

# CONFIG

## SITE-POD-01

iBGP - ASN - 65001

VLAN 10 - vrf tenant-1 member vni 10010  
VLAN 11 - vrf tenant-1  
ip add 192.168.11.0 /24

VLAN 12 - vrf tenant-1  
ip add 192.168.12.0 /24

VLAN 20 vrf tenant-2 member vni 20020  
VLAN 21 - vrf tenant-2  
ip add 192.168.21.0 /24

VLAN 22 - vrf tenant-2  
ip add 192.168.22.0 /24

DO APPLY TO ALL DEVICES!

system jumbomtu 9216

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### LEAFs

license grace-period

feature privilege  
feature telnet  
feature vrrp  
feature ospf  
feature bgp  
feature pim  
feature private-vlan  
feature interface-vlan

```
feature vn-segment-vlan-based
feature glbp
feature dhcp
feature tunnel
feature vpc
feature lldp
feature vtp
feature bfd
feature nv overlay
feature vni
```

```
install feature-set fabric
install feature-set fabricpath
```

```
feature-set fabric
feature-set fabricpath
feature fabric forwarding
```

```
nv overlay evpn
```

---

### **SPINEs**

```
feature-set mpls
```

```
feature privilege
feature telnet
feature vrrp
feature tacacs+
nv overlay evpn
feature ospf
feature bgp
feature pim
feature eigrp
feature isis
feature fabric forwarding
feature private-vlan
feature port-security
feature interface-vlan
feature vn-segment-vlan-based
feature dhcp
feature vpc
feature lldp
feature vtp
feature bfd
feature nv overlay
```



```
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown

int eth 1/20
description Linka k LEAF-20-POD-01
mtu 9216
no switchport
ip add 10.1.20.1 255.255.255.252
ip ospf network point-to-point
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown

int loopback 0
description Loopback pre OSPF RID
ip add 1.1.1.1/32 tag 54321
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode

int loopback 1
description Loopback pre VTEP PIP
ip add 1.1.1.10/32 tag 54321
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode

int loopback 254
description Loopback pre PIM
ip add 10.254.254.254/32
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode

ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
ip pim anycast-rp 10.254.254.254 1.1.1.1
ip pim anycast-rp 10.254.254.254 1.1.2.1

router bgp 65001
  router-id 1.1.1.1
  neighbor 1.1.10.2
    remote-as 65001
    update-source loopback0
    address-family l2vpn evpn
      send-community
      send-community extended
```

```
        route-reflector-client
neighbor 1.1.20.2
    remote-as 65001
    update-source loopback0
    address-family l2vpn evpn
        send-community
        send-community extended
    route-reflector-client
```

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```
evpn multisite border-gateway 100
    delay-restore time 30
```

```
interface e1/1
    description Linka k PE-1-WAN-ISP-I
    mtu 9216
    ip add 172.16.1.1 255.255.255.252 tag 54321
    no shutdown
    evpn multisite dci-tracking
```

```
interface e1/2
    description Linka k PE-2-WAN-ISP-II
    mtu 9216
    ip add 172.16.2.1 255.255.255.252 tag 54321
    no shutdown
    evpn multisite dci-tracking
```

```
int e1/30
    description Linka k SPINE-02-POD-01
    mtu 9216
    ip add 172.17.1.1/30 tag 54321
    ip ospf network point-to-point
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
    no shutdown
    evpn multisite fabric-tracking
```

```
int loopback 100
    description Loopback pre VTEP
    ip add 1.1.1.100/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
```

```
vlan 10
```

```
        name tenant-1
        vn-segment 10010

vlan 20
    name tenant-2
    vn-segment 20020

vlan 11
    vn-segment 10011

vlan 12
    vn-segment 10012

vlan 21
    vn-segment 20021

vlan 22
    vn-segment 20022

route-map SITE-REDIST-DIRECT-CONN permit 100
    match tag 54321

vrf context tenant-1
    vni 10010
    rd auto
    address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context tenant-2
    vni 20020
    rd auto
    address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

int vlan 10
    description tenant-1-VRF-VLAN
    no shutdown
    mtu 9216
    vrf member tenant-1
    ip forward

int vlan 20
```

```
description tenant-2-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-2
ip forward

int nve 1
    no shut
    host-reachability protocol bgp
    source-interface loopback 1
    multisite border-gateway interface loopback 100
    member vni 10011
        multisite ingress-replication
        mcast-group 239.0.0.11
        suppress-arp
    member vni 10012
        multisite ingress-replication
        mcast-group 239.0.0.12
        suppress-arp
    member vni 20021
        multisite ingress-replication
        mcast-group 239.0.0.21
        suppress-arp
    member vni 20022
        multisite ingress-replication
        mcast-group 239.0.0.22
        suppress-arp
member vni 10010 associate-vrf
member vni 20020 associate-vrf

router bgp 65001
    address-family ipv4 unicast
        redistribute direct route-map SITE-REDIST-DIRECT-CONN
        maximum-paths 4
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
            send-community extended
    neighbor 1.1.200.100 ( PE-1 )
        remote-as 65535
        update-source loopback 0
        peer-type fabric-external
```

```
address-family l2vpn evpn
    send-community
    send-community extended
    rewrite-evpn-rt-asn
neighbor 1.1.200.200 ( PE-2 )
    remote-as 65535
    update-source loopback 0
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
        rewrite-evpn-rt-asn
neighbor 172.16.1.2
    remote-as 65535
    update-source eth1/1
    address-family ipv4 unicast
neighbor 172.16.2.2
    remote-as 65535
    update-source eth1/2
    address-family ipv4 unicast
```

#### evpn

```
vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20022 I2
    rd auto
    route-target import auto
    route-target export auto
```

//////////

## **SPINE-02-POD-01**

hostname SPINE-02-POD-01



