

VXLAN ECMP Configuration

Requirements

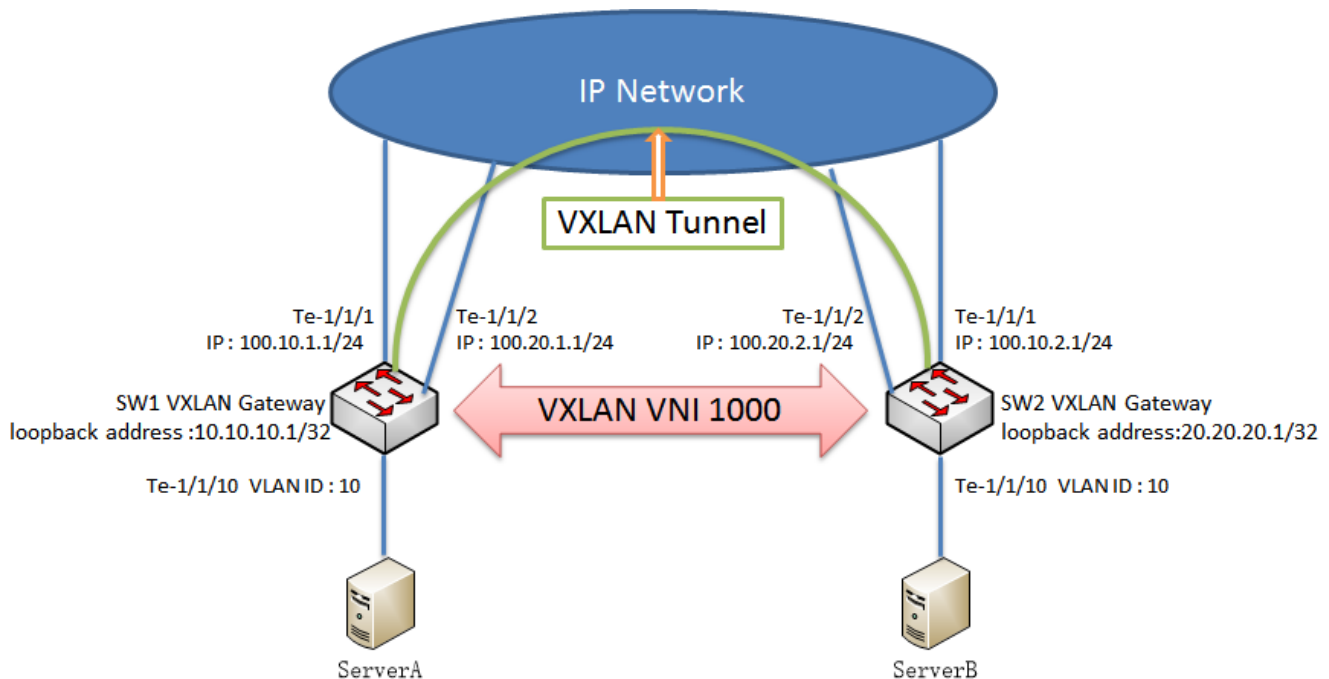
This example uses the following hardware and software components:

- An Trident-II Series switch
- PICOS OS Release more than 2.5 version

Overview

In this example, VXLAN ECMP is configured to run on a VXLAN domain. VTEP interfaces sources are configured to the loopback address. Interfaces are configured for VLAN tagging and encapsulation. Static route protocols is configured to facilitate unicast routing.

Topology



The VXLAN that comprise the networks include:

- SW1 VNI 1000: VTEP 10.10.10.1: VLAN 10
- SW2 VNI 1000: VTEP 20.20.20.1: VLAN 10
- SW1 IP Address: 100.10.1.1 and IP Address: 100.20.1.1
- SW2 IP Address: 100.10.2.1 and IP Address: 100.20.2.1

Configuring VXLAN on Trident-II Series Switches

CLI Quick Configuration

To quickly configure this example, copy the following commands, paste them into a text file, remove any line breaks, change any details necessary to match your network configuration, and copy and paste the commands into the CLI.

