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

背景信息

数据中心是一个资源池，其中包含计算能力、存储和必要的應用，以支持任何业务环境。正确规划数据中心基础设施设计至关重要。本文档介绍医院网络等关键要求，以及如何满足或超过这些要求。现代IT基础设施和数据中心部署需要高可用性(HA)、以更快的速度扩展的能力以及始终保持的高性能。

下面是一些在DC设计/架构领域探讨的关键要求：

- 端口密度通过交换矩阵扩展器(FEX)得以改善。
- 通过硬件虚拟化(UCS)提高计算容量。
- 接入层上行链路带宽通过端口通道得以提高。
- 机箱级冗余通过vPC得以改进。
- 软件定义网络(SDN)交换矩阵通过以应用为中心的基础设施(ACI)进行了改进 — 在交换矩阵中自动进行底层和重叠。
- 通过数据中心网络管理器(DCNM)，新服务的快速部署和支持得以改进。
- 通过暗光纤或波长服务提高了长距离应用的带宽要求。
- 最重要的是，地理冗余和扩展是数据中心环境跳转/扩展的关键属性。多站点VxLAN/EVPN帮助我们获得更好的数据中心互联(DCI)解决方案。

多站点有何帮助？

外部连接包括数据中心到网络其余部分的连接：到Internet、WAN或园区。为外部连接提供的所有选项都是多租户感知的，并侧重于到外部网络域的第3层(L3)传输。

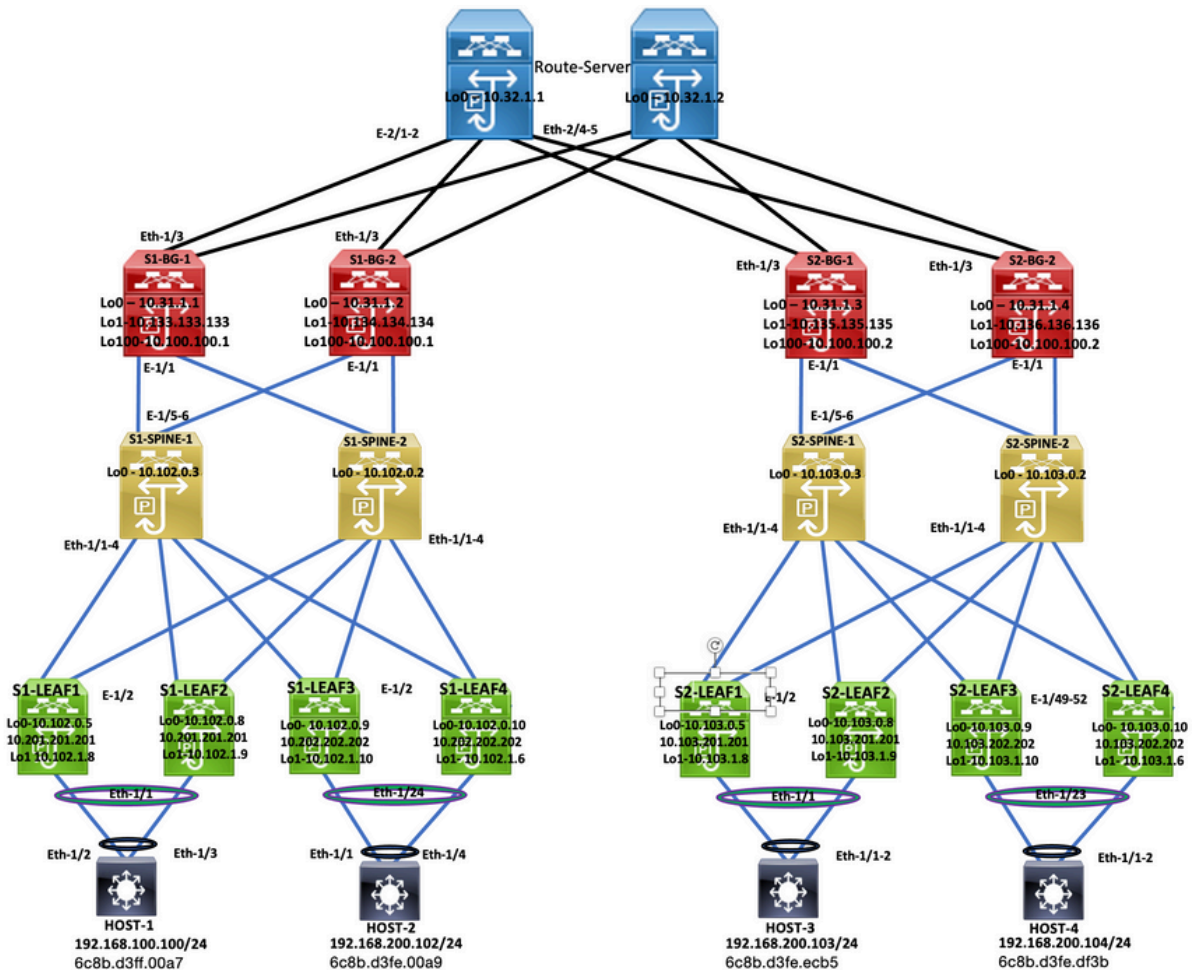
- EVPN是下一代一体化VPN解决方案。
- 它不仅能完成许多其他的VPN技术，而且性能更佳。
- 与传统网络集成。
- 选择性通告/扩展：
 - 扩展唯一的第2层(L2) — 可使用第2类路由扩展的特定VLAN/子网。
 - 仅扩展第3层域 — 特定第3层域可使用第5类路由进行扩展。
- 自动发现具有类型4路由的冗余组。
- 混叠、大量提取地址、水平分割(SH)多归属(MH)指示和1类路由。
- 使用类型3路由自动发现组播隧道终端和组播(MCAST)隧道类型。

其他优势

- 在数据中心和云之间平衡工作负载。
- 对中断做出主动响应 — 降低即将到来的灾难（如飓风和洪水）的风险。
- 数据中心维护和迁移 — 计划在一段时间内发生的事件，并与传统网络集成。
- 备份和灾难恢复即服务(aaS)。

配置

网络图



拓扑

站点1枝叶1配置

```

feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lACP
feature vpc
feature nv overlay

fabric forwarding anycast-gateway-mac 0000.1111.2222

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8
ip igmp snooping vxlan

vlan 1,100,200,300-350,2001
vlan 100
    vn-segment 4000100
vlan 200

```

```
    vn-segment 4000200
vlan 301
    vn-segment 4000301
vlan 302
    vn-segment 4000302
vlan 303
    vn-segment 4000303
vlan 350
    name L3-VNI
    vn-segment 4000999
vlan 2001
    vn-segment 4000502

vrf context L3VNI4000999
    vni 4000999
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn
vrf context vrf_1
    vni 4000501
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn

vrf context vrf_2
    vni 4000502
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn
vpc domain 100
    peer-switch
    peer-keepalive destination 10.197.214.54 source 10.197.214.53
    virtual peer-link destination 10.102.1.9 source 10.102.1.8 dscp 56
    delay restore 150
    peer-gateway
    ip arp synchronize

interface Vlan100
    no shutdown
    mtu 9216
    vrf member vrf_2
    no ip redirects
    ip address 192.168.100.254/24
    no ipv6 redirects
    fabric forwarding mode anycast-gateway

interface Vlan200
    no shutdown
    mtu 9216
    vrf member vrf_2
    no ip redirects
    ip address 192.168.200.254/24
    no ipv6 redirects
    fabric forwarding mode anycast-gateway

interface Vlan301
    no shutdown
    mtu 9216
    vrf member vrf_1
```

```
no ip redirects
ip address 172.16.11.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan302
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.12.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan303
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects

interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-350,2001
spanning-tree port type network
vpc peer-link

interface port-channel100
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
mtu 9216
vpc 100

interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
suppress-arp
mcast-group 231.0.0.1
member vni 4000200
suppress-arp
mcast-group 231.0.0.2
member vni 4000502 associate-vrf

interface Ethernet1/1
switchport
switchport mode trunk
```

```
switchport trunk allowed vlan 100,200
mtu 9216
channel-group 100
no shutdown

interface Ethernet1/2
mtu 9216
port-type fabric
medium p2p
ip address 192.168.17.12/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface loopback0
ip address 10.102.0.5/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback1
ip address 10.102.1.8/32
ip address 10.201.201.201/32 secondary
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

router ospf 100
router-id 10.102.0.5
router bgp 100
router-id 10.102.0.5
log-neighbor-changes
address-family l2vpn evpn
advertise-pip
neighbor 10.102.0.2
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.102.0.3
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended

evpn
vni 4000100 l2
rd auto
route-target import auto
route-target export auto
vni 4000200 l2
rd auto
route-target import auto
```

```
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
route-target import auto
route-target export auto
```