```
ip pim sparse-mode
no shutdown

int loopback 0
    description Loopback pre OSPF RID
    ip add 1.1.2.1/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 1
    description Loopback pre VTEP PIP
    ip add 1.1.2.10/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 254
    description Loopback pre PIM
    ip add 10.254.254.254/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
ip pim anycast-rp 10.254.254.254 1.1.1.1
ip pim anycast-rp 10.254.254.254 1.1.2.1

router bgp 65001
    router-id 1.1.2.1
    neighbor 1.2.10.2
        remote-as 65001
        update-source loopback0
        address-family l2vpn evpn
            send-community
            send-community extended
            route-reflector-client
    neighbor 1.2.20.2
        remote-as 65001
        update-source loopback0
        address-family l2vpn evpn
            send-community
            send-community extended
            route-reflector-client
```

---

```
evpn multisite border-gateway 100
```

```
delay-restore time 30
```

```
interface e1/1
```

```
  description Linka k PE-1-WAN-ISP-I
  mtu 9216
  ip add 172.16.1.5 255.255.255.252 tag 54321
  no shutdown
  evpn multisite dci-tracking
```

```
interface e1/2
```

```
  description Linka k PE-2-WAN-ISP-II
  mtu 9216
  ip add 172.16.2.5 255.255.255.252 tag 54321
  no shutdown
  evpn multisite dci-tracking
```

```
int e1/30
```

```
  description Linka k SPINE-01-POD-01
  mtu 9216
  ip add 172.17.1.2/30 tag 54321
  ip ospf network point-to-point
  ip router ospf 110 area 0.0.0.0
  ip pim sparse-mode
  no shutdown
  evpn multisite fabric-tracking
```

```
int loopback 100
```

```
  description Loopback pre VTEP
  ip add 1.1.2.100/32 tag 54321
  ip router ospf 110 area 0.0.0.0
  ip pim sparse-mode
```

```
vlan 10
```

```
  name tenant-1
  vn-segment 10010
```

```
vlan 20
```

```
  name tenant-2
  vn-segment 20020
```

```
vlan 11
```

```
  vn-segment 10011
```

```
vlan 12
```

```
vn-segment 10012

vlan 21
    vn-segment 20021

vlan 22
    vn-segment 20022

route-map SITE-REDIST-DIRECT-CONN permit 100
    match tag 54321

vrf context tenant-1
    vni 10010
    rd auto
    address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context tenant-2
    vni 20020
    rd auto
    address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

int vlan 10
    description tenant-1-VRF-VLAN
    no shutdown
    mtu 9216
    vrf member tenant-1
    ip forward

int vlan 20
    description tenant-2-VRF-VLAN
    no shutdown
    mtu 9216
    vrf member tenant-2
    ip forward

int nve 1
    no shut
    host-reachability protocol bgp
    source-interface loopback 1
    multisite border-gateway interface loopback 100
```

```
member vni 10011
    multisite ingress-replication
    mcast-group 239.0.0.11
    suppress-arp
member vni 10012
    multisite ingress-replication
    mcast-group 239.0.0.12
    suppress-arp
member vni 20021
    multisite ingress-replication
    mcast-group 239.0.0.21
    suppress-arp
member vni 20022
    multisite ingress-replication
    mcast-group 239.0.0.22
    suppress-arp
member vni 10010 associate-vrf
member vni 20020 associate-vrf

router bgp 65001
    address-family ipv4 unicast
        redistribute direct route-map SITE-REDIST-DIRECT-CONN
        maximum-paths 4
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
            send-community extended
    neighbor 1.1.200.100 ( PE-1 )
        remote-as 65535
        update-source loopback 0
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            rewrite-evpn-rt-asn
    neighbor 1.1.200.200 ( PE-2 )
        remote-as 65535
        update-source loopback 0
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
```

```
        rewrite-evpn-rt-asn
neighbor 172.16.1.6
    remote-as 65535
    update-source eth1/1
    address-family ipv4 unicast
neighbor 172.16.2.6
    remote-as 65535
    update-source eth1/2
    address-family ipv4 unicast

evpn
vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20022 I2
    rd auto
    route-target import auto
    route-target export auto
```

||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

## **LEAF-10**

hostname LEAF-10-POD-01

```
int loo 0
ip add 1.1.10.1/32
```

```
int loo 1
ip add 1.1.10.10/32
```

```
int loo 100
ip add 1.1.10.100/32
```

```
int loo 254
```

```
ip add 10.254.254.254/32
```

```
int eth2/1
```

```
ip add 10.1.10.2 255.255.255.252
```

```
int eth2/2
```

```
ip add 10.2.10.2 255.255.255.252
```

```
int vlan 11
```

```
ip add 192.168.11.1 255.255.255.0
```

```
int vlan 12
```

```
ip add 192.168.12.1 255.255.255.0
```

```
int vlan 21
```

```
ip add 192.168.21.1 255.255.255.0
```

```
int vlan 22
```

```
ip add 192.168.22.1 255.255.255.0
```

```
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
```

```
router ospf 110
```

```
    router-id 1.1.10.1
```

```
    log-adjacency-changes detail
```

```
int eth 2/1
```

```
    description Linka k SPINE-01-POD-01
```

```
    mtu 9216
```

```
    ip add 10.1.10.2 255.255.255.252
```

```
    ip ospf network point-to-point
```

```
    ip router ospf 110 area 0.0.0.0
```

```
    ip pim sparse-mode
```

```
    no shutdown
```

```
int eth 2/2
```

```
    description Linka k SPINE-02-POD-01
```

```
    mtu 9216
```

```
    ip add 10.2.10.2 255.255.255.252
```

```
    ip ospf network point-to-point
```

```
    ip router ospf 110 area 0.0.0.0
```

```
    ip pim sparse-mode
```

```
    no shutdown
```

```
int loopback 0
    description Loopback pre OSPF RID
    ip add 1.1.10.1/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
```

```
int loopback 1
    description Loopback pre VTEP PIP
    ip add 1.1.10.10/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
```

```
int loopback 254
    description Loopback for PIM
    ip add 10.254.254.254/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
```

```
ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
```

```
vlan 10
    name tenant-1
    vn-segment 10010
```

```
vlan 20
    name tenant-2
    vn-segment 20020
```

```
vlan 11
    vn-segment 10011
```

```
vlan 12
    vn-segment 10012
```

```
vlan 21
    vn-segment 20021
```

```
vlan 22
    vn-segment 20022
```

```
vrf context tenant-1
    vni 10010
    rd auto
    address-family ipv4 unicast
```

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

