

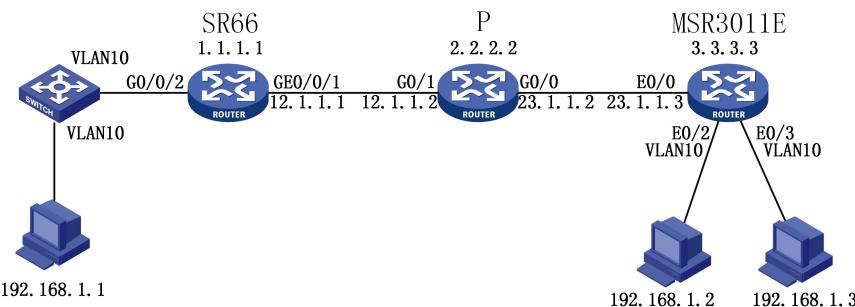
知 MSR v5使用VLAN接口与SR66对接Martini模式典型配置

MPLS L2VPN LDP 吕甲南 2015-12-31 发表

MSR v5与SR66v5建立L2VPN，多台电脑直接连接在MSR上与SR66侧实现二层互通。

MSR v5侧设备具有多个二层接口，直接用多个二层接口连接PC。保证用户在MSR侧可以同时有多个接口与远端进行二层通信。

SR66侧连接CE的接口三层物理接口。



设备3011E 版本R2207P02

设备SR6602-X1版本R3303P05

1. 实验配置

1.1 MSR3011E设备配置

```
#配置mpls lsr-id
mpls lsr-id 3.3.3.3
#创建VLAN
vlan 10
#使能mpls
mpls
#使能mpls l2vpn
l2vpn
mpls l2vpn
#使能mpls ldp
mpls ldp
#配置LDP远端对等体
mpls ldp remote-peer 1
remote-ip 1.1.1.1
#接口使能mpls, mpls ldp
interface Ethernet0/0
port link-mode route
ip address 23.1.1.3 255.255.255.0
mpls
mpls ldp
#配置loopback接口
interface LoopBack0
ip address 3.3.3.3 255.255.255.255
#在VLAN接口上创建Martini方式的VC连接
```

```
interface Vlan-interface10
description L2VPN
mpls l2vc 1.1.1.1 1 ethernet
#接口划入相应VLAN
interface Ethernet0/2
port link-mode bridge
description L2VPN
port access vlan 10
#接口划入相应VLAN
interface Ethernet0/3
port link-mode bridge
description L2VPN
port access vlan 10
#配置底层路由协议
ospf 1
area 0.0.0
network 23.1.1.3 0.0.0.0
network 3.3.3.3 0.0.0.0
1.2 P设备配置
#配置mpls lsr-id
mpls lsr-id 2.2.2.2
#使能mpls
mpls
#使能mpls ldp
mpls ldp
#配置loopback接口
interface LoopBack0
ip address 2.2.2.2 255.255.255.255
#接口使能mpls, mpls ldp
interface GigabitEthernet0/0
port link-mode route
ip address 23.1.1.2 255.255.255.0
mpls
mpls