站点1枝叶2配置

```
feature nxapi
feature sftp-server
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay
fabric forwarding anycast-gateway-mac 0000.1111.2222

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001

vlan 100
vn-segment 4000100
vlan 200
vn-segment 4000200
vlan 301
vn-segment 4000301
vlan 302
vn-segment 4000302
vlan 303
vn-segment 4000303
vlan 350
name L3-VNI
vn-segment 4000999
vlan 2001
vn-segment 4000502

vrf context L3VNI4000999
vni 4000999
rd auto
address-family ipv4 unicast
route-target both auto
```



```
    route-target both auto evpn

vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vpc domain 100
  peer-switch
  peer-keepalive destination 10.197.214.53 source 10.197.214.54
  virtual peer-link destination 10.102.1.8 source 10.102.1.9 dscp 56
  delay restore 150
  peer-gateway
  ip arp synchronize

interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects

  fabric forwarding mode anycast-gateway
interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.12.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan303
  no shutdown
```

```
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects
```

```
interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-350,2001
spanning-tree port type network
vpc peer-link
```

```
interface port-channel100
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
mtu 9216
vpc 100
```

```
interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
  suppress-arp
  mcast-group 231.0.0.1
member vni 4000200
  suppress-arp
  mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/1
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
mtu 9216
channel-group 100
no shutdown
```

```
interface Ethernet1/2
mtu 9216
port-type fabric
medium p2p
ip address 192.168.18.12/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
interface loopback0
```

```
ip address 10.102.0.8/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback1
 ip address 10.102.1.9/32
 ip address 10.201.201.201/32 secondary
 ip router ospf 100 area 0.0.0.0
 ip pim sparse-mode
 icam monitor scale

router ospf 100
 router-id 10.102.0.8
router bgp 100
 router-id 10.102.0.8
 log-neighbor-changes
 address-family l2vpn evpn
  advertise-pip
 neighbor 10.102.0.2
  remote-as 100
  update-source loopback0
  address-family ipv4 unicast
  address-family ipv6 unicast
  send-community
  send-community extended
  address-family l2vpn evpn
  send-community
  send-community extended
 neighbor 10.102.0.3
  remote-as 100
  update-source loopback0
  address-family ipv4 unicast
  address-family ipv6 unicast
  send-community
  send-community extended
  address-family l2vpn evpn
  send-community
  send-community extended
evpn
 vni 4000100 12
  rd auto
  route-target import auto
  route-target export auto
 vni 4000200 12
  rd auto
  route-target import auto
  route-target export auto
 vni 4000301 12
  rd auto
  route-target import auto
  route-target export auto
 vni 4000302 12
  rd auto
  route-target import auto
  route-target export auto
 vni 4000303 12
  rd auto
  route-target import auto
  route-target export auto
```

站点1枝叶-3配置

```
feature nxapi
feature bash-shell
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay
feature ngoam

fabric forwarding anycast-gateway-mac 0000.1111.2222

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001

vlan 100
  vn-segment 4000100
vlan 200
  vn-segment 4000200
vlan 301
  vn-segment 4000301
vlan 302
  vn-segment 4000302
vlan 303
  vn-segment 4000303
vlan 350
  name L3-VNI
  vn-segment 4000999
vlan 2001
  vn-segment 4000502

vrf context L3VNI4000999
  vni 4000999
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
```

```
route-target both auto evpn

vpc domain 100
peer-switch
peer-keepalive destination 10.197.214.56 source 10.197.214.55
virtual peer-link destination 10.102.0.10 source 10.102.0.9 dscp 56
delay restore 150
peer-gateway
layer3 peer-router
ip arp synchronize

interface Vlan100
no shutdown
mtu 9216
vrf member vrf_2
no ip redirects
ip address 192.168.100.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan200
no shutdown
mtu 9216
vrf member vrf_2
no ip redirects
ip address 192.168.200.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects

interface port-channel2
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
vpc 2

interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-500,2001
spanning-tree port type network
vpc peer-link

interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
suppress-arp
mcast-group 231.0.0.1
member vni 4000200
suppress-arp
mcast-group 231.0.0.2
```

```
member vni 4000502 associate-vrf

interface Ethernet1/1
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 200,300-305
  mtu 9216
  no shutdown

interface Ethernet1/2
  mtu 9216
  port-type fabric
  medium p2p
  ip address 192.168.19.12/24
  ip ospf network point-to-point
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode
  no shutdown

interface Ethernet1/24
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 100,200
  channel-group 2 mode active
  no shutdown

interface loopback0
  ip address 10.102.0.9/32
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode

interface loopback1
  ip address 10.102.1.10/32
  ip address 10.202.202.202/32 secondary
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode

interface loopback100
  vrf member vrf_2
  ip address 10.15.100.2/24

router ospf 100
  router-id 10.102.0.9
router bgp 100
  router-id 10.102.0.9
  log-neighbor-changes
  address-family 12vpn evpn
    advertise-pip
  neighbor 10.102.0.2
    remote-as 100
    update-source loopback0
    address-family ipv4 unicast
    address-family ipv6 unicast
      send-community
    send-community extended
  address-family 12vpn evpn
    send-community
    send-community extended
neighbor 10.102.0.3
  remote-as 100
  update-source loopback0
  address-family ipv4 unicast
```

```

address-family ipv6 unicast
  send-community
  send-community extended
address-family l2vpn evpn
  send-community
  send-community extended
  vrf vrf_2
address-family ipv4 unicast
  network 10.15.100.2/32
  network 192.168.100.0/24
neighbor 192.168.100.253
  remote-as 65111
  update-source loopback100
  ebgp-multihop 10
  address-family ipv4 unicast
evpn
vni 4000100 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000200 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000301 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000302 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000303 12
  rd auto
  route-target import auto
  route-target export auto

```

站点1枝叶4配置

```

feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay
feature ngoam

fabric forwarding anycast-gateway-mac 0000.1111.2222

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

```

```
vlan 1,100,200,300-350,2001
```

```
vlan 100
```

```
vn-segment 4000100
```

```
vlan 200
```

```
vn-segment 4000200
```

```
vlan 301
```

```
vn-segment 4000301
```

```
vlan 302
```

```
vn-segment 4000302
```

```
vlan 303
```

```
vn-segment 4000303
```

```
vlan 350
```

```
name L3-VNI
```

```
vn-segment 4000999
```

```
vlan 2001
```

```
vn-segment 4000502
```

```
vrf context L3VNI4000999
```

```
vni 4000999
```

```
rd auto
```

```
address-family ipv4 unicast
```

```
route-target both auto
```

```
route-target both auto evpn
```

```
vrf context vrf_1
```

```
vni 4000501
```

```
rd auto
```

```
address-family ipv4 unicast
```

```
route-target both auto
```

```
route-target both auto evpn
```

```
vrf context vrf_2
```

```
vni 4000502
```

```
rd auto
```

```
address-family ipv4 unicast
```

```
route-target both auto
```

```
route-target both auto evpn
```

```
vpc domain 100
```

```
peer-switch
```

```
peer-keepalive destination 10.197.214.55 source 10.197.214.56
```

```
virtual peer-link destination 10.102.0.9 source 10.102.0.10 dscp 56
```

```
delay restore 150
```

```
peer-gateway
```

```
layer3 peer-router
```

```
ip arp synchronize
```

```
interface Vlan100
```

```
no shutdown
```

```
mtu 9216
```

```
vrf member vrf_2
```

```
no ip redirects
```

```
ip address 192.168.100.254/24
```

```
no ipv6 redirects
```

```
fabric forwarding mode anycast-gateway
```

```
interface Vlan200
```

```
no shutdown
```

```
mtu 9216
```



```
vrf member vrf_2
no ip redirects
ip address 192.168.200.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects
```

```
interface port-channel2
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
vpc 2
```

```
interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-500,2001
spanning-tree port type network
vpc peer-link
```

```
interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
suppress-arp
mcast-group 231.0.0.1
member vni 4000200
suppress-arp
mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/1
switchport
switchport mode trunk
switchport trunk allowed vlan 200,300-305
mtu 9216
no shutdown
```

```
interface Ethernet1/2
mtu 9216
port-type fabric
medium p2p
ip address 192.168.20.12/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
interface Ethernet1/24
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200
```

```
channel-group 2 mode active
no shutdown

interface loopback0
ip address 10.102.0.10/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback1
ip address 10.102.1.6/32
ip address 10.202.202.202/32 secondary
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback100
vrf member vrf_2
ip address 10.15.100.1/24

router ospf 100
router-id 10.102.0.10
router bgp 100
router-id 10.102.0.10
log-neighbor-changes
address-family ipv4 unicast
address-family ipv4 mvpn
address-family l2vpn evpn
advertise-pip
neighbor 10.102.0.2
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.102.0.3
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
vrf vrf_2
address-family ipv4 unicast
network 10.15.100.1/32
network 192.168.100.0/24
neighbor 192.168.100.253
remote-as 65111
update-source loopback100
ebgp-multihop 3
address-family ipv4 unicast
evpn
vni 4000100 l2
rd auto
route-target import auto
```

```
route-target export auto
vni 4000200 12
rd auto
route-target import auto
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
route-target import auto
route-target export auto
```

