

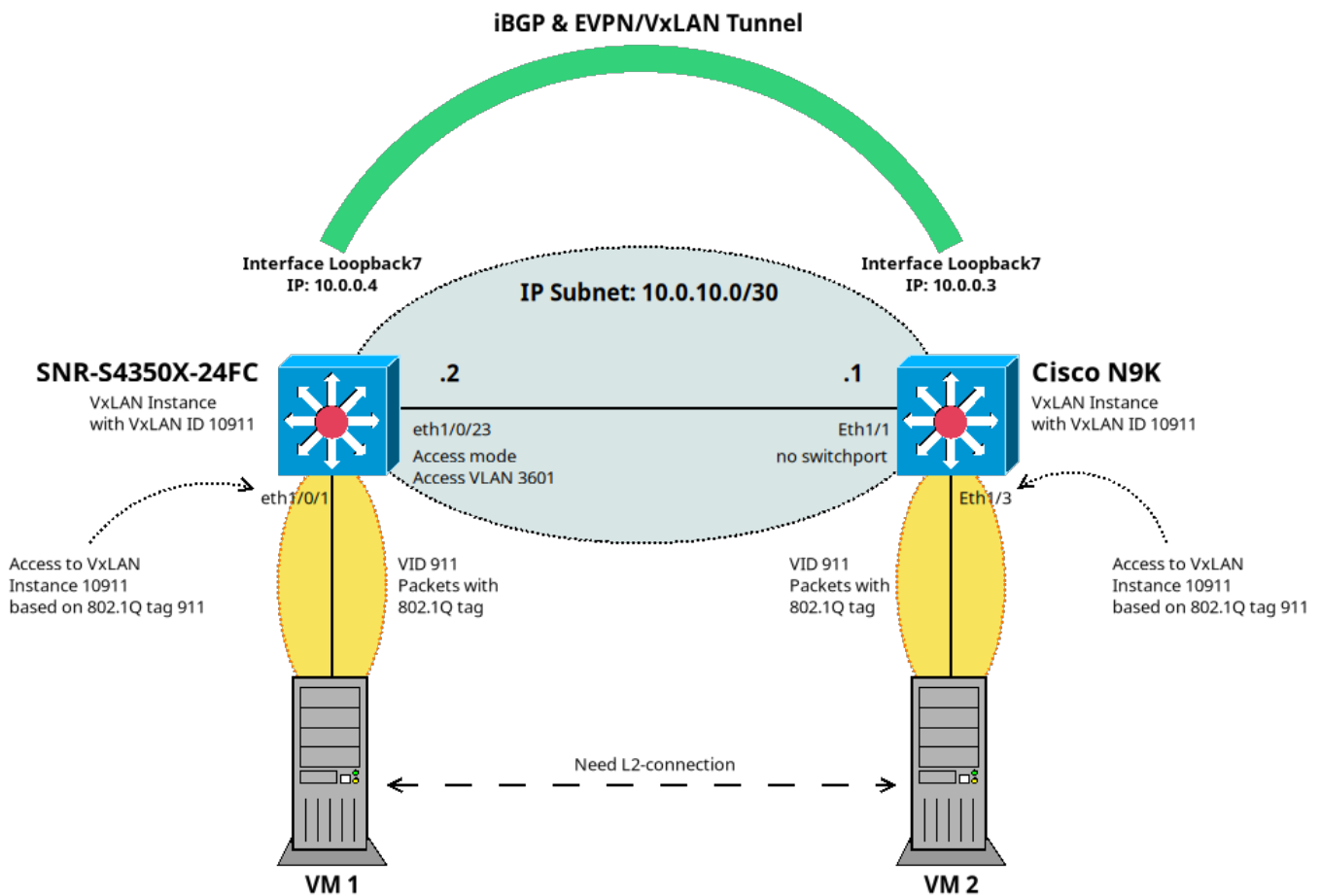
EVPN/VxLAN SNR-S4350X-24FC Cisco N9K

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- IP SNR Cisco
- iBGP + Address Family EVPN
- VxLAN Instance NVE
- VxLAN Instance:
- Cisco N9K
- SNR

EVPN/VxLAN SNR-S4350X-24FC Cisco N9K

SNR-S4350X-24FC V707R401C006B003, EVPN/VxLAN point-to-multipoint!



DIA: [EVPN-VxLAN.dia](#)

- 1) VM 1 — , VID 911. L2- VM 2
- 2) VM 2 — , VID 911. L2- VM 1
- 3) SNR-S4350X-24FX — L3- VTEP, V707R301C011. EVPN/VxLAN Cisco N9K
- 4) Cisco N9K — Cisco Nexus9000 C93180YC-FX, NXOS: version 9.3(11). EVPN/VxLAN SNR-S4350X-24FX

IP SNR Cisco

- Cisco N9K SNR L3-, 10.0.10.1/30
- SNR-S4350X Cisco L3-. Access(), VLAN 3601, L3-Interface VLAN 10.0.10.2/30.
- , IP- 10.0.10.0/30
- Loopback:
 - Cisco N9K — Interface Loopback 7 10.0.0.3/32
 - SNR-S4350X — Interface Loopback 7 10.0.0.4/32
- OSPF Loopback- IP-

iBGP + Address Family EVPN

IP- Loopback-, iBGP:

BGP Cisco N9K

```
router bgp 64500
  log-neighbor-changes
  address-family l2vpn evpn
    retain route-target all
    allow-vni-in-ethertag
  template peer EVPN_CORE
    remote-as 64500
    dont-capability-negotiate
    update-source loopback7
    address-family l2vpn evpn
      send-community
      send-community extended
  neighbor 10.0.0.4
    inherit peer EVPN_CORE
```

BGP SNR-S4350X

```
router bgp 64500
  bgp router-id 10.0.0.4
  bgp log-neighbor-changes
  neighbor 10.0.0.3 remote-as 64500
  neighbor 10.0.0.3 update-source Loopback7
  neighbor 10.0.0.3 timers 60 240

  address-family ipv4 unicast
    neighbor 10.0.0.3 activate
  exit-address-family

  address-family l2vpn evpn
    neighbor 10.0.0.3 activate
  exit-address-family
```

VxLAN Instance NVE

VxLAN Instance NVE Cisco N9K

```
vlan 911
  name L3VNI-TenantA
  vn-segment 10911
evpn
  vni 10911 12
    rd 10.0.0.3:10911
    route-target import 64500:10911
    route-target export 64500:10911
interface nvel
  no shutdown
  overlay-encapsulation vxlan-with-tag
  host-reachability protocol bgp
  source-interface loopback7
  global ingress-replication protocol bgp
  member vni 10911
  ingress-replication protocol bgp
```



, SNR-S4350X Interface NVE, EVPN

VxLAN Instance NVE SNR-S4350X

```
evpn nvi-vlan-mapping-monitor disable
evpn nve source-address 10.0.0.4
nvi 911
  vxlan-id 10911
  evpn
    rd 10.0.0.3:10911
    route-target both 64500:10911
  enable
evpn-exit
```

VxLAN Instance:

VxLAN Instance Cisco N9K

```
interface Ethernet1/3
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 30,911
  no shutdown
```

VxLAN Instance SNR-S4350X

```
Interface Ethernet1/0/1
  switchport mode trunk allow-null
  xconnect nvi 911 mode vlan svid 911
```

Cisco N9K

```

feature telnet
nv overlay evpn
feature ospf
feature bgp
feature pim
feature fabric forwarding
feature interface-vlan
feature vn-segment-vlan-based
feature nv overlay

vlan 1,911,3601
vlan 911
  vn-segment 10911

interface nve1
  no shutdown
  overlay-encapsulation vxlan-with-tag
  host-reachability protocol bgp
  source-interface loopback7
  global ingress-replication protocol bgp
  member vni 10911
    ingress-replication

interface Ethernet1/1 # SNR-S4350X
  mtu 2000
  no ip redirects
  ip address 10.0.10.1/30
  ip ospf network point-to-point
  no ip ospf passive-interface
  ip router ospf 1 area 0.0.0.0
  no shutdown

interface Ethernet1/3 # VM
  switchport
  switchport mode trunk
  switchport trunk allowed vlan 911
  no shutdown

interface loopback7
  ip address 10.0.0.3/32
  ip router ospf 1 area 0.0.0.0

router ospf 1
  router-id 10.0.0.3
router bgp 64500
  log-neighbor-changes
  address-family l2vpn evpn
    retain route-target all
    allow-vni-in-ethertag
  template peer EVPN_CORE
    remote-as 64500
    dont-capability-negotiate
    update-source loopback7
    address-family l2vpn evpn
      send-community
      send-community extended
  neighbor 10.0.0.4
    inherit peer EVPN_CORE
evpn
  vni 10911 l2
    rd 10.0.0.3:10911
    route-target import 64500:10911
    route-target export 64500:10911

```

```
!  
evpn nvi-vlan-mapping-monitor disable  
evpn nve source-address 10.0.0.4  
!  
vlan 1;911;3601  
!  
nvi 911  
vxlan-id 10911  
evpn  
rd 10.0.0.3:10911  
route-target both 64500:10911  
enable  
evpn-exit  
!  
Interface Ethernet1/0/1 # VM  
switchport mode trunk allow-null  
xconnect nvi 911 mode vlan svid 911  
!  
Interface Ethernet1/0/23 # Cisco N9K  
switchport mode trunk allow-null  
switchport trunk native vlan 3601  
!  
interface Vlan3601  
mtu 2000  
ip ospf network point-to-point  
ip address 10.0.10.2 255.255.255.252  
!  
interface Loopback7  
ip address 10.0.0.4 255.255.255.255  
!  
router ospf 1  
ospf router-id 10.0.0.4  
passive-interface default  
no passive-interface Vlan3601  
network 10.0.0.4 0.0.0.0 area 0  
network 10.0.10.0 0.0.0.3 area 0  
!  
router bgp 64500  
bgp router-id 10.0.0.4  
bgp log-neighbor-changes  
neighbor 10.0.0.3 remote-as 64500  
neighbor 10.0.0.3 update-source Loopback7  
neighbor 10.0.0.3 timers 60 240  
  
address-family ipv4 unicast  
neighbor 10.0.0.3 activate  
exit-address-family  
  
address-family l2vpn evpn  
neighbor 10.0.0.3 activate  
exit-address-family  
!
```