```
vrf context tenant-2
  vni 20020
  rd auto
  address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn
```

```
fabric forwarding anycast-gateway-mac eeee.eeee.eeee
```

```
int vlan 10
  description tenant-1-VRF-VLAN
  no shutdown
  mtu 9216
  vrf member tenant-1
  ip forward
```

```
int vlan 11
  no shut
  vrf member tenant-1
  ip add 192.168.11.1/24 tag 101112
  fabric forwarding mode anycast-gateway
```

```
int vlan 12
  no shut
  vrf member tenant-1
  ip add 192.168.12.1/24 tag 101112
  fabric forwarding mode anycast-gateway
```

```
int vlan 20
  description tenant-2-VRF-VLAN
  no shutdown
  mtu 9216
  vrf member tenant-2
  ip forward
```

```
int vlan 21
  no shut
  vrf member tenant-2
  ip add 192.168.21.1/24 tag 202122
  fabric forwarding mode anycast-gateway
```

```
int vlan 22
    no shut
    vrf member tenant-2
    ip add 192.168.22.1/24 tag 202122
    fabric forwarding mode anycast-gateway

int nve 1
    no shut
    host-reachability protocol bgp
    source-interface loopback 1
    member vni 10011
        mcast-group 239.0.0.11
        suppress-arp
    member vni 10012
        mcast-group 239.0.0.12
        suppress-arp
    member vni 20021
        mcast-group 239.0.0.21
        suppress-arp
    member vni 20022
        mcast-group 239.0.0.22
        suppress-arp
    member vni 10010 associate-vrf
    member vni 20020 associate-vrf

route-map FABRIC_REDIST_SUBNET_TEN-1 permit 10
    match tag 101112

route-map FABRIC_REDIST_SUBNET_TEN-2 permit 20
    match tag 202122

router bgp 65001
    router-id 1.1.10.1
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
            send-community extended
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
```

```
        send-community extended
vrf tenant-1
    address-family ipv4 unicast
        advertise l2vpn evpn
        redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-1
        maximum-paths ibgp 4

vrf tenant-2
    address-family ipv4 unicast
        advertise l2vpn evpn
        redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-2
        maximum-paths ibgp 4

evpn
vni 10011 l2
    rd auto
    route-target import auto
    route-target export auto
vni 10012 l2
    rd auto
    route-target import auto
    route-target export auto
vni 20021 l2
    rd auto
    route-target import auto
    route-target export auto
vni 20022 l2
    rd auto
    route-target import auto
    route-target export auto
```

```
//////////
```

## **LEAF-20**

```
hostname LEAF-20-POD-01
```

```
int loo 0
ip add 1.1.20.1/32
```

```
int loo 1
ip add 1.1.20.10/32
```

```
int loo 100
```

```
ip add 1.1.20.100/32
```

```
int loo 254
```

```
ip add 10.254.254.254/32
```

```
int eth2/1
```

```
ip add 10.1.20.2 255.255.255.252
```

```
int eth2/2
```

```
ip add 10.2.20.2 255.255.255.252
```

```
int vlan 11
```

```
ip add 192.168.11.1 255.255.255.0
```

```
int vlan 12
```

```
ip add 192.168.12.1 255.255.255.0
```

```
int vlan 21
```

```
ip add 192.168.21.1 255.255.255.0
```

```
int vlan 22
```

```
ip add 192.168.22.1 255.255.255.0
```

```
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
```

```
router ospf 110
```

```
    router-id 1.1.20.1
```

```
    log-adjacency-changes detail
```

```
int eth 2/1
```

```
    description Linka k SPINE-01-POD-01
```

```
    mtu 9216
```

```
    ip add 10.1.20.2 255.255.255.252
```

```
    ip ospf network point-to-point
```

```
    ip router ospf 110 area 0.0.0.0
```

```
    ip pim sparse-mode
```

```
    no shutdown
```

```
int eth 2/2
```

```
    description Linka k SPINE-02-POD-01
```

```
    mtu 9216
```

```
    ip add 10.2.20.2 255.255.255.252
```

```
    ip ospf network point-to-point
```

```
    ip router ospf 110 area 0.0.0.0
```

```
ip pim sparse-mode
no shutdown

int loopback 0
    description Loopback pre OSPF RID
    ip add 1.1.20.1/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 1
    description Loopback pre VTEP PIP
    ip add 1.1.20.10/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 254
    description Loopback pre PIM
    ip add 10.254.254.254/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24

vlan 10
    name tenant-1
    vn-segment 10010

vlan 20
    name tenant-2
    vn-segment 20020

vlan 11
    vn-segment 10011

vlan 12
    vn-segment 10012

vlan 21
    vn-segment 20021

vlan 22
    vn-segment 20022

vrf context tenant-1
```

```
vni 10010
rd auto
address-family ipv4 unicast
route-target both auto
route-target both auto evpn
```

```
vrf context tenant-2
vni 20020
rd auto
address-family ipv4 unicast
route-target both auto
route-target both auto evpn
```

```
fabric forwarding anycast-gateway-mac eeee.eeee.eeee
```

```
int vlan 10
description tenant-1-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-1
ip forward
```

```
int vlan 11
no shut
vrf member tenant-1
ip add 192.168.11.1/24 tag 101112
fabric forwarding mode anycast-gateway
```

```
int vlan 12
no shut
vrf member tenant-1
ip add 192.168.12.1/24 tag 101112
fabric forwarding mode anycast-gateway
```

```
int vlan 20
description tenant-2-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-2
ip forward
```

```
int vlan 21
no shut
vrf member tenant-2
```

```
ip add 192.168.21.1/24 tag 202122
fabric forwarding mode anycast-gateway

int vlan 22
    no shut
    vrf member tenant-2
    ip add 192.168.22.1/24 tag 202122
    fabric forwarding mode anycast-gateway

int nve 1
    no shut
    host-reachability protocol bgp
    source-interface loopback 1
    member vni 10011
        mcast-group 239.0.0.11
        suppress-arp
    member vni 10012
        mcast-group 239.0.0.12
        suppress-arp
    member vni 20021
        mcast-group 239.0.0.21
        suppress-arp
    member vni 20022
        mcast-group 239.0.0.22
        suppress-arp
    member vni 10010 associate-vrf
    member vni 20020 associate-vrf

route-map FABRIC_REDIST_SUBNET_TEN-1 permit 10
    match tag 101112

route-map FABRIC_REDIST_SUBNET_TEN-2 permit 20
    match tag 202122

router bgp 65001
    router-id 1.1.20.1
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
            send-community extended
    neighbor 1.1.2.1
        remote-as 65001
```