站点1主干-1配置

```
feature nxapi
nv overlay evpn
feature ospf
feature bgp
feature pim
feature interface-vlan
feature vn-segment-vlan-based
feature lACP
```

```
ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8
```

```
vlan 1
```

```
interface Ethernet1/1
mtu 9216
medium p2p
ip address 192.168.17.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
interface Ethernet1/2
mtu 9216
medium p2p
ip address 192.168.18.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
interface Ethernet1/3
mtu 9216
port-type fabric
medium p2p
```

```
ip address 192.168.19.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/4
mtu 9216
medium p2p
ip address 192.168.20.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/5
mtu 9216
medium p2p
ip address 192.168.15.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/6
mtu 9216
medium p2p
ip address 192.168.16.11/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface loopback0
description "anycast RP address"
ip address 10.102.0.2/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
icam monitor scale

router ospf 100
router-id 10.102.0.2
router bgp 100
router-id 10.102.0.2
log-neighbor-changes
address-family ipv4 unicast
address-family ipv6 unicast
address-family l2vpn evpn
neighbor 10.31.1.1
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
send-community
send-community extended
route-reflector-client
address-family l2vpn evpn
send-community
send-community extended
route-reflector-client
neighbor 10.31.1.2
```

```
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
  send-community
  send-community extended
route-reflector-client
address-family l2vpn evpn
  send-community
  send-community extended
route-reflector-client
neighbor 10.102.0.5
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
  send-community
  send-community extended
route-reflector-client
address-family l2vpn evpn
  send-community
  send-community extended
route-reflector-client
neighbor 10.102.0.8
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
  send-community
  send-community extended
route-reflector-client
address-family l2vpn evpn
  send-community
  send-community extended
route-reflector-client
neighbor 10.102.0.9
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
  send-community
  send-community extended
route-reflector-client
address-family l2vpn evpn
  send-community
  send-community extended
route-reflector-client
neighbor 10.102.0.10
remote-as 100
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
  send-community
  send-community extended
route-reflector-client
address-family l2vpn evpn
  send-community
  send-community extended
route-reflector-client
neighbor 10.133.133.133
remote-as 100
```

```
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
route-reflector-client
address-family l2vpn evpn
send-community
send-community extended
route-reflector-client
```

站点1边界网关-1配置

```
S1-Bg1# show run
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature nv overlay
evpn multisite border-gateway 100
delay-restore time 300

fabric forwarding anycast-gateway-mac 0000.1111.2222

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001

vlan 100
vn-segment 4000100
vlan 200
vn-segment 4000200
vlan 301
vn-segment 4000301
vlan 302
vn-segment 4000302
vlan 303
vn-segment 4000303
vlan 350
name L3-VNI
vn-segment 4000999
vlan 2001
vn-segment 4000502

route-map REDIST-T0-SITE-EXT-DCI permit 10
match tag 54321
route-map RETAIN-NEXT-HOP permit 10
set ip next-hop unchanged

vrf context L3VNI4000999
vni 4000999
```

```
rd auto
address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn

vrf context vrf_1
vni 4000501
rd auto
address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn

vrf context vrf_2
vni 4000502
rd auto
address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn

interface Vlan100
no shutdown
mtu 9216
vrf member vrf_2
no ip redirects
ip address 192.168.100.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan200
no shutdown
mtu 9216
vrf member vrf_2
no ip redirects
ip address 192.168.200.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan301
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.11.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan302
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.12.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan303
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
```

```
fabric forwarding mode anycast-gateway

interface Vlan2001
  no shutdown
  mtu 9000
  vrf member vrf_2
  no ip redirects
  ip forward
  ipv6 address use-link-local-only
  no ipv6 redirects

interface nve1
  no shutdown
  host-reachability protocol bgp
  source-interface loopback1
  multisite border-gateway interface loopback100
  member vni 4000100
    suppress-arp
    multisite ingress-replication
    mcast-group 231.0.0.1
  member vni 4000200
    suppress-arp
    multisite ingress-replication
    mcast-group 231.0.0.2
  member vni 4000502 associate-vrf

interface Ethernet1/1
  mtu 9216
  port-type fabric
  medium p2p
  ip address 192.168.15.12/24
  ip ospf network point-to-point
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode
  no shutdown
  evpn multisite fabric-tracking

interface Ethernet1/3
  mtu 9216
  ip address 10.150.150.1/24 tag 54321
  ip router ospf 100 area 0.0.0.0
  no shutdown
  evpn multisite dci-tracking

interface loopback0
  ip address 10.31.1.1/32 tag 54321
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode

interface loopback1
  ip address 10.133.133.133/32 tag 54321
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode

interface loopback100
  description "Multi-site VIP"
  ip address 10.100.100.1/32 tag 54321
  ip router ospf 100 area 0.0.0.0
  ip pim sparse-mode
  icam monitor scale

router ospf 100
```



```

router-id 10.31.1.1
router bgp 100
router-id 10.31.1.1
log-neighbor-changes
address-family ipv4 unicast
  redistribute direct route-map REDIST-T0-SITE-EXT-DCI
address-family ipv4 mvpn
address-family l2vpn evpn
neighbor 10.32.1.1
  remote-as 300
  update-source loopback0
  ebgp-multihop 5
  peer-type fabric-external
  address-family ipv4 mvpn
    send-community
    send-community extended
    rewrite-rt-asn
  address-family l2vpn evpn
    send-community
    send-community extended
    rewrite-evpn-rt-asn
neighbor 10.102.0.2
  remote-as 100
  update-source loopback0
  address-family ipv4 unicast
  address-family ipv6 unicast
  address-family ipv4 mvpn
    send-community
    send-community extended
  address-family l2vpn evpn
    send-community
    send-community extended
neighbor 10.150.150.2
  remote-as 300
  address-family ipv4 unicast
evpn
vni 4000100 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000200 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000301 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000302 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000303 12
  rd auto
  route-target import auto
  route-target export auto

```

站点1边界网关2配置

```
S1_B2#
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature nv overlay
evpn multisite border-gateway 100
    delay-restore time 300

fabric forwarding anycast-gateway-mac 0000.2222.4444

ip pim rp-address 10.102.0.2 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001
vlan 100
    vn-segment 4000100
vlan 200
    vn-segment 4000200
vlan 301
    vn-segment 4000301
vlan 302
    vn-segment 4000302
vlan 303
    vn-segment 4000303
vlan 350
    name L3-VNI
    vn-segment 4000999
vlan 2001
    vn-segment 4000502

route-map REDIST-T0-SITE-EXT-DCI permit 10
    match tag 54321
route-map RETAIN-NEXT-HOP permit 10
    set ip next-hop unchanged

vrf context L3VNI4000999
    vni 4000999
    rd auto
address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_1
    vni 4000501
    rd auto
address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
    vni 4000502
    rd auto
address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn
```

```
interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.12.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan303
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.13.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
  no shutdown
  mtu 9000
  vrf member vrf_2
  no ip redirects
  ip forward
  ipv6 address use-link-local-only
  no ipv6 redirects
```

```
interface nve1
  no shutdown
  host-reachability protocol bgp
  source-interface loopback1
  multisite border-gateway interface loopback100
  member vni 4000100
  suppress-arp
  multisite ingress-replication
```

```
    mcast-group 231.0.0.1
member vni 4000200
    suppress-arp
    multisite ingress-replication
    mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/1
    mtu 9216
    port-type fabric
    medium p2p
    ip address 192.168.16.12/24
    ip ospf network point-to-point
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
    no shutdown
    evpn multisite fabric-tracking
```

```
interface Ethernet1/3
    mtu 9216
    ip address 10.150.151.1/24 tag 54321
    ip router ospf 100 area 0.0.0.0
    no shutdown
    evpn multisite dci-tracking
```

```
interface loopback0
    ip address 10.31.1.2/32 tag 54321
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
```

```
interface loopback1
    ip address 10.134.134.134/32 tag 54321
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
```

```
interface loopback100
    description "Multi-site VIP"
    ip address 10.100.100.1/32 tag 54321
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
icam monitor scale
```

```
router ospf 100
    router-id 10.31.1.2
router bgp 100
    router-id 10.31.1.2
    log-neighbor-changes
    address-family ipv4 unicast
        redistribute direct route-map REDIST-TO-SITE-EXT-DCI
    address-family ipv4 mvpn
    address-family l2vpn evpn
    neighbor 10.32.1.1
        remote-as 300
        update-source loopback0
        ebgp-multihop 5
        peer-type fabric-external
        address-family ipv4 mvpn
            send-community
            send-community extended
            rewrite-rt-asn
        address-family l2vpn evpn
            send-community
```

```
        send-community extended
        rewrite-evpn-rt-asn
neighbor 10.102.0.2
  remote-as 100
  update-source loopback0
  address-family ipv4 unicast
  address-family ipv6 unicast
    send-community
    send-community extended
  address-family l2vpn evpn
    send-community
    send-community extended
neighbor 10.150.151.2
  remote-as 300
  address-family ipv4 unicast
evpn
vni 4000100 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000200 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000301 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000302 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000303 12
  rd auto
  route-target import auto
  route-target export auto
S1_B2#
```