SW1 Configure

```

set vlans vlan-id 10
set vlans vlan-id 1000 l3-interface 1000
set vlans vlan-id 2000 l3-interface 2000
set interface gigabit-ethernet te-1/1/1 family ethernet-switching native-vlan-id 1000
set interface gigabit-ethernet te-1/1/2 family ethernet-switching native-vlan-id 2000
set interface gigabit-ethernet te-1/1/10 family ethernet-switching native-vlan-id 10
set l3-interface loopback lo address 10.10.10.1 prefix-length 32
set l3-interface vlan-interface 1000 address 100.10.1.1 prefix-length 24
set l3-interface vlan-interface 2000 address 100.20.1.1 prefix-length 24
set l3-interface vlan-interface 1000 mtu 1450
set l3-interface vlan-interface 2000 mtu 1450
set protocols static route 20.20.20.1/32 next-hop 100.10.1.2
set protocols static route 20.20.20.1/32 next-hop 100.20.1.2
set vxlans source-interface loopback address 10.10.10.1
set vxlans vni 1000 vlan 10
set vxlans vni 1000 flood vtep 20.20.20.1

```

SW2 Configure

```

set vlans vlan-id 10
set vlans vlan-id 1000 l3-interface 1000
set vlans vlan-id 2000 l3-interface 2000
set interface gigabit-ethernet te-1/1/1 family ethernet-switching native-vlan-id 1000
set interface gigabit-ethernet te-1/1/2 family ethernet-switching native-vlan-id 2000
set interface gigabit-ethernet te-1/1/10 family ethernet-switching native-vlan-id 10
set l3-interface loopback lo address 20.20.20.1 prefix-length 32
set l3-interface vlan-interface 1000 address 100.10.2.1 prefix-length 24
set l3-interface vlan-interface 2000 address 100.20.2.1 prefix-length 24
set l3-interface vlan-interface 1000 mtu 1450
set l3-interface vlan-interface 2000 mtu 1450
set protocols static route 10.10.10.1/32 next-hop 100.10.2.2
set protocols static route 10.10.10.1/32 next-hop 100.20.2.2
set vxlans source-interface loopback address 20.20.20.1
set vxlans vni 1000 vlan 10
set vxlans vni 1000 flood vtep 10.10.10.1

```

Configuring VXLAN Step-by-Step Procedure

The following example shows how to set up a basic VXLAN ECMP configuration with VXLAN domain. To configure VXLAN ECMP on Trident-II Series switches, follow these steps:

Configure VXLAN Step-by-Step for SW1

1. Configure the VLAN ID to 10 for vxlan domain.

```
set vlans vlan-id 10
```

2. Configure the VLAN ID to 1000 and 2000 for ip routing.

```
set vlans vlan-id 1000 l3-interface 1000
set vlans vlan-id 2000 l3-interface 2000
```

3. Configure the te-1/1/1 interface VLAN ID to 1000.

```
set interface gigabit-ethernet te-1/1/1 family ethernet-switching native-vlan-id 1000
```

4. Configure the te-1/1/2 interface VLAN ID to 2000.

```
set interface gigabit-ethernet te-1/1/2 family ethernet-switching native-vlan-id 2000
```

5. Configure the te-1/1/10 interface VLAN ID to 10

```
set interface gigabit-ethernet te-1/1/10 family ethernet-switching native-vlan-id 10
```

6. Configure ip address for the loopback interface.

```
set l3-interface loopback lo address 10.10.10.1 prefix-length 32
```

7. Configure ip address and MTU for the vlan-interface 1000.

```
set l3-interface vlan-interface 1000 address 100.10.1.1 prefix-length 24  
set l3-interface vlan-interface 1000 mtu 1450
```

8. Configure ip address and MTU for the vlan-interface 2000.

```
set l3-interface vlan-interface 2000 address 100.20.1.1 prefix-length 24  
set l3-interface vlan-interface 2000 mtu 1450
```