```

update-source loopback 0
address-family l2vpn evpn
    send-community
    send-community extended
vrf tenant-1
    address-family ipv4 unicast
        advertise l2vpn evpn
        redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-1
        maximum-paths ibgp 4
vrf tenant-2
    address-family ipv4 unicast
        advertise l2vpn evpn
        redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-2
        maximum-paths ibgp 4

evpn
vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20022 I2
    rd auto
    route-target import auto
    route-target export auto

```

|||||||||||||||||||||||||||||||||||||||

|||||||||||||||||||||||||||||||||||||||||||

## SITE-POD-02

iBGP - ASN - 65002

VLAN 10 - vrf tenant-1 member vni 10010

VLAN 11 - vrf tenant-1

ip add 192.168.11.0 /24

```
VLAN 12 - vrf tenant-1  
ip add 192.168.12.0 /24
```

```
VLAN 20 vrf tenant-2 member vni 20020  
VLAN 21 - vrf tenant-2  
ip add 192.168.21.0 /24
```

```
VLAN 22 - vrf tenant-2  
ip add 192.168.22.0 /24
```

```
|||||||  
DO APPLY TO ALL DEVICES!  
|||||||
```

```
system jumbomtu 9216
```

```
license grace-period
```

```
feature privilege  
feature telnet  
feature vrrp  
feature tacacs+  
feature ospf  
feature bgp  
feature ospfv3  
feature pim  
feature eigrp  
feature isis  
feature private-vlan  
feature interface-vlan  
feature vn-segment-vlan-based  
feature netflow  
feature hsrp  
feature glbp  
feature dhcp  
feature tunnel  
feature vpc  
feature lldp  
feature vtp  
feature bfd  
feature wccp  
feature evc  
feature evmed
```

```
feature nv overlay
feature nxapi
feature msrp
feature vni

install feature-set fabric
install feature-set fabricpath
```

```
feature-set fabric
feature-set fabricpath
feature fabric forwarding
```

```
nv overlay evpn
```

---

---

---

## **SPINE-01-POD-02**

```
hostname SPINE-01-POD-02
```

```
int loo 0
    ip add 1.2.1.1/32
```

```
int loo 1
    ip add 1.2.1.10/32
```

```
int loo 100
    ip add 1.2.1.100/32
```

```
int loo 254
    ip add 10.254.254.254/32
```

```
int eth1/1
    ip add 172.18.1.1 255.255.255.252
```

```
int eth1/2
    ip add 172.18.2.1 255.255.255.252
```

```
int eth1/10
    Linka k LEAF-10
    ip add 10.1.10.5 255.255.255.252
```

```
int eth1/20
```

```
  Linka k LEAF-20
```

```
  ip add 10.1.20.5 255.255.255.252
```

```
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW
```

```
router ospf 110
```

```
  router-id 1.2.1.1
```

```
  log-adjacency-changes detail
```

```
int eth 1/10
```

```
  description Link to LEAF-10
```

```
  mtu 9216
```

```
  ip add 10.1.10.5 255.255.255.252
```

```
  ip ospf network point-to-point
```

```
  ip router ospf 110 area 0.0.0.0
```

```
  ip pim sparse-mode
```

```
  no shutdown
```

```
int eth 1/20
```

```
  description Link to LEAF-20
```

```
  mtu 9216
```

```
  ip add 10.1.20.5 255.255.255.252
```

```
  ip ospf network point-to-point
```

```
  ip router ospf 110 area 0.0.0.0
```

```
  ip pim sparse-mode
```

```
  no shutdown
```

```
int loopback 0
```

```
  description Loopback for OSPF RID
```

```
  ip add 1.2.1.1/32 tag 54321
```

```
  ip router ospf 110 area 0.0.0.0
```

```
  ip pim sparse-mode
```

```
int loopback 1
```

```
  description Loopback for VTEP PIP
```

```
  ip add 1.2.1.10/32 tag 54321
```

```
  ip router ospf 110 area 0.0.0.0
```

```
  ip pim sparse-mode
```

```
int loopback 254
```

```
  description Loopback for PIM
```

```
  ip add 10.254.254.254/32
```

```
  ip router ospf 110 area 0.0.0.0
```

```
ip pim sparse-mode
```

```
ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
ip pim anycast-rp 10.254.254.254 1.2.1.1
ip pim anycast-rp 10.254.254.254 1.2.2.1
```

```
router bgp 65002
```

```
    router-id 1.2.1.1
```

```
    neighbor 1.2.10.1
```

```
        remote-as 65002
```

```
        update-source loopback0
```

```
        address-family l2vpn evpn
```

```
            send-community
```

```
            send-community extended
```

```
            route-reflector-client
```

```
    neighbor 1.2.20.1
```

```
        remote-as 65002
```

```
        update-source loopback0
```

```
        address-family l2vpn evpn
```

```
            send-community
```

```
            send-community extended
```

```
            route-reflector-client
```

---

```
evpn multisite border-gateway 200
```

```
    delay-restore time 30
```

```
interface e1/1
```

```
    description Linka k PE-1-WAN-ISP-I
```

```
    mtu 9216
```

```
    ip add 172.18.1.1 255.255.255.252 tag 54321
```

```
    no shutdown
```

```
    evpn multisite dci-tracking
```

```
interface e1/2
```

```
    description Linka k PE-2-WAN-ISP-II
```

```
    mtu 9216
```

```
    ip add 172.18.2.1 255.255.255.252 tag 54321
```

```
    no shutdown
```

```
    evpn multisite dci-tracking
```

```
int e1/30
```

```
    description Linka k SPINE-02
```

```
    mtu 9216
```

```
ip add 172.17.2.1/30 tag 54321
ip ospf network point-to-point
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown
evpn multisite fabric-tracking