路由器服务器

```
Router_Server#
nv overlay evpn
feature ospf
feature bgp
feature pim
feature interface-vlan

vlan 1

route-map REDIST-T0-SITE-EXT-DCI permit 10
  match tag 54321
route-map RETAIN-NEXT-HOP permit 10
  set ip next-hop unchanged

interface Ethernet2/1
  no switchport
```

```
ip address 10.150.150.2/24
no shutdown

interface Ethernet2/2
no switchport
ip address 10.150.151.2/24
no shutdown

interface Ethernet2/4
no switchport
ip address 10.150.152.2/24
no shutdown

interface Ethernet2/5
no switchport
mtu 9216
ip address 10.150.153.2/24
no shutdown

interface loopback0
ip address 10.32.1.1/32 tag 54321

router bgp 300
router-id 10.32.1.1
address-family ipv4 unicast
redistribute direct route-map REDIST-T0-SITE-EXT-DCI
maximum-paths 2
retain route-target all
address-family l2vpn evpn
retain route-target all
neighbor 10.31.1.1
remote-as 100
update-source loopback0
ebgp-multihop 5
address-family ipv4 unicast
send-community
send-community extended
route-map RETAIN-NEXT-HOP out
rewrite-rt-asn
address-family l2vpn evpn
send-community
send-community extended
route-map RETAIN-NEXT-HOP out
rewrite-evpn-rt-asn
neighbor 10.31.1.2
remote-as 100
update-source loopback0
ebgp-multihop 5
address-family ipv4 unicast
send-community
send-community extended
route-map RETAIN-NEXT-HOP out
rewrite-rt-asn
address-family l2vpn evpn
send-community
send-community extended
route-map RETAIN-NEXT-HOP out
rewrite-evpn-rt-asn
neighbor 10.31.1.3
remote-as 200
update-source loopback0
ebgp-multihop 5
```

```
address-family ipv4 unicast
  send-community
  send-community extended
  route-map RETAIN-NEXT-HOP out
  rewrite-rt-asn
address-family l2vpn evpn
  send-community
  send-community extended
  route-map RETAIN-NEXT-HOP out
  rewrite-evpn-rt-asn
neighbor 10.31.1.4
  remote-as 200
  update-source loopback0
  ebgp-multihop 5
  address-family ipv4 unicast
  address-family ipv4 mvpn
    send-community
    send-community extended
    route-map RETAIN-NEXT-HOP out
    rewrite-rt-asn
  address-family l2vpn evpn
    send-community
    send-community extended
    route-map RETAIN-NEXT-HOP out
    rewrite-evpn-rt-asn
neighbor 10.150.150.1
  remote-as 100
  address-family ipv4 unicast
neighbor 10.150.151.1
  remote-as 100
  address-family ipv4 unicast
neighbor 10.150.152.1
  remote-as 200
  address-family ipv4 unicast
neighbor 10.150.153.1
  remote-as 200
  address-family ipv4 unicast
Router_Server#
```

站点2边界网关-1配置

```
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature nv overlay
evpn multisite border-gateway 200

fabric forwarding anycast-gateway-mac 0000.2222.4444

ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8
```

```
vlan 1,100,200,300-350,2000-2001
vlan 100
  vn-segment 4000100
vlan 200
  vn-segment 4000200
vlan 301
  vn-segment 4000301
vlan 302
  vn-segment 4000302
vlan 303
  vn-segment 4000303
vlan 350
  name L3-VNI
  vn-segment 4000999
vlan 2000
  vn-segment 2000
vlan 2001
  vn-segment 4000502

route-map REDIST-T0-SITE-EXT-DCI permit 10
  match tag 54321
route-map RETAIN-NEXT-HOP permit 10
  set ip next-hop unchanged

vrf context L3VNI4000999
  vni 4000999
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
```



```
fabric forwarding mode anycast-gateway

interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.12.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan303
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.13.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan2001
  no shutdown
  mtu 9000
  vrf member vrf_2
  no ip redirects
  ip forward
  ipv6 address use-link-local-only
  no ipv6 redirects

interface nve1
  no shutdown
  host-reachability protocol bgp
  source-interface loopback1
  multisite border-gateway interface loopback100
  member vni 4000100
    suppress-arp
    mcast-group 231.0.0.1
  member vni 4000200
    suppress-arp
    mcast-group 231.0.0.2
  member vni 4000502 associate-vrf

interface Ethernet1/1
  mtu 9216
  port-type fabric
  medium p2p
  ip address 192.168.17.12/24
  ip ospf network point-to-point
  ip router ospf 200 area 0.0.0.0
  ip pim sparse-mode
  no shutdown
  evpn multisite fabric-tracking
```

```

interface Ethernet1/3
  mtu 9216
  ip address 10.150.152.1/24 tag 54321
  ip router ospf 200 area 0.0.0.0
  no shutdown
  evpn multisite dci-tracking

interface loopback0
  ip address 10.31.1.3/32 tag 54321
  ip router ospf 200 area 0.0.0.0
  ip pim sparse-mode

interface loopback1
  ip address 10.135.135.135/32 tag 54321
  ip router ospf 200 area 0.0.0.0
  ip pim sparse-mode

interface loopback100
  description "Multi-site VIP"
  ip address 10.100.100.2/32 tag 54321
  ip router ospf 200 area 0.0.0.0
  ip pim sparse-mode
  icam monitor scale

router ospf 200
router bgp 200
  router-id 10.31.1.3
  log-neighbor-changes
  address-family ipv4 unicast
    redistribute direct route-map REDIST-TO-SITE-EXT-DCI
  address-family l2vpn evpn
  neighbor 10.32.1.1
    remote-as 300
    update-source loopback0
    ebgp-multihop 5
    peer-type fabric-external
    send-community
    send-community extended
    rewrite-rt-asn
  address-family l2vpn evpn
    send-community
    send-community extended
    rewrite-evpn-rt-asn
  neighbor 10.103.0.3
    remote-as 200
    update-source loopback0
  address-family ipv4 unicast
  address-family ipv6 unicast
    send-community
    send-community extended
  address-family l2vpn evpn
    send-community
    send-community extended
  neighbor 10.150.152.2
    remote-as 300
    address-family ipv4 unicast

evpn
  vni 4000100 l2
    rd auto
    route-target import auto
    route-target export auto
  vni 4000200 l2

```

```
rd auto
route-target import auto
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
route-target import auto
route-target export auto
```

站点2边界网关-2配置

```
S2-BG2#
cfs ipv4 distribute
feature ngmvpn
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature lldp
feature bfd
feature nv overlay
evpn multisite border-gateway 200
    delay-restore time 300

fabric forwarding anycast-gateway-mac 0000.2222.4444
ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,301-303,350,2000-2001
vlan 100
    vn-segment 4000100
vlan 200
    vn-segment 4000200
vlan 301
    vn-segment 4000301
vlan 302
    vn-segment 4000302
vlan 303
    vn-segment 4000303
vlan 350
    name L3-VNI
    vn-segment 4000999
vlan 2000
    vn-segment 2000
vlan 2001
    vn-segment 4000502
```

```
route-map REDIST-TO-SITE-EXT-DCI permit 10
  match tag 54321
route-map RETAIN-NEXT-HOP permit 10
  set ip next-hop unchanged
```

```
vrf context L3VNI4000999
  vni 4000999
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn
```

```
vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn
```

```
vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn
```

```
interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
```

```
no ip redirects
ip address 172.16.12.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan303
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway

interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects

interface nve1
no shutdown
host-reachability protocol bgp
source-interface loopback1
multisite border-gateway interface loopback100
member vni 4000100
    suppress-arp
    multisite ingress-replication
    mcast-group 231.0.0.1
member vni 4000200
    suppress-arp
    multisite ingress-replication
    mcast-group 231.0.0.2
member vni 4000502 associate-vrf

interface Ethernet1/1
mtu 9216
port-type fabric
medium p2p
ip address 192.168.18.12/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown
evpn multisite fabric-tracking

interface Ethernet1/3
mtu 9216
ip address 10.150.153.1/24 tag 54321
ip router ospf 200 area 0.0.0.0
no shutdown
evpn multisite dci-tracking

interface loopback0
ip address 10.31.1.4/32 tag 54321
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode

interface loopback1
```

```
ip address 10.136.136.136/32 tag 54321
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode

interface loopback100
description "Multi-site VIP"
ip address 10.100.100.2/32 tag 54321
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
icam monitor scale

router ospf 200
router bgp 200
router-id 10.31.1.4
log-neighbor-changes
address-family ipv4 unicast
redistribute direct route-map REDIST-T0-SITE-EXT-DCI
address-family l2vpn evpn
neighbor 10.32.1.1
remote-as 300
update-source loopback0
ebgp-multihop 5
peer-type fabric-external
send-community
send-community extended
rewrite-rt-asn
address-family l2vpn evpn
send-community
send-community extended
rewrite-evpn-rt-asn
neighbor 10.103.0.3
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.150.153.2
remote-as 300
address-family ipv4 unicast

evpn
vni 4000100 12
rd auto
route-target import auto
route-target export auto
vni 4000200 12
rd auto
route-target import auto
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
```

```
route-target import auto
route-target export auto
S2-BG2#
```

