

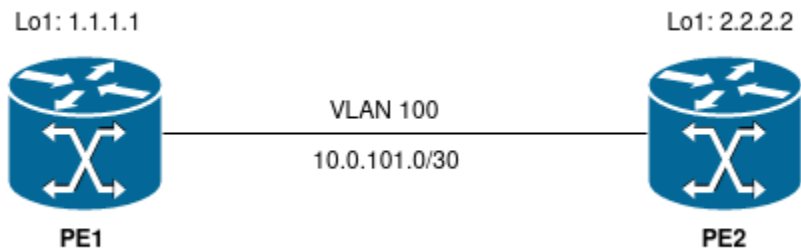
# MPLS SNR-S4650X-48FQ, SNR-S4550 SNR-S300G-24FX

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**MPLS (Multiprotocol Label Switching)** SNR-S4650X-48FQ, SNR-S4550 Trident2, MPLS. 48 1/10G SFP+, 6 40G QSFP+ . SNR-S4650X-48FQ MPLS L3VPN, VPLS (Martini mode), VPWS, .

## MPLS

:



PE1

MPLS

```
mpls enable
```

MPLS

```
interface Vlan100
mtu 2000
label-switching
ldp enable
ip address 10.0.101.1 255.255.255.252
!
```

Loopback

```
interface Loopback1
ip address 1.1.1.1 255.255.255.255
!
```

IGP

```
router ospf 1
ospf router-id 1.1.1.1
network 10.0.101.0 0.0.0.3 area 0
redistribute connected
!
```

LDP

```
router ldp
router-id 1.1.1.1
transport-address 1.1.1.1
```

PE2 .  
, MPLS :

```
PE1#sh mpls forwarding-table
Codes: > - selected FTN, B - BGP FTN, C - CR-LDP FTN, K - CLI FTN,
       L - LDP FTN, R - RSVP-TE FTN, S - SNMP FTN, U - unknown FTN

Code          FEC          FTN-ID          Pri          Nexthop          Out-Label  Out-Intf
L>            10.0.101.0/30          1          Yes
0.0.0.0              3          Vlan100
L>            2.2.2.2/32          2          Yes
10.0.101.2              3          Vlan100
```



implicit null

## L3VPN

VRF test1

```
ip vrf test1
 rd 100:1
 route-target both 100:1
```

loopback vrf test1

```
interface Loopback2
 ip vrf forwarding test1
 ip address 192.168.100.1 255.255.255.255
```

BGP MPLS PE2

```
router bgp 65534
 redistribute connected
 redistribute static
 neighbor 2.2.2.2 remote-as 65534
 neighbor 2.2.2.2 update-source 1.1.1.1
 address-family vpnv4 unicast
 neighbor 2.2.2.2 activate
 exit-address-family
 address-family ipv4 vrf test1
 redistribute connected
 redistribute static
 exit-address-family
```

, loopback2 VFR test1,

```
mpls local-packet-handling
```

PE2 , Lo2 192.168.200.1/32.

, :

```

PE1#sh ip route vrf test1
Codes: K - kernel, C - connected, S - static, R - RIP, B - BGP
       O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default
C       192.168.100.1/32 is directly connected, Loopback2 tag:0
B       192.168.200.1/32 [200/0] via 2.2.2.2 00:00:07 tag:0

```

## VPWS (Virtual Private Wire Service)

pw-class I2-vc IP PE VPN

```

pw-class c1
l2-vc 2.2.2.2 pw-id 100 pw-class c1

```

I2-vc , VLAN, VPN

```

Interface Ethernet1/0/33
xconnect l2-vc pw-id 100 mode vlan svid 25

```

PE2

PseudoWire

```

PE1#sh mpls l2-vc 100
VC ID      State   Type           In Label   Out Label   Endpoint
100        Up       Ethernet VLAN  12160      1920        2.2.2.2

```

## VPLS (Virtual Private Lan Service)

pw-class VFI PE VPLS

```

pw-class c2
vfi v1 200
peer 2.2.2.2 pw-id 200 pw-class c2

```

, VLAN

```

Interface Ethernet1/0/34
xconnect vfi 200 mode vlan svid 35

```

VPN

VPLS

```

PE1#show vpls
Name      VPLS-ID  VPLS-MTU  Type           Peers  State
v1        200      1500      Ethernet VLAN  1      Active

```