int loopback 100
    description Loopback pre VTEP
    ip add 1.2.1.100/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

vlan 10
    name tenant-1
    vn-segment 10010

vlan 20
    name tenant-2
    vn-segment 20020

vlan 11
    vn-segment 10011

vlan 12
    vn-segment 10012

vlan 21
    vn-segment 20021

vlan 22
    vn-segment 20022

route-map SITE-REDIST-DIRECT-CONN permit 100
    match tag 54321

vrf context tenant-1
    vni 10010
    rd auto
    address-family ipv4 unicast
    route-target both auto
    route-target both auto evpn

vrf context tenant-2
```

```
vni 20020
rd auto
address-family ipv4 unicast
route-target both auto
route-target both auto evpn

int vlan 10
description tenant-1-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-1
ip forward

int vlan 20
description tenant-2-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-2
ip forward

int nve 1
no shut
host-reachability protocol bgp
source-interface loopback 1
multisite border-gateway interface loopback 100
member vni 10011
    multisite ingress-replication
    mcast-group 239.0.0.11
    suppress-arp
member vni 10012
    multisite ingress-replication
    mcast-group 239.0.0.12
    suppress-arp
member vni 20021
    multisite ingress-replication
    mcast-group 239.0.0.21
    suppress-arp
member vni 20022
    multisite ingress-replication
    mcast-group 239.0.0.22
    suppress-arp
member vni 10010 associate-vrf
member vni 20020 associate-vrf
```

```
router bgp 65002
  address-family ipv4 unicast
    redistribute direct route-map SITE-REDIST-DIRECT-CONN
    maximum-paths 4
  neighbor 1.2.2.1
    remote-as 65001
    update-source loopback 0
    address-family l2vpn evpn
      send-community
      send-community extended
  neighbor 1.2.200.100 ( PE-3 )
    remote-as 65535
    update-source loopback 0
    peer-type fabric-external
    address-family l2vpn evpn
      send-community
      send-community extended
      rewrite-evpn-rt-asn
  neighbor 1.2.200.200 ( PE-4 )
    remote-as 65535
    update-source loopback 0
    peer-type fabric-external
    address-family l2vpn evpn
      send-community
      send-community extended
      rewrite-evpn-rt-asn
  neighbor 172.18.1.2
    remote-as 65535
    update-source eth1/1
    address-family ipv4 unicast
  neighbor 172.18.2.2
    remote-as 65535
    update-source eth1/2
    address-family ipv4 unicast
```

## evpn

```
vni 10011 I2
  rd auto
  route-target import auto
  route-target export auto
vni 10012 I2
  rd auto
  route-target import auto
  route-target export auto
```



```
int eth 1/10
    description Link to LEAF-10
    mtu 9216
    ip add 10.2.10.5 255.255.255.252
    ip ospf network point-to-point
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
    no shutdown

int eth 1/20
    description Link to LEAF-20
    mtu 9216
    ip add 10.2.20.5 255.255.255.252
    ip ospf network point-to-point
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
    no shutdown

int loopback 0
    description Loopback for OSPF RID
    ip add 1.2.2.1/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 1
    description Loopback for VTEP PIP
    ip add 1.2.2.10/32 tag 54321
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 254
    description Loopback for PIM
    ip add 10.254.254.254/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
ip pim anycast-rp 10.254.254.254 1.2.1.1
ip pim anycast-rp 10.254.254.254 1.2.2.1

router bgp 65002
    router-id 1.2.2.1
    neighbor 1.2.10.1
```

```
    remote-as 65002
    update-source loopback0
    address-family l2vpn evpn
        send-community
        send-community extended
        route-reflector-client
neighbor 1.2.20.1
    remote-as 65002
    update-source loopback0
    address-family l2vpn evpn
        send-community
        send-community extended
        route-reflector-client
```

---

```
evpn multisite border-gateway 200
    delay-restore time 30
```

```
interface e1/1
    description Linka k PE-1-WAN-ISP-I
    mtu 9216
    ip add 172.18.1.5 255.255.255.252 tag 54321
    no shutdown
    evpn multisite dci-tracking
```

```
interface e1/2
    description Linka k PE-2-WAN-ISP-II
    mtu 9216
    ip add 172.18.2.5 255.255.255.252 tag 54321
    no shutdown
    evpn multisite dci-tracking
```

```
int e1/30
    description Linka k SPINE-02
    mtu 9216
    ip add 172.17.2.2/30 tag 54321
    ip ospf network point-to-point
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
    no shutdown
    evpn multisite fabric-tracking
```

```
int loopback 100
    description Loopback pre VTEP
```

```
ip add 1.2.2.100/32 tag 54321
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
```

```
vlan 10
  name tenant-1
  vn-segment 10010
```

```
vlan 20
  name tenant-2
  vn-segment 20020
```

```
vlan 11
  vn-segment 10011
```

```
vlan 12
  vn-segment 10012
```

```
vlan 21
  vn-segment 20021
```

```
vlan 22
  vn-segment 20022
```

```
route-map SITE-REDIST-DIRECT-CONN permit 100
  match tag 54321
```

```
vrf context tenant-1
  vni 10010
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
vrf context tenant-2
  vni 20020
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
int vlan 10
  description tenant-1-VRF-VLAN
  no shutdown
```

```
mtu 9216
vrf member tenant-1
ip forward

int vlan 20
    description tenant-2-VRF-VLAN
    no shutdown
    mtu 9216
    vrf member tenant-2
    ip forward

int nve 1
    no shut
    host-reachability protocol bgp
    source-interface loopback 1
    multisite border-gateway interface loopback 100
    member vni 10011
        multisite ingress-replication
        mcast-group 239.0.0.11
        suppress-arp
    member vni 10012
        multisite ingress-replication
        mcast-group 239.0.0.12
        suppress-arp
    member vni 20021
        multisite ingress-replication
        mcast-group 239.0.0.21
        suppress-arp
    member vni 20022
        multisite ingress-replication
        mcast-group 239.0.0.22
        suppress-arp
    member vni 10010 associate-vrf
    member vni 20020 associate-vrf

router bgp 65002
    address-family ipv4 unicast
        redistribute direct route-map SITE-REDIST-DIRECT-CONN
        maximum-paths 4
    neighbor 1.2.1.1
        remote-as 65001
        update-source loopback 0
        address-family l2vpn evpn
            send-community
```