站点2主干-1配置

```
S2-Spine1#
feature nxapi
cfs ipv4 distribute
cfs eth distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature ngoam

ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

interface Ethernet1/1
mtu 9216
medium p2p
ip address 192.168.0.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/2
mtu 9216
medium p2p
ip address 192.168.1.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/3
mtu 9216
medium p2p
ip address 192.168.2.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/4
mtu 9216
medium p2p
ip address 192.168.3.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
```

```
ip pim sparse-mode
no shutdown

interface Ethernet1/5
mtu 9216
medium p2p
ip address 192.168.17.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/6
mtu 9216
medium p2p
ip address 192.168.18.11/24
ip ospf network point-to-point
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface loopback0
description "anycast RP address"
ip address 10.103.0.3/32
ip router ospf 200 area 0.0.0.0
ip pim sparse-mode
icam monitor scale

router ospf 200
router-id 10.202.0.3
router bgp 200
router-id 10.103.0.3
log-neighbor-changes
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
address-family l2vpn evpn
neighbor 10.31.1.3
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.31.1.4
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.103.0.5
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
```



```
    send-community
    send-community extended
    route-reflector-client
address-family l2vpn evpn
    send-community
    send-community extended
    route-reflector-client
neighbor 10.103.0.8
    remote-as 200
    update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
    send-community
    send-community extended
    route-reflector-client
address-family l2vpn evpn
    send-community
    send-community extended
    route-reflector-client
neighbor 10.103.0.9
    remote-as 200
    update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
    send-community
    send-community extended
    route-reflector-client
address-family l2vpn evpn
    send-community
    send-community extended
    route-reflector-client
neighbor 10.103.0.10
    remote-as 200
    update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
    send-community
    send-community extended
    route-reflector-client
address-family l2vpn evpn
    send-community
    send-community extended
    route-reflector-client
S2-Spine1#
```

站点2枝叶1配置

```
feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
```

```
feature vn-segment-vlan-based
feature lACP
feature vpc
feature nv overlay

fabric forwarding anycast-gateway-mac 0000.1111.2222
ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001
vlan 100
    vn-segment 4000100
vlan 200
    vn-segment 4000200
vlan 301
    vn-segment 4000301
vlan 302
    vn-segment 4000302
vlan 303
    vn-segment 4000303
vlan 350
    name L3-VNI
    vn-segment 4000999
vlan 2001
    vn-segment 4000502

route-map DIRECT permit 10
    match tag 12345
route-map DIRECT deny 90
vrf context L3VNI4000999
    vni 4000999
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn

vrf context vrf_1
    vni 4000501
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn

vrf context vrf_2
    vni 4000502
    rd auto
    address-family ipv4 unicast
        route-target both auto
        route-target both auto evpn

vpc domain 100
    peer-switch
    peer-keepalive destination 10.197.214.63
    virtual peer-link destination 10.103.1.9 source 10.103.1.8 dscp 56
    delay restore 150
    peer-gateway
    ip arp synchronize
```

```
interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.12.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan303
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.13.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
  no shutdown
  mtu 9000
  vrf member vrf_2
  no ip redirects
  ip forward
  ipv6 address use-link-local-only
  no ipv6 redirects
```

```
interface port-channel10
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 100,200,300-500
  spanning-tree port type network
  vpc peer-link
```

```
interface port-channel100
```

```
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
vpc 100
```

```
interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
    suppress-arp
    mcast-group 231.0.0.1
member vni 4000200
    suppress-arp
    mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/1
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
channel-group 100
no shutdown
```

```
interface Ethernet1/2
mtu 9216
port-type fabric
medium p2p
ip address 192.168.0.12/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
interface loopback0
ip address 10.103.0.5/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
```

```
interface loopback1
ip address 10.103.1.8/32
ip address 10.103.201.201/32 secondary
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
icam monitor scale
```

```
router ospf 100
router-id 10.102.0.5
router bgp 200
router-id 10.103.0.5
log-neighbor-changes
address-family ipv4 mvpn
address-family l2vpn evpn
    advertise-pip
neighbor 10.103.0.2
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
```

```
    send-community
    send-community extended
address-family l2vpn evpn
    send-community
    send-community extended
neighbor 10.103.0.3
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
    send-community
    send-community extended
address-family l2vpn evpn
    send-community
    send-community extended
evpn
vni 4000100 12
rd auto
route-target import auto
route-target export auto
vni 4000200 12
rd auto
route-target import auto
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
route-target import auto
route-target export auto
```

站点2枝叶2配置

```
S2-Leaf2#
feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay

fabric forwarding anycast-gateway-mac 0000.1111.2222
ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8
```

vlan 1,100,200,300-350,2001

vlan 100

vn-segment 4000100

vlan 200

vn-segment 4000200

vlan 301

vn-segment 4000301

vlan 302

vn-segment 4000302

vlan 303

vn-segment 4000303

vlan 350

name L3-VNI

vn-segment 4000999

vlan 2001

vn-segment 4000502

vrf context L3VNI4000999

vni 4000999

rd auto

address-family ipv4 unicast

route-target both auto

route-target both auto evpn

vrf context vrf_1

vni 4000501

rd auto

address-family ipv4 unicast

route-target both auto

route-target both auto evpn

vrf context vrf_2

vni 4000502

rd auto

address-family ipv4 unicast

route-target both auto

route-target both auto evpn

vpc domain 100

peer-switch

peer-keepalive destination 10.197.214.62

virtual peer-link destination 10.103.1.8 source 10.103.1.9 dscp 56

delay restore 150

peer-gateway

ip arp synchronize

interface Vlan100

no shutdown

mtu 9216

vrf member vrf_2

no ip redirects

ip address 192.168.100.254/24

no ipv6 redirects

fabric forwarding mode anycast-gateway

interface Vlan200

no shutdown

mtu 9216

```
vrf member vrf_2
no ip redirects
ip address 192.168.200.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan301
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.11.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan302
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.12.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan303
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects
```

```
interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-500
spanning-tree port type network
vpc peer-link
```

```
interface port-channel100
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
vpc 100
```

```
interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
```

```
    suppress-arp
    mcast-group 231.0.0.1
member vni 4000200
    suppress-arp
    mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/1
    switchport
    switchport mode trunk
    switchport trunk allowed vlan 100,200,300-305
    mtu 9216
    channel-group 100
    no shutdown
```

```
interface Ethernet1/2
    mtu 9216
    port-type fabric
    medium p2p
    ip address 192.168.1.12/24
    ip ospf network point-to-point
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
    no shutdown
```

```
interface loopback0
    ip address 10.103.0.8/32
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
```

```
interface loopback1
    ip address 10.103.1.9/32
    ip address 10.103.201.201/32 secondary
    ip router ospf 100 area 0.0.0.0
    ip pim sparse-mode
icam monitor scale
```

```
router ospf 100
    router-id 10.102.0.8
router bgp 200
    router-id 10.103.0.8
    log-neighbor-changes
    address-family l2vpn evpn
        advertise-pip
    neighbor 10.103.0.2
        remote-as 200
        update-source loopback0
        address-family ipv4 unicast
        address-family ipv6 unicast
            send-community
            send-community extended
        address-family l2vpn evpn
            send-community
            send-community extended
    neighbor 10.103.0.3
        remote-as 200
        update-source loopback0
        address-family ipv4 unicast
        address-family ipv6 unicast
        address-family ipv4 mvpn
            send-community
            send-community extended
```



```
    address-family l2vpn evpn
      send-community
      send-community extended
evpn
vni 4000100 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000200 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000301 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000302 12
  rd auto
  route-target import auto
  route-target export auto
vni 4000303 12
  rd auto
  route-target import auto
  route-target export auto
S2-Leaf2#
```

