

VXLAN Static Configuration Study Notes (Alternate Case: Aruba 6300 ↔ Cisco 9500)

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Architecture Summary

Feature	Description
VXLAN Mode	Static (no EVPN)
Overlay VLANs	VLANs 200–220
Mapped VNIs	VNI 11200–11220
Underlay Protocol	OSPF (Area 0)
VXLAN Encapsulation	VXLAN over UDP (port 4789)
VTEP IP – Cisco 9500	10.100.100.1 (Loopback0)
VTEP IP – Aruba 6300	10.100.100.2 (Loopback0)
Transport Link	PtP Routed: 192.168.50.1/30 ↔ 192.168.50.2/30
Tunnel Source Interface	Loopback0 on both sides
Routing Model	OSPF for underlay + static VXLAN mapping

Logical Architecture

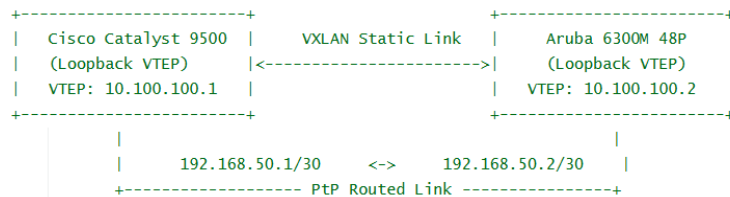


Figure 1: VXLAN Static Configuration Topology Between Cisco Catalyst 9500 and Aruba 6300

VXLAN Mapping Table

VLAN	VNI	VTEP Peer
200	11200	10.100.100.1/2
201	11201	10.100.100.1/2
...	...	...
220	11220	10.100.100.1/2

CLI Configuration – Cisco 9500

```
interface Loopback0
 ip address 10.100.100.1 255.255.255.255

interface TenGigabitEthernet1/0/10
 description PTP Link to Aruba 6300
 no switchport
 mtu 9100
 ip address 192.168.50.1 255.255.255.252
 ip ospf 10 area 0

interface nve1
 no ip address
 source-interface Loopback0
 vni 11200
  member Vlan200 service-instance 1
  ingress-replication 10.100.100.2
 ...
 vni 11220
  member Vlan220 service-instance 1
  ingress-replication 10.100.100.2

bridge-domain 200
 member vni 11200
 member Vlan200 service-instance 1
 ...
bridge-domain 220
 member vni 11220
 member Vlan220 service-instance 1

interface Vlan200
 ip address 10.20.200.1 255.255.255.0

router ospf 10
 router-id 10.100.100.1
 network 10.100.100.1 0.0.0.0 area 0
 network 192.168.50.0 0.0.0.3 area 0

ip route 10.100.100.2 255.255.255.255 192.168.50.2
```

CLI Configuration – Aruba 6300

```
interface loopback 0
ip address 10.100.100.2/32
ip ospf 10 area 0.0.0.0

interface 1/1/24
description Routed link to Cisco 9500
no shutdown
mtu 9100
routing
ip address 192.168.50.2/30
ip ospf 10 area 0.0.0.0
ip ospf network point-to-point

interface vlan 200
ip address 10.20.200.2/24

interface vxlan 1
source ip 10.100.100.2
inter-vxlan-bridging-mode static-evpn
no shutdown
vni 11200
    vlan 200
    vtep-peer 10.100.100.1
...
vni 11220
    vlan 220
    vtep-peer 10.100.100.1

router ospf 10
router-id 10.100.100.2
area 0.0.0.0

ip route 10.100.100.1/32 192.168.50.1
```

Note: VNI = 11000 + VLAN ID. Ellipsis ‘...’ indicates continuation of the same structure for VLANs 202 to 219.

VXLAN Static Configuration – Aruba 6400 to Aruba 6300

Architecture Summary

Feature	Description
VXLAN Mode	Static (no EVPN)
Overlay VLANs	VLANs 300–320
Mapped VNIs	VNI 11300–11320
Underlay Protocol	OSPF (Area 0)
VXLAN Encapsulation	VXLAN over UDP
VTEP IP – Aruba 6400	10.100.200.1 (Loopback1)
VTEP IP – Aruba 6300	10.100.200.2 (Loopback1)
Transport Link	PtP Routed: 192.168.60.1/30 ↔ 192.168.60.2/30

Logical Architecture

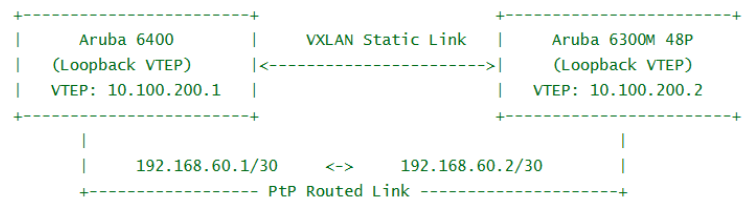


Figure 2: VXLAN Static Configuration Topology Between Aruba 6400 and 6300 Switches

VXLAN Mapping Table

VLAN	VNI	VTEP Peer
300	11300	10.100.200.1/2
301	11301	10.100.200.1/2
...	...	...
320	11320	10.100.200.1/2

CLI Configuration – Aruba 6400

```
interface loopback 1
  ip address 10.100.200.1/32
  ip ospf 20 area 0.0.0.0
interface 1/3/48
  description Link to Aruba 6300
  no shutdown
  mtu 9100
  routing
  ip address 192.168.60.1/30
  ip ospf 20 area 0.0.0.0
  ip ospf network point-to-point
interface vlan 300
  ip address 10.30.300.1/24
interface vxlan 1
  source ip 10.100.200.1
  inter-vxlan-bridging-mode static-evpn
  no shutdown
  vni 11300
    vlan 300
    vtep-peer 10.100.200.2
  ...
  vni 11320
    vlan 320
    vtep-peer 10.100.200.2
router ospf 20
  router-id 10.100.200.1
  area 0.0.0.0
ip route 10.100.200.2/32 192.168.60.2
```

CLI Configuration – Aruba 6300

```
interface loopback 1
  ip address 10.100.200.2/32
  ip ospf 20 area 0.0.0.0
interface 1/1/47
  description Link to Aruba 6400
  no shutdown
  mtu 9100
  routing
  ip address 192.168.60.2/30
  ip ospf 20 area 0.0.0.0
  ip ospf network point-to-point
interface vlan 300
  ip address 10.30.300.2/24
interface vxlan 1
  source ip 10.100.200.2
  inter-vxlan-bridging-mode static-evpn
  no shutdown
  vni 11300
    vlan 300
    vtep-peer 10.100.200.1
  ...
  vni 11320
    vlan 320
    vtep-peer 10.100.200.1
router ospf 20
  router-id 10.100.200.2
  area 0.0.0.0
ip route 10.100.200.1/32 192.168.60.1
```

Note: VNI = 11000 + VLAN ID. Ellipsis ‘...’ indicates continuation for intermediate VLANs.