```
    send-community extended
neighbor 1.2.200.100 ( PE-3 )
    remote-as 65535
    update-source loopback 0
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
        rewrite-evpn-rt-asn
neighbor 1.2.200.200 ( PE-4 )
    remote-as 65535
    update-source loopback 0
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
        rewrite-evpn-rt-asn
neighbor 172.18.1.6
    remote-as 65535
    update-source eth1/1
    address-family ipv4 unicast
neighbor 172.18.2.6
    remote-as 65535
    update-source eth1/2
    address-family ipv4 unicast
```

## evpn

```
vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
vni 20022 I2
    rd auto
    route-target import auto
    route-target export auto
```



```
mtu 9216
ip add 10.1.10.6 255.255.255.252
ip ospf network point-to-point
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown

int eth 2/2
    description Link to SPINE-2
    mtu 9216
    ip add 10.2.10.6 255.255.255.252
    ip ospf network point-to-point
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode
    no shutdown

int loopback 0
    description Loopback for OSPF RID
    ip add 1.2.10.1/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 1
    description Loopback for VTEP PIP
    ip add 1.2.10.10/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

int loopback 254
    description Loopback for PIM
    ip add 10.254.254.254/32
    ip router ospf 110 area 0.0.0.0
    ip pim sparse-mode

ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24

vlan 10
    name tenant-1
    vn-segment 10010

vlan 20
    name tenant-2
    vn-segment 20020
```

```
vlan 11
  vn-segment 10011
```

```
vlan 12
  vn-segment 10012
```

```
vlan 21
  vn-segment 20021
```

```
vlan 22
  vn-segment 20022
```

```
vrf context tenant-1
  vni 10010
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
vrf context tenant-2
  vni 20020
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
fabric forwarding anycast-gateway-mac eeee.eeee.eeee
```

```
int vlan 10
  description tenant-1-VRF-VLAN
  no shutdown
  mtu 9216
  vrf member tenant-1
  ip forward
```

```
int vlan 11
  no shut
  vrf member tenant-1
  ip add 192.168.11.1/24 tag 101112
  fabric forwarding mode anycast-gateway
```

```
int vlan 12
  no shut
  vrf member tenant-1
```

```
ip add 192.168.12.1/24 tag 101112
fabric forwarding mode anycast-gateway

int vlan 20
description tenant-2-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-2
ip forward

int vlan 21
no shut
vrf member tenant-2
ip add 192.168.21.1/24 tag 202122
fabric forwarding mode anycast-gateway

int vlan 22
no shut
vrf member tenant-2
ip add 192.168.22.1/24 tag 202122
fabric forwarding mode anycast-gateway

int nve 1
no shut
host-reachability protocol bgp
source-interface loopback 1
member vni 10011
    mcast-group 239.0.0.11
    suppress-arp
member vni 10012
    mcast-group 239.0.0.12
    suppress-arp
member vni 20021
    mcast-group 239.0.0.21
    suppress-arp
member vni 20022
    mcast-group 239.0.0.22
    suppress-arp
member vni 10010 associate-vrf
member vni 20020 associate-vrf

route-map FABRIC_REDIST_SUBNET_TEN-1 permit 10
match tag 101112
```

```
route-map FABRIC_REDIST_SUBNET_TEN-2 permit 20
  match tag 202122

router bgp 65002
  router-id 1.2.10.1
  neighbor 1.2.1.1
    remote-as 65002
    update-source loopback 0
    address-family l2vpn evpn
      send-community
      send-community extended
  neighbor 1.2.2.1
    remote-as 65002
    update-source loopback 0
    address-family l2vpn evpn
      send-community
      send-community extended
vrf tenant-1
  address-family ipv4 unicast
    advertise l2vpn evpn
    redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-1
    maximum-paths ibgp 4
vrf tenant-2
  address-family ipv4 unicast
    advertise l2vpn evpn
    redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-2
    maximum-paths ibgp 4

evpn
  vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 20022 I2
    rd auto
    route-target import auto
```



```
description Link to SPINE-1
mtu 9216
ip add 10.1.20.6 255.255.255.252
ip ospf network point-to-point
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
int eth 2/2
description Link to SPINE-2
mtu 9216
ip add 10.2.20.6 255.255.255.252
ip ospf network point-to-point
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
no shutdown
```

```
int loopback 0
description Loopback for OSPF RID
ip add 1.2.20.1/32
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
```

```
int loopback 1
description Loopback for VTEP PIP
ip add 1.2.20.10/32
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
```

```
int loopback 254
description Loopback for PIM
ip add 10.254.254.254/32
ip router ospf 110 area 0.0.0.0
ip pim sparse-mode
```

```
ip pim rp-address 10.254.254.254 group-list 239.239.239.0 /24
```

```
vlan 10
name tenant-1
vn-segment 10010
```

```
vlan 20
name tenant-2
vn-segment 20020
```

```
vlan 11
  vn-segment 10011
```

```
vlan 12
  vn-segment 10012
```

```
vlan 21
  vn-segment 20021
```

```
vlan 22
  vn-segment 20022
```

```
vrf context tenant-1
  vni 10010
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
vrf context tenant-2
  vni 20020
  rd auto
  address-family ipv4 unicast
  route-target both auto
  route-target both auto evpn
```

```
fabric forwarding anycast-gateway-mac eeee.eeee.eeee
```

```
int vlan 10
  description tenant-1-VRF-VLAN
  no shutdown
  mtu 9216
  vrf member tenant-1
  ip forward
```

```
int vlan 11
  no shut
  vrf member tenant-1
  ip add 192.168.11.1/24 tag 101112
  fabric forwarding mode anycast-gateway
```