站点2枝叶3配置

```
S2-leaf3#
feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay

fabric forwarding anycast-gateway-mac 0000.1111.2222
ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001
vlan 100
  vn-segment 4000100
vlan 200
  vn-segment 4000200
vlan 301
  vn-segment 4000301
vlan 302
  vn-segment 4000302
vlan 303
  vn-segment 4000303
```

```
vlan 350
  name L3-VNI
  vn-segment 4000999
vlan 2001
  vn-segment 4000502

vrf context L3VNI4000999
  vni 4000999
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vpc domain 100
  peer-switch
  peer-keepalive destination 10.197.214.65
  virtual peer-link destination 10.103.1.6 source 10.103.1.10 dscp 56
  delay restore 150
  peer-gateway
  ip arp synchronize

interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
```

```
ip address 172.16.11.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan302
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.12.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan303
no shutdown
mtu 9216
vrf member vrf_1
no ip redirects
ip address 172.16.13.254/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
no shutdown
mtu 9000
vrf member vrf_2
no ip redirects
ip forward
ipv6 address use-link-local-only
no ipv6 redirects
```

```
interface port-channel10
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-500
spanning-tree port type network
vpc peer-link
```

```
interface port-channel100
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
vpc 100
```

```
interface nve1
no shutdown
host-reachability protocol bgp
advertise virtual-rmac
source-interface loopback1
member vni 4000100
suppress-arp
mcast-group 231.0.0.1
member vni 4000200
suppress-arp
mcast-group 231.0.0.2
member vni 4000502 associate-vrf
```

```
interface Ethernet1/2
mtu 9216
port-type fabric
medium p2p
```

```
ip address 192.168.2.12/24
ip ospf network point-to-point
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
no shutdown

interface Ethernet1/23
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
channel-group 100
no shutdown

interface Ethernet1/24
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
channel-group 100
no shutdown

interface loopback0
ip address 10.103.0.9/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback1
ip address 10.103.1.10/32
ip address 10.103.202.202/32 secondary
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
icam monitor scale

router ospf 100
router-id 10.102.0.9
router bgp 200
router-id 10.103.0.9
log-neighbor-changes
address-family ipv4 mvpn
address-family l2vpn evpn
advertise-pip
neighbor 10.103.0.2
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.103.0.3
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
```

```
        send-community extended
evpn
vni 4000100 12
    rd auto
    route-target import auto
    route-target export auto
vni 4000200 12
    rd auto
    route-target import auto
    route-target export auto
vni 4000301 12
    rd auto
    route-target import auto
    route-target export auto
vni 4000302 12
    rd auto
    route-target import auto
    route-target export auto
vni 4000303 12
    rd auto
    route-target import auto
    route-target export auto
```

站点2枝叶4配置

```
S2-Leaf4#
feature nxapi
cfs ipv4 distribute
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature lacp
feature vpc
feature nv overlay

fabric forwarding anycast-gateway-mac 0000.1111.2222
ip pim rp-address 10.103.0.3 group-list 224.0.0.0/4
ip pim ssm range 232.0.0.0/8

vlan 1,100,200,300-350,2001
vlan 100
    vn-segment 4000100
vlan 200
    vn-segment 4000200
vlan 301
    vn-segment 4000301
vlan 302
    vn-segment 4000302
vlan 303
    vn-segment 4000303
vlan 350
    name L3-VNI
    vn-segment 4000999
```

```
vlan 2001
  vn-segment 4000502

vrf context L3VNI4000999
  vni 4000999
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_1
  vni 4000501
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context vrf_2
  vni 4000502
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vpc domain 100
  peer-switch
  peer-keepalive destination 10.197.214.64
  virtual peer-link destination 10.103.1.10 source 10.103.1.6 dscp 56
  delay restore 150
  peer-gateway
  ip arp synchronize

interface Vlan100
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.100.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan200
  no shutdown
  mtu 9216
  vrf member vrf_2
  no ip redirects
  ip address 192.168.200.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway

interface Vlan301
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.11.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan302
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.12.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan303
  no shutdown
  mtu 9216
  vrf member vrf_1
  no ip redirects
  ip address 172.16.13.254/24
  no ipv6 redirects
  fabric forwarding mode anycast-gateway
```

```
interface Vlan2001
  no shutdown
  mtu 9000
  vrf member vrf_2
  no ip redirects
  ip forward
  ipv6 address use-link-local-only
  no ipv6 redirects
```

```
interface port-channel10
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 100,200,300-500
  spanning-tree port type network
  vpc peer-link
```

```
interface port-channel100
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 100,200,300-305
  mtu 9216
  vpc 100
```

```
interface nve1
  no shutdown
  host-reachability protocol bgp
  advertise virtual-rmac
  source-interface loopback1
  member vni 4000100
    suppress-arp
    mcast-group 231.0.0.1
  member vni 4000200
    suppress-arp
    mcast-group 231.0.0.2
  member vni 4000502 associate-vrf
```

```
interface Ethernet1/2
  mtu 9216
  port-type fabric
  medium p2p
  ip address 192.168.3.12/24
  ip ospf network point-to-point
  ip router ospf 100 area 0.0.0.0
```

```
ip pim sparse-mode
no shutdown

interface Ethernet1/23
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
channel-group 100
no shutdown

interface Ethernet1/24
switchport
switchport mode trunk
switchport trunk allowed vlan 100,200,300-305
mtu 9216
channel-group 100
no shutdown

interface loopback0
ip address 10.103.0.10/32
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode

interface loopback1
ip address 10.103.1.6/32
ip address 10.103.202.202/32 secondary
ip router ospf 100 area 0.0.0.0
ip pim sparse-mode
icam monitor scale

router ospf 100
router-id 10.102.0.10
router bgp 200
router-id 10.102.0.10
log-neighbor-changes
address-family l2vpn evpn
advertise-pip
neighbor 10.103.0.2
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
address-family ipv4 mvpn
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended
neighbor 10.103.0.3
remote-as 200
update-source loopback0
address-family ipv4 unicast
address-family ipv6 unicast
send-community
send-community extended
address-family l2vpn evpn
send-community
send-community extended

evpn
vni 4000100 12
rd auto
```



```
route-target import auto
route-target export auto
vni 4000200 12
rd auto
route-target import auto
route-target export auto
vni 4000301 12
rd auto
route-target import auto
route-target export auto
vni 4000302 12
rd auto
route-target import auto
route-target export auto
vni 4000303 12
rd auto
route-target import auto
route-target export auto
S2-Leaf4#
```

验证

使用本部分可确认配置能否正常运行。

[Cisco CLI Analyzer](#) (仅限注册客户) 支持以下功能： `show` 命令。使用Cisco CLI分析器查看分析 `show` 命令输出。

```
<#root>
```

```
Host2#
```

```
show ip int brief
```

```
IP Interface Status for VRF "default"(1)
Interface          IP Address          Interface Status
Vlan100            192.168.100.102    protocol-up/link-up/admin-up
Vlan200            192.168.200.102    protocol-up/link-up/admin-up
Lo100              10.2.3.4           protocol-up/link-up/admin-up
Host2#
Host2#
```

```
<#root>
```

```
Host2#
```

```
ping 192.168.200.103
```

```
PING 192.168.200.103 (192.168.200.103): 56 data bytes
64 bytes from 192.168.200.103: icmp_seq=0 ttl=254 time=1.21 ms
64 bytes from 192.168.200.103: icmp_seq=1 ttl=254 time=0.627 ms
64 bytes from 192.168.200.103: icmp_seq=2 ttl=254 time=0.74 ms
64 bytes from 192.168.200.103: icmp_seq=3 ttl=254 time=0.737 ms
64 bytes from 192.168.200.103: icmp_seq=4 ttl=254 time=0.542 ms
```

```
--- 192.168.200.103 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.542/0.771/1.21 ms
Host2#
Host2#
Host2#
```

```
ping 192.168.100.103
```

```
PING 192.168.100.103 (192.168.100.103): 56 data bytes
64 bytes from 192.168.100.103: icmp_seq=0 ttl=254 time=1.195 ms
64 bytes from 192.168.100.103: icmp_seq=1 ttl=254 time=0.613 ms
64 bytes from 192.168.100.103: icmp_seq=2 ttl=254 time=0.575 ms
64 bytes from 192.168.100.103: icmp_seq=3 ttl=254 time=0.522 ms
64 bytes from 192.168.100.103: icmp_seq=4 ttl=254 time=0.534 ms
```

```
--- 192.168.100.103 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.522/0.687/1.195 ms
Host2#
Host2#
Host2#
```

```
ping 192.168.100.100
```

```
PING 192.168.100.100 (192.168.100.100): 56 data bytes
64 bytes from 192.168.100.100: icmp_seq=0 ttl=254 time=1.029 ms
64 bytes from 192.168.100.100: icmp_seq=1 ttl=254 time=0.561 ms
64 bytes from 192.168.100.100: icmp_seq=2 ttl=254 time=0.579 ms
64 bytes from 192.168.100.100: icmp_seq=3 ttl=254 time=0.511 ms
64 bytes from 192.168.100.100: icmp_seq=4 ttl=254 time=0.496 ms
```

```
--- 192.168.100.100 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.496/0.635/1.029 ms
Host2#
Host2#
Host2#
```

```
ping 192.168.200.100
```

```
PING 192.168.200.100 (192.168.200.100): 56 data bytes
64 bytes from 192.168.200.100: icmp_seq=0 ttl=254 time=1.263 ms
64 bytes from 192.168.200.100: icmp_seq=1 ttl=254 time=0.816 ms
64 bytes from 192.168.200.100: icmp_seq=2 ttl=254 time=0.735 ms
64 bytes from 192.168.200.100: icmp_seq=3 ttl=254 time=0.659 ms
64 bytes from 192.168.200.100: icmp_seq=4 ttl=254 time=0.634 ms
```

```
--- 192.168.200.100 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.634/0.821/1.263 ms
Host2#
```

```
<#root>
```

```
HOST_3(config)#
HOST_3(config)#
```

```
ping 192.168.100.100
```

```
PING 192.168.100.100 (192.168.100.100): 56 data bytes
```

```
64 bytes from 192.168.100.100: icmp_seq=0 ttl=254 time=1.319 ms
64 bytes from 192.168.100.100: icmp_seq=1 ttl=254 time=0.77 ms
64 bytes from 192.168.100.100: icmp_seq=2 ttl=254 time=0.505 ms
64 bytes from 192.168.100.100: icmp_seq=3 ttl=254 time=0.542 ms
64 bytes from 192.168.100.100: icmp_seq=4 ttl=254 time=0.486 ms
--- 192.168.100.100 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.486/0.724/1.319 ms
HOST_3(config)#
```

```
HOST_3(config)#
```

```
ping 192.168.100.102
```

```
PING 192.168.100.102 (192.168.100.102): 56 data bytes
64 bytes from 192.168.100.102: icmp_seq=0 ttl=254 time=1.304 ms
64 bytes from 192.168.100.102: icmp_seq=1 ttl=254 time=0.853 ms
64 bytes from 192.168.100.102: icmp_seq=2 ttl=254 time=0.845 ms
64 bytes from 192.168.100.102: icmp_seq=3 ttl=254 time=0.564 ms
64 bytes from 192.168.100.102: icmp_seq=4 ttl=254 time=0.55 ms
--- 192.168.100.102 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.55/0.823/1.304 ms
HOST_3(config)#
HOST_3(config)#
HOST_3(config)#
```

```
ping 192.168.200.102
```

```
PING 192.168.200.102 (192.168.200.102): 56 data bytes
64 bytes from 192.168.200.102: icmp_seq=0 ttl=254 time=0.997 ms
64 bytes from 192.168.200.102: icmp_seq=1 ttl=254 time=0.766 ms
64 bytes from 192.168.200.102: icmp_seq=2 ttl=254 time=0.84 ms
64 bytes from 192.168.200.102: icmp_seq=3 ttl=254 time=0.734 ms
64 bytes from 192.168.200.102: icmp_seq=4 ttl=254 time=0.592 ms
--- 192.168.200.102 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.592/0.785/0.997 ms
HOST_3(config)#
```

```
HOST_3(config)#
```

```
ping 192.168.200.100
```

```
PING 192.168.200.100 (192.168.200.100): 56 data bytes
36 bytes from 192.168.200.103: Destination Host Unreachable
Request 0 timed out
64 bytes from 192.168.200.100: icmp_seq=1 ttl=254 time=1.376 ms
64 bytes from 192.168.200.100: icmp_seq=2 ttl=254 time=0.806 ms
64 bytes from 192.168.200.100: icmp_seq=3 ttl=254 time=0.77 ms
64 bytes from 192.168.200.100: icmp_seq=4 ttl=254 time=0.793 ms
--- 192.168.200.100 ping statistics ---
5 packets transmitted, 4 packets received, 20.00% packet loss
round-trip min/avg/max = 0.77/0.936/1.376 ms
HOST_3(config)#
```

