

MSR路由器
MPLS L2VPN Kompella功能的配置

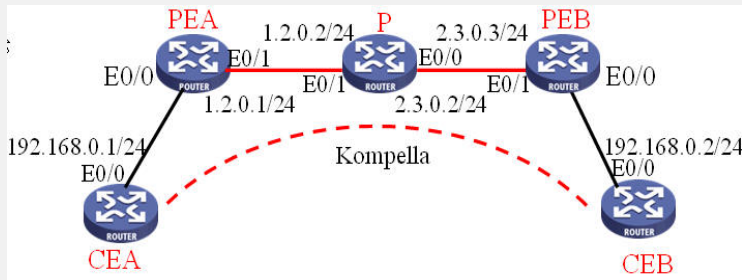
关键词: MSR;MPLS;L2VPN;Kompella

一、组网需求:

PEA为CEA提供Kompella接入, PEB为CEB提供Kompella接入, PEA、PEB各自为接入通过BGP分发标签。

设备清单: MSR路由器5台

二、组网图:



三、配置步骤:

适用设备和版本: MSR、Version 5.20, Beta 1105后所有版本。

CEA配置:

```
#
interface Ethernet0/0
port link-mode route
ip address 192.168.0.1 255.255.255.0
#
```

PEA配置:

```
#
router id 1.1.1.1
#
mpls lsr-id 1.1.1.1
#
mpls
#
mpls l2vpn
#
mpls ldp
#
interface Ethernet0/0
port link-mode route
#
interface Ethernet0/1
port link-mode route
ip address 1.2.0.1 255.255.255.0
mpls
mpls ldp
#
interface LoopBack0
ip address 1.1.1.1 255.255.255.255
#
bgp 1
undo synchronization
peer 3.3.3.3 as-number 1
peer 3.3.3.3 connect-interface LoopBack0
#
l2vpn-family //分发L2VPN标签
```

```
peer 3.3.3.3 enable
#
ospf 1
area 0.0.0.0
network 1.1.1.1 0.0.0.0
network 1.2.0.0 0.0.0.255
#
mpls l2vpn vpna encapsulation ethernet
route-distinguisher 1:1
vpn-target 1:1 import-extcommunity
vpn-target 1:1 export-extcommunity
ce cea id 1 range 5 default-offset 0
connection ce-offset 2 interface Ethernet0/0
#
```

P配置:

```
#
router id 2.2.2.2
#
mpls lsr-id 2.2.2.2
#
mpls
#
mpls ldp
#
interface Ethernet0/0
port link-mode route
ip address 2.3.0.2 255.255.255.0
mpls
mpls ldp
#
interface Ethernet0/1
port link-mode route
ip address 1.2.0.2 255.255.255.0
mpls
mpls ldp
#
interface LoopBack0
ip address 2.2.2.2 255.255.255.255
#
ospf 1
area 0.0.0.0
network 2.2.2.2 0.0.0.0
network 1.2.0.0 0.0.0.255
network 2.3.0.0 0.0.0.255
#
```

PEB配置:

```
#
router id 3.3.3.3
#
mpls lsr-id 3.3.3.3
#
mpls
#
mpls l2vpn
#
mpls ldp
#
interface Ethernet0/0
port link-mode route
#
interface Ethernet0/1
port link-mode route
ip address 2.3.0.3 255.255.255.0
mpls
```

```
mpls ldp
#
interface LoopBack0
ip address 3.3.3.3 255.255.255.255
#
bgp 1
undo synchronization
peer 1.1.1.1 as-number 1
peer 1.1.1.1 connect-interface LoopBack0
#
l2vpn-family //分发L2VPN标签
peer 1.1.1.1 enable
#
ospf 1
area 0.0.0.0
network 3.3.3.3 0.0.0.0
network 2.3.0.0 0.0.0.255
#
mpls l2vpn vpna encapsulation ethernet
route-distinguisher 2:1
vpn-target 1:1 import-extcommunity
vpn-target 1:1 export-extcommunity
ce ceb id 2 range 5 default-offset 0
connection ce-offset 1 interface Ethernet0/0
#
CEB配置:
#
interface Ethernet0/0
port link-mode route
ip address 192.168.0.2 255.255.255.0
#
```

四、配置关键点:

1. PE和P之间要保证MPLS互通，即建立OSPF和LDP连接;
2. PE连接CE的2个接口类型必须一致;
3. PE之间L2VPN实例配置要注意ce id及其connection ce-offset的设置必须要匹配，range也要一致。