```
int vlan 12
  no shut
```

```
vrf member tenant-1
ip add 192.168.12.1/24 tag 101112
fabric forwarding mode anycast-gateway

int vlan 20
description tenant-2-VRF-VLAN
no shutdown
mtu 9216
vrf member tenant-2
ip forward

int vlan 21
no shut
vrf member tenant-2
ip add 192.168.21.1/24 tag 202122
fabric forwarding mode anycast-gateway

int vlan 22
no shut
vrf member tenant-2
ip add 192.168.22.1/24 tag 202122
fabric forwarding mode anycast-gateway

int nve 1
no shut
host-reachability protocol bgp
source-interface loopback 1
member vni 10011
    mcast-group 239.0.0.11
    suppress-arp
member vni 10012
    mcast-group 239.0.0.12
    suppress-arp
member vni 20021
    mcast-group 239.0.0.21
    suppress-arp
member vni 20022
    mcast-group 239.0.0.22
    suppress-arp
member vni 10010 associate-vrf
member vni 20020 associate-vrf

route-map FABRIC_REDIST_SUBNET_TEN-1 permit 10
match tag 101112
```

```
route-map FABRIC_REDIST_SUBNET_TEN-2 permit 20
  match tag 202122

router bgp 65002
  router-id 1.2.20.1
  neighbor 1.2.1.1
    remote-as 65002
    update-source loopback 0
    address-family l2vpn evpn
      send-community
      send-community extended
  neighbor 1.2.2.1
    remote-as 65002
    update-source loopback 0
    address-family l2vpn evpn
      send-community
      send-community extended
vrf tenant-1
  address-family ipv4 unicast
    advertise l2vpn evpn
    redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-1
    maximum-paths ibgp 4
vrf tenant-2
  address-family ipv4 unicast
    advertise l2vpn evpn
    redistribute direct route-map FABRIC_REDIST_SUBNET_TEN-2
    maximum-paths ibgp 4

evpn
  vni 10011 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 10012 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 20021 I2
    rd auto
    route-target import auto
    route-target export auto
  vni 20022 I2
    rd auto
```

```
route-target import auto  
route-target export auto
```

```
//////////
```

## **ROUTE-SERVER-01**

```
hostname RS-1-P/C-EDGE-WAN
```

```
system jumbomtu 9216
```

```
feature ospf  
feature bgp  
feature mpls  
feature lldp
```

```
int gig1/0  
    description Linka k SPINE-01-BGW-POD-01  
    mtu 9216  
    ip add 172.16.1.2 255.255.255.252  
    no shutdown
```

```
int gig2/0  
    description Linka k SPINE-02-BGW-POD-01  
    mtu 9216  
    ip add 172.16.1.6 255.255.255.252  
    no shutdown
```

```
int gig3/0  
    description Linka k R-WAN-TEN-1  
    mtu 9216  
    ip add 157.127.81.2 255.255.255.252  
    no shutdown
```

```
int serial6/1  
    ip add 172.16.61.1 255.255.255.252  
    ip router isis
```

```
int serial6/2  
    ip add 172.16.62.1 255.255.255.252  
    ip router isis
```

```
int serial6/3  
    ip add 172.16.63.1 255.255.255.252  
    ip router isis
```

```
int serial6/4
    ip add 172.16.64.1 255.255.255.252
    ip router isis

int loopback 0
    ip add 71.100.100.1/32

route-map NEXT-HOP-UNCHANGED permit 100
    set ip next-hop unchanged

router isis
    net 49.0001.0000.0000.000a.00

router bgp 65100
    address-family ipv4 unicast
        network 71.100.100.1/32
    address-family l2vpn evpn
        retain route-target all
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn

neighbor 1.2.1.1
    remote-as 65002
    update-source loopback0
    ebgp-multipath 5
    peer-type fabric-external
```

```
address-family l2vpn evpn
    send-community
    send-community extended
    route-map NEXT-HOP-UNCHANGED out
    rewrite-evpn-rt-asn
```

```
neighbor 1.2.2.1
    remtoe-as 65002
    update-source loopback0
    ebgp-multipath 5
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
        route-map NEXT-HOP-UNCHANGED out
        rewrite-evpn-rt-asn
```

```
neighbor 172.16.1.1
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.1.5
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.2.1
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.2.5
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.18.1.1
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.1.5
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.2.1
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.2.5
    remote-as 65002
    address-family ipv4 unicast
```

```
////////////////////////////////////////////////////////////////////////
```

## **ROUTE-SERVER-02**

```
hostname RS-2-P/C-EDGE-WAN
```

```
system jumbomtu 9216
```

```
feature ospf
feature bgp
feature mpls
feature lldp
```

```
int gig1/0
    description Linka k SPINE-01-BGW-POD-01
    mtu 9216
    ip add 172.16.2.2 255.255.255.252
    no shutdown
```

```
int gig2/0
    description Linka k SPINE-02-BGW-POD-01
    mtu 9216
    ip add 172.16.2.6 255.255.255.252
    no shutdown
```

```
int serial6/1
    ip add 172.16.61.5 255.255.252
    ip router isis
```

```
int serial6/2
    ip add 172.16.62.2 255.255.255.252
    ip router isis
```

```
int serial6/3
    ip add 172.16.63.5 255.255.255.252
    ip router isis
```

```
int serial6/6
```

```
ip add 172.16.66.1 255.255.255.252
ip router isis

int loopback 0
    ip add 71.100.100.2/32

route-map NEXT-HOP-UNCHANGED permit 100
    set ip next-hop unchanged

router isis
    net 49.0001.0000.0000.000b.00

router bgp 65100
    address-family ipv4 unicast
        network 71.100.100.2/32
    address-family l2vpn evpn
        retain route-target all
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn

    neighbor 1.2.1.1
        remote-as 65002
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
```

```
    send-community
    send-community extended
    route-map NEXT-HOP-UNCHANGED out
    rewrite-evpn-rt-asn
```

```
neighbor 1.2.2.1
  remote-as 65002
  update-source loopback0
  ebgp-multipath 5
  peer-type fabric-external
  address-family l2vpn evpn
    send-community
    send-community extended
    route-map NEXT-HOP-UNCHANGED out
    rewrite-evpn-rt-asn
```

```
neighbor 172.16.1.1
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.1.5
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.2.1
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.2.5
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.18.1.1
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.1.5
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.2.1
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.2.5
    remote-as 65002
    address-family ipv4 unicast
```

```
////////////////////////////////////////////////////////////////////////
```

## ROUTE-SERVER-03

hostname RS-3-P/C-EDGE-WAN