故障排除

本部分提供的信息可用于对配置进行故障排除。

[Cisco CLI Analyzer](#) (仅限注册客户) 支持以下功能： `show` 命令。使用Cisco CLI分析器查看分析 `show` 命令输出。

<#root>

Host2#

`show ip arp`

Flags: * - Adjacencies learnt on non-active FHRP router
+ - Adjacencies synced via CFSOE
- Adjacencies Throttled for Glean
CP - Added via L2RIB, Control plane Adjacencies
PS - Added via L2RIB, Peer Sync
RO - Re-Originated Peer Sync Entry
D - Static Adjacencies attached to down interface

IP ARP Table for context default

Total number of entries: 8

Address	Age	MAC Address	Interface	Flags
192.168.100.100	00:06:52	6c8b.d3ff.00a7	Vlan100	
192.168.100.103	00:07:54	6c8b.d3fe.ecb5	Vlan100	
192.168.100.104	00:07:01	6c8b.d3fe.df3b	Vlan100	
192.168.100.254	00:08:01	0000.1111.2222	Vlan100	
192.168.200.100	00:14:46	6c8b.d3ff.00a7	Vlan200	
192.168.200.103	00:07:07	6c8b.d3fe.ecb5	Vlan200	
192.168.200.104	00:07:31	6c8b.d3fe.df3b	Vlan200	
192.168.200.254	00:07:07	0000.1111.2222	Vlan200	

Host2#

Host2#

`show mac address-table`

Legend:

* - primary entry, G - Gateway MAC, (R) - Routed MAC, O - Overlay MAC
age - seconds since last seen,+ - primary entry using vPC Peer-Link,
(T) - True, (F) - False, C - ControlPlane MAC, ~ - vsan

VLAN	MAC Address	Type	age	Secure	NTFY	Ports
* 100	0000.1111.2222	dynamic	0	F	F	Po2
* 100	6c8b.d3fe.df3b	dynamic	0	F	F	Po2
* 100	6c8b.d3fe.ecb5	dynamic	0	F	F	Po2
* 100	6c8b.d3ff.00a7	dynamic	0	F	F	Po2
* 200	0000.1111.2222	dynamic	0	F	F	Po2
* 200	6c8b.d3fe.df3b	dynamic	0	F	F	Po2
* 200	6c8b.d3fe.ecb5	dynamic	0	F	F	Po2
* 200	6c8b.d3ff.00a7	dynamic	0	F	F	Po2
G -	6c8b.d3fe.ff09	static	-	F	F	sup-eth1(R)
G 100	6c8b.d3fe.ff09	static	-	F	F	sup-eth1(R)
G 200	6c8b.d3fe.ff09	static	-	F	F	sup-eth1(R)

Host2#

Host2#

<#root>

HOST_3(config)#

show ip arp

Flags: * - Adjacencies learnt on non-active FHRP router
+ - Adjacencies synced via CFSOE
- Adjacencies Throttled for Glean
CP - Added via L2RIB, Control plane Adjacencies
PS - Added via L2RIB, Peer Sync
RO - Re-Originated Peer Sync Entry
D - Static Adjacencies attached to down interface

IP ARP Table for context default

Total number of entries: 8

Address	Age	MAC Address	Interface	Flags
192.168.200.100	00:00:07	6c8b.d3ff.00a7	Vlan200	
192.168.200.102	00:11:41	6c8b.d3fe.ff09	Vlan200	
192.168.200.104	00:18:38	6c8b.d3fe.df3b	Vlan200	
192.168.200.254	00:12:19	0000.1111.2222	Vlan200	
192.168.100.100	00:07:16	6c8b.d3ff.00a7	Vlan100	
192.168.100.102	00:11:51	6c8b.d3fe.ff09	Vlan100	
192.168.100.104	00:15:06	6c8b.d3fe.df3b	Vlan100	
192.168.100.254	00:11:37	0000.1111.2222	Vlan100	

HOST_3(config)#

<#root>

S1-Leaf1#

show bgp l2vpn evpn

BGP routing table information for VRF default, address family L2VPN EVPN

BGP table version is 3291, Local Router ID is 10.102.0.5

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-injected

Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath, & - backup, 2 - best2

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

Route Distinguisher: 100:4000100

*>i[2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.3aef]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272	10.100.100.1		100	0	300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.100.103]/272	10.100.100.1		100	0	300 200 i

Route Distinguisher: 100:4000200

```

*>i [2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.3aef]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.200.103]/272
    10.100.100.1          100          0 300 200

Route Distinguisher: 10.31.1.1:32867
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216
    10.133.133.133        100          0

Route Distinguisher: 10.31.1.1:32967
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216
    10.133.133.133        100          0 i

Route Distinguisher: 10.31.1.2:32867
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
    10.134.134.134        100          0 i

Route Distinguisher: 10.31.1.2:32967
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
    10.134.134.134        100          0 i

Route Distinguisher: 10.102.0.5:32867 (L2VNI 4000100)
*>i [2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216
    10.133.133.133        100          0 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
    10.134.134.134        100          0 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
* i [2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202        100          0 i
*>i
    10.202.202.202        100          0 i
*>l [2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216
    10.201.201.201        100          32768 i
*>i [2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202        100          0 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.3aef]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i

```

```

*>i [2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>l [2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
    10.201.201.201       100          32768 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202       100           0 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.100.103]/272
    10.100.100.1          100          0 300 200 i
* i [2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
    10.202.202.202       100           0 i
*>i
    10.202.202.202       100           0 i
*>l [2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.100.100]/272
    10.201.201.201       100          32768 i

```

Route Distinguisher: 10.102.0.5:32967 (L2VNI 4000200)

```

*>i [2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216
    10.133.133.133       100           0 i
*>i [2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
    10.134.134.134       100           0 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i

* i [2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202       100           0 i
*>i
    10.202.202.202       100           0 i
*>l [2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216
    10.201.201.201       100          32768 i
*>i [2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202       100           0 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76d4.3aef]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
    10.100.100.1          100          0 300 200 i
*>l [2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
    10.201.201.201       100          32768 i
*>i [2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202       100           0 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.100.100.1          100          0 300 200 i
*>i [2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.200.103]/272
    10.100.100.1          100          0 300 200 i
* i [2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
    10.202.202.202       100           0 i
*>i
    10.202.202.202       100           0 i
*>l [2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.200.100]/272
    10.201.201.201       100          32768 i