9. Configure static route for the VXLAN ECMP.

```
set protocols static route 20.20.20.1/32 next-hop 100.10.1.2  
set protocols static route 20.20.20.1/32 next-hop 100.20.1.2
```

10. Configure VTEP interface sources ip address.

```
set vxlans source-interface loopback address 10.10.10.1
```

11. Configure a VLAN ID 10 to a VNI 1000

```
set vxlans vni 1000 vlan 10
```

12. Configure flood vtep ip address for a VNI

```
set vxlans vni 1000 flood vtep 20.20.20.1
```

Configure VXLAN Step-by-Step for SW2

1. Configure the VLAN ID to 10 for vxlan domain.

```
set vlans vlan-id 10
```

2. Configure the VLAN ID to 1000 and 2000 for ip routing.

```
set vlans vlan-id 1000 l3-interface 1000  
set vlans vlan-id 2000 l3-interface 2000
```

3. Configure the te-1/1/1 interface VLAN ID to 1000.

```
set interface gigabit-ethernet te-1/1/1 family ethernet-switching native-vlan-id 1000
```

4. Configure the te-1/1/2 interface VLAN ID to 2000.

```
set interface gigabit-ethernet te-1/1/2 family ethernet-switching native-vlan-id 2000
```

5. Configure the te-1/1/10 interface VLAN ID to 10

```
set interface gigabit-ethernet te-1/1/10 family ethernet-switching native-vlan-id 10
```

6. Configure ip address for the loopback interface.

```
set l3-interface loopback lo address 20.20.20.1 prefix-length 32
```

7. Configure ip address and MTU for the vlan-interface 1000.

```
set l3-interface vlan-interface 1000 address 100.10.2.1 prefix-length 24  
set l3-interface vlan-interface 1000 mtu 1450
```

8. Configure ip address and MTU for the vlan-interface 2000.

```
set l3-interface vlan-interface 2000 address 100.20.2.1 prefix-length 24  
set l3-interface vlan-interface 2000 mtu 1450
```

9. Configure static route for the VXLAN ECMP.

```
set protocols static route 10.10.10.1/32 next-hop 100.10.2.2  
set protocols static route 10.10.10.1/32 next-hop 100.20.2.2
```

10. Configure VTEP interface sources ip address.

```
set vxlans source-interface loopback address 20.20.20.1
```

11. Configure a VLAN ID 10 to a VNI 1000

```
set vxlans vni 1000 vlan 10
```

12. Configure flood vtep ip address for a VNI

```
set vxlans vni 1000 flood vtep 10.10.10.1
```

View the VXLAN Table of SW1

```
admin@XorPlus# run show vxlan
Egress map:
egress_id 100006 MAC 22:22:22:22:22:1, port_id 1/1/1, vif_index 7 unicast
egress_id 100008 MAC 22:22:22:22:22:2, port_id 1/1/2, vif_index 8 unicast
L3 tunnel mac map:
vlan id 1000, ref_count 1
vlan id 2000, ref_count 1
Port vlan map mode map:
port id 1/1/10, ref_count 1
Termination admin state map:
port id 1/1/10, ref_count 1
Tunnel Map:
tunnel id 0X4C000001, dst_vtep 20.20.20.1, nexthops (100.10.1.2 100.20.1.2 ), ecmp_id 200256, ref_count 1
tunnel id 0, dst_vtep 224.0.0.1, nexthops (), ecmp_id 0, ref_count 1
Access ports:
id 0X80000001, vpn_id 0X7000, port_id 1/1/10, vlan_id 10, egress id 100005
Network ports:
id 0X80000002, vpn_id 0X7000, port_id 1/1/1, egress_id 100006, tunnel_id 0X4C000001, unicast
id 0X80000003, vpn_id 0X7000, port_id 1/1/1, egress_id 100007, tunnel_id 0X4C000001, multicast
BFD sessions:
admin@XorPlus#
```

The show vxlan to displays information about VXLAN endpoint configuration. Display VXLAN ECMP to the remote vxlan tunnel vtep has two nexthops (100.10.1.2 100.20.1.2).