```
system jumbomtu 9216
```

```
feature ospf
feature bgp
feature mpls
feature lldp
```

```
int gig1/0
    description Linka k SPINE-01-BGW-POD-02
    mtu 9216
    ip add 172.18.1.2 255.255.255.252
    no shutdown
```

```
int gig2/0
    description Linka k SPINE-02-BGW-POD-02
    mtu 9216
    ip add 172.18.1.6 255.255.255.252
    no shutdown
```

```
int serial6/1
    ip add 172.16.61.6 255.255.255.252
    ip router isis
```

```
int serial6/2
    ip add 172.16.62.5 255.255.255.252
    ip router isis
```

```
int serial6/3
    ip add 172.16.63.2 255.255.255.252
    ip router isis
```

```
int serial6/7
    ip add 172.16.67.1 255.255.255.252
    ip router isis
```

```
int loopback 0
    ip add 71.100.100.3/32

route-map NEXT-HOP-UNCHANGED permit 100
    set ip next-hop unchanged

router isis
    net 49.0001.0000.0000.000c.00

router bgp 65100
    address-family ipv4 unicast
        network 71.100.100.3/32
    address-family l2vpn evpn
        retain route-target all
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn

neighbor 1.2.1.1
    remote-as 65002
    update-source loopback0
    ebgp-multipath 5
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
```

```
route-map NEXT-HOP-UNCHANGED out
rewrite-evpn-rt-asn
```

```
neighbor 1.2.2.1
    remote-as 65002
    update-source loopback0
    ebgp-multipath 5
    peer-type fabric-external
    address-family l2vpn evpn
        send-community
        send-community extended
        route-map NEXT-HOP-UNCHANGED out
        rewrite-evpn-rt-asn
```

```
neighbor 172.16.1.1
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.1.5
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.2.1
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.16.2.5
    remote-as 65001
    address-family ipv4 unicast
```

```
neighbor 172.18.1.1
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.1.5
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.2.1
    remote-as 65002
    address-family ipv4 unicast
```

```
neighbor 172.18.2.5
    remote-as 65002
```

```
address-family ipv4 unicast
```

```
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

## **ROUTE-SERVER-04**

```
hostname RS-4-P/C-EDGE-WAN
```

```
feature ospf  
feature bgp  
feature mpls  
feature lldp
```

```
system jumbomtu 9216
```

```
int gig1/0  
    description Linka k SPINE-01-BGW-POD-02  
    mtu 9216  
    ip add 172.18.2.2 255.255.255.252  
    no shutdown
```

```
int gig2/0  
    description Linka k SPINE-02-BGW-POD-02  
    mtu 9216  
    ip add 172.18.2.6 255.255.255.252  
    no shutdown
```

```
int gig3/0  
    description Linka k R-WAN-TEN-2  
    mtu 9216  
    ip add 143.28.160.2 255.255.255.252  
    no shutdown
```

```
int serial6/1  
    ip add 172.16.61.2 255.255.255.252  
    router isis
```

```
int serial6/2  
    ip add 172.16.62.6 255.255.255.252  
    router isis
```

```
int serial6/3  
    ip add 172.16.63.6 255.255.255.252  
    router isis
```

```
int serial6/5
```

```
ip add 172.16.65.1 255.255.255.252
router isis

int loopback 0
    ip add 71.100.100.4/32

route-map NEXT-HOP-UNCHANGED permit 100
    set ip next-hop unchanged

router isis
    net 49.0001.0000.0000.000d.00

router bgp 65100
    address-family ipv4 unicast
        network 71.100.100.4/32
    address-family l2vpn evpn
        retain route-target all
    neighbor 1.1.1.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn
    neighbor 1.1.2.1
        remote-as 65001
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
            send-community
            send-community extended
            route-map NEXT-HOP-UNCHANGED out
            rewrite-evpn-rt-asn

    neighbor 1.2.1.1
        remote-as 65002
        update-source loopback0
        ebgp-multipath 5
        peer-type fabric-external
        address-family l2vpn evpn
```

```
    send-community
    send-community extended
    route-map NEXT-HOP-UNCHANGED out
    rewrite-evpn-rt-asn
```

```
neighbor 1.2.2.1
  remote-as 65002
  update-source loopback0
  ebgp-multipath 5
  peer-type fabric-external
  address-family l2vpn evpn
    send-community
    send-community extended
    route-map NEXT-HOP-UNCHANGED out
    rewrite-evpn-rt-asn
```

```
neighbor 172.16.1.1
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.1.5
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.2.1
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.16.2.5
  remote-as 65001
  address-family ipv4 unicast
```

```
neighbor 172.18.1.1
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.1.5
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.2.1
  remote-as 65002
  address-family ipv4 unicast
```

```
neighbor 172.18.2.5
    remote-as 65002
    address-family ipv4 unicast
```

||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

## **ROUTER-WAN-CEN-05**

hostname R-5-WAN-CEN

```
feature ospf
feature bgp
feature mpls
feature lldp
```

```
system jumbomtu 9216
```

```
int serial6/4
    ip add 172.16.64.2 255.255.255.252
    ip router isis
```

```
int serial6/5
    ip add 172.16.65.2 255.255.255.252
    ip router isis
```

```
int serial6/6
    ip add 172.16.66.2 255.255.255.252
    ip router isis
```

```
int serial6/7
    ip add 172.16.67.2 255.255.255.252
    ip router isis
```

```
router isis
    net 49.0001.0000.0000.000e.00
```

||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

## **ROUTER-TEN-1**

hostname R-WAN-TEN-1

```
int gig3/0
    ip add 157.127.81.1 255.255.255.252
    mtu 9216
    no shutdown
```

||||||||||||||||||||||||||||||||||||||||||||||||

## **ROUTER-TEN-2**

hostname R-WAN-TEN-2

```
int gig3/0
  ip add 143.28.160.1 255.255.255.252
  mtu 9216
  no shutdown
```

|||||||||||||||||||||||||||||||||||||||||||||||  
|||||||||||||||||||||||||||||||||||||||||||||||  
**THE END**  
|||||||||||||||||||||||||||||||||||||||||||||||  
|||||||||||||||||||||||||||||||||||||||||||||||