```

Route Distinguisher: 10.102.0.9:5

```

*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[5]:[0]:[0]:[24]:[192.168.100.0]/224
    10.102.1.10                       100          0 i
*>i[5]:[0]:[0]:[32]:[10.15.100.2]/224
    10.102.1.10                       100          0 i

Route Distinguisher: 10.102.0.9:32867
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
    10.202.202.202                    100          0 i

Route Distinguisher: 10.102.0.9:32967
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
    10.202.202.202                    100          0 i

Route Distinguisher: 10.102.0.10:5
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[5]:[0]:[0]:[24]:[192.168.100.0]/224
    10.102.1.6                        100          0 i
*>i[5]:[0]:[0]:[32]:[10.15.100.1]/224
    10.102.1.6                        100          0 i

Route Distinguisher: 10.102.0.10:32867
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
    10.202.202.202                    100          0 i

Route Distinguisher: 10.102.0.10:32967
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
    10.202.202.202                    100          0 i

Route Distinguisher: 10.102.0.5:5 (L3VNI 4000502)
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>l[2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
    10.201.201.201                    100          32768 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.202.202.202                    100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
    10.100.100.1                      100          0 300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.100.100.1                      100          0 300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.100.103]/272
    10.100.100.1                      100          0 300 200 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.200.103]/272
    10.100.100.1                      100          0 300 200 i

```



```

* i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
      10.202.202.202          100          0 i
*>i  10.202.202.202          100          0 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
      10.202.202.202          100          0 i
*>i  10.202.202.202          100          0 i
* i[5]:[0]:[0]:[24]:[192.168.100.0]/224
      10.102.1.6              100          0 i
*>i  10.102.1.10             100          0 i
*>i[5]:[0]:[0]:[32]:[10.15.100.1]/224
      10.102.1.6              100          0 i
*>i[5]:[0]:[0]:[32]:[10.15.100.2]/224
      10.102.1.10             100          0 i
S1-Leaf1#

```

<#root>

S1-Leaf1#

show vpc brief

Legend:

(*) - local vPC is down, forwarding via vPC peer-link

```

vPC domain id          : 100
Peer status            : peer adjacency formed ok
vPC keep-alive status  : peer is alive
Configuration consistency status : success
Per-vlan consistency status : success
Type-2 consistency status : success
vPC role               : secondary
Number of vPCs configured : 1
Peer Gateway           : Enabled
Dual-active excluded VLANs : -
Graceful Consistency Check : Enabled
Auto-recovery status   : Disabled
Delay-restore status   : Timer is off.(timeout = 150s)
Delay-restore SVI status : Timer is off.(timeout = 10s)
Delay-restore Orphan-port status : Timer is off.(timeout = 0s)
Operational Layer3 Peer-router : Disabled
Virtual-peerlink mode  : Enabled

```

vPC Peer-link status

```

-----
id   Port   Status Active vlans
--   -
1    Po10   up     100,200,300-350,2001

```

vPC status

```

-----
Id   Port           Status Consistency Reason           Active vlans
--   -
100  Po100          up     success      success           100,200

```

Please check "show vpc consistency-parameters vpc <vpc-num>" for the consistency reason of down vpc and for type-2 consistency reasons for any vpc.

S1-Leaf1#

<#root>

S1-Leaf1#

S1-Leaf1#

show ip int brief

IP Interface Status for VRF "default"(1)

Interface	IP Address	Interface Status
Lo0	10.102.0.5	protocol-up/link-up/admin-up
Lo1	10.102.1.8	protocol-up/link-up/admin-up
Eth1/2	192.168.17.12	protocol-up/link-up/admin-up

S1-Leaf1#

<#root>

S2-Leaf1#

show bgp l2vpn evpn

BGP routing table information for VRF default, address family L2VPN EVPN

BGP table version is 4016, Local Router ID is 10.103.0.5

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-injected

Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath, & - backup, 2 - best2

Network	Next Hop	Metric	LocPrf	Weight	Path
Route Distinguisher: 200:4000100					
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0907]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.100.100]/272	10.100.100.2		100	0 300	100 i
Route Distinguisher: 200:4000200					
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216	10.100.100.2		100	0 300	100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216					

```

10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0907]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.200.100]/272
10.100.100.2 100 0 300 100 i

Route Distinguisher: 200:4000502
*>i[5]:[0]:[0]:[24]:[192.168.100.0]/224
10.100.100.2 100 0 300 100 i
*>i[5]:[0]:[0]:[32]:[10.15.100.1]/224
10.100.100.2 100 0 300 100 i
*>i[5]:[0]:[0]:[32]:[10.15.100.2]/224
10.100.100.2 100 0 300 100 i

Route Distinguisher: 10.31.1.3:32867
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
10.135.135.135 100 0 i

Route Distinguisher: 10.31.1.3:32967
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
10.135.135.135 100 0 i

Route Distinguisher: 10.31.1.4:32867
*>i[2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
10.136.136.136 100 0 i

Route Distinguisher: 10.31.1.4:32967
*>i[2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
10.136.136.136 100 0 i

Route Distinguisher: 10.102.0.10:5
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i

Route Distinguisher: 10.102.0.10:32867
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
10.103.202.202 100 0 i

Route Distinguisher: 10.102.0.10:32967
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
10.103.202.202 100 0 i

Route Distinguisher: 10.103.0.5:32867 (L2VNI 4000100)
*>i[2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
10.136.136.136 100 0 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
10.135.135.135 100 0 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216

```

```

10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i 10.103.202.202 100 0 i
*>l[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216
10.103.201.201 100 32768 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0907]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>l[2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
10.103.201.201 100 32768 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
10.103.202.202 100 0 i
*>i 10.103.202.202 100 0 i
*>l[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.100.103]/272
10.103.201.201 100 32768 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.100.100]/272
10.100.100.2 100 0 300 100 i

Route Distinguisher: 10.103.0.5:32967 (L2VNI 4000200)
*>i[2]:[0]:[0]:[48]:[10b3.d5c7.9fbd]:[0]:[0.0.0.0]/216
10.136.136.136 100 0 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.3785]:[0]:[0.0.0.0]/216
10.135.135.135 100 0 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.383d]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[4ce1.75f7.38c7]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i 10.103.202.202 100 0 i
*>l[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[0]:[0.0.0.0]/216
10.103.201.201 100 32768 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76c6.a673]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
10.103.202.202 100 0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0907]:[0]:[0.0.0.0]/216
10.100.100.2 100 0 300 100 i

```

```

*>l[2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
    10.103.201.201          100      32768 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.0adb]:[0]:[0.0.0.0]/216
    10.100.100.2           100          0 300 100 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.118f]:[0]:[0.0.0.0]/216
    10.100.100.2           100          0 300 100 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.103.202.202        100          0 i
*>i
    10.103.202.202        100          0 i
*>l[2]:[0]:[0]:[48]:[6c8b.d3fe.ecb5]:[32]:[192.168.200.103]/272
    10.103.201.201        100      32768 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
    10.100.100.2           100          0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.200.100]/272
    10.100.100.2           100          0 300 100 i

```

Route Distinguisher: 10.103.0.9:5

```

*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i

```

Route Distinguisher: 10.103.0.9:32867

```

*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
    10.103.202.202        100          0 i

```

Route Distinguisher: 10.103.0.9:32967

```

*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.103.202.202        100          0 i

```

Route Distinguisher: 10.103.0.5:5 (L3VNI 4000502)

```

*>i[2]:[0]:[0]:[48]:[cc7f.76d4.2ebf]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[cc7f.76fa.04c3]:[0]:[0.0.0.0]/216
    10.103.202.202        100          0 i
*>l[2]:[0]:[0]:[48]:[cc7f.76fa.0a3f]:[0]:[0.0.0.0]/216
    10.103.201.201        100      32768 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.100.104]/272
    10.103.202.202        100          0 i
*>i
    10.103.202.202        100          0 i
* i[2]:[0]:[0]:[48]:[6c8b.d3fe.df3b]:[32]:[192.168.200.104]/272
    10.103.202.202        100          0 i
*>i
    10.103.202.202        100          0 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.100.102]/272
    10.100.100.2           100          0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3fe.ff09]:[32]:[192.168.200.102]/272
    10.100.100.2           100          0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.100.100]/272
    10.100.100.2           100          0 300 100 i
*>i[2]:[0]:[0]:[48]:[6c8b.d3ff.00a7]:[32]:[192.168.200.100]/272
    10.100.100.2           100          0 300 100 i
*>i[5]:[0]:[0]:[24]:[192.168.100.0]/224
    10.100.100.2           100          0 300 100 i
*>i[5]:[0]:[0]:[32]:[10.15.100.1]/224
    10.100.100.2           100          0 300 100 i
*>i[5]:[0]:[0]:[32]:[10.15.100.2]/224

```

S2-Leaf1#

10.100.100.2

100

0 300 100 i

关于此翻译

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