

```
R7: CE-1
conf t
int e0/0
ip add 192.168.17.7 255.255.255.0
no sh
int lo 0
ip add 7.7.7.7 255.0.0.0
exit
```

```
router bgp 100
neig 192.168.17.1 remote-as 200
net 7.0.0.0
exit
```

=====

```
R1:PE router
conf t
int e0/1
Desc conn to CE-1
ip add 192.168.17.1 255.255.255.0
no sh
int e0/0
Desc conn to MPLS domain
ip add 10.12.1.1 255.255.255.0
no sh
int lo 0
ip add 1.1.1.1 255.255.255.0
exit
```

```
! ospf config
```

```
int lo0
ip ospf network point-to-point
exit
```

```
int range e0/0, lo0
ip ospf 1 area 0
exit
```

```
! Bgp config
```

```
router bgp 200
neig 192.168.17.7 remote-as 100
neig 5.5.5.5 remote-as 200
neig 5.5.5.5 update-source lo0
neig 5.5.5.5 next-hop-self
exit
```

```
!MPLS config:
```

```
mpls label protocol ldp
mpls ldp router-id lo0
mpls label range 1000 1999
mpls ip
ip cef
int e0/0
mpls ip
exit
```

```
R2: P router
conf t
int e0/0
Desc conn to R1 PE
ip add 10.12.1.2 255.255.255.0
no sh
int e0/1
Desc conn to R3-P
ip add 10.23.1.2 255.255.255.0
no sh
int lo 0
ip add 2.2.2.2 255.255.255.0
exit
```

```
! ospf config
```

```
int lo0
ip ospf network point-to-point
exit
```

```
int range e0/0-1, lo0
ip ospf 1 area 0
exit
```

```
mpls label protocol ldp
mpls ldp router-id lo0
mpls label range 2000 2999
mpls ip
ip cef
int range e0/0-1
mpls ip
exit
```

```
R3: P router
conf t
int e0/0
Desc conn to R2 P
ip add 10.23.1.3 255.255.255.0
no sh
int e0/1
Desc conn to R4-P
ip add 10.34.1.3 255.255.255.0
no sh
int lo 0
ip add 3.3.3.3 255.255.255.0
exit
```

```
! ospf config
```

```
int lo0
ip ospf network point-to-point
exit
```

```
int range e0/0-1, lo0
ip ospf 1 area 0
exit
```

```
!MPLS
```

```
mpls label protocol ldp
mpls ldp router-id lo0
mpls label range 3000 3999
mpls ip
ip cef
int range e0/0-1
mpls ip
exit
```

```
R4: P router
```

```
conf t
int e0/0
Desc conn to R3 P
ip add 10.34.1.4 255.255.255.0
no sh
int e0/1
Desc conn to R5-PE
ip add 10.45.1.4 255.255.255.0
no sh
int lo 0
ip add 4.4.4.4 255.255.255.0
exit
```

```
! ospf config
```

```
int lo0
ip ospf network point-to-point
exit
```

```
int range e0/0-1, lo0
ip ospf 1 area 0
exit
```

```
!MPLS
```

```
mpls label protocol ldp
mpls ldp router-id lo0
mpls label range 4000 4999
mpls ip
ip cef
int range e0/0-1
mpls ip
exit
```

```
R5: PE router
```

```
conf t
int e0/1
Desc conn to CE-2
ip add 192.168.56.5 255.255.255.0
no sh
int e0/0
Desc conn to mpls domain
ip add 10.45.1.5 255.255.255.0
no sh
int lo 0
```

```
ip add 5.5.5.5 255.255.255.0
exit
```

```
! ospf config
```

```
int lo 0
ip ospf network point-to-point
```

```
int range e0/0, lo0
ip ospf 1 area 0
exit
```

```
! Bgp config
```

```
router bgp 200
neig 192.168.56.6 remote-as 300
neig 1.1.1.1 remote-as 200
neig 1.1.1.1 update-source lo 0
neig 1.1.1.1 next-hop-self
exit
```

```
!MPLS
```

```
mpls label protocol ldp
mpls ldp router-id lo0
mpls label range 5000 5999
mpls ip
ip cef
int range e0/0
mpls ip
exit
```

```
R6:CE-2
```

```
conf t
int e0/0
ip add 192.168.56.6 255.255.255.0
no sh
int lo 0
ip add 6.6.6.6 255.0.0.0
exit
```

```
router bgp 300
neig 192.168.56.5 remote-as 200
net 6.0.0.0
exit
```

```
=====
MPLS l2vpn
```

```
-----
R2
int e0/2
mpls ip
xconnect 4.4.4.4 1000 encapsulation mpls
exit
```

```
R4
int e0/2
```

```
mpls ip
xconnect 2.2.2.2 1000 encapsulation mpls
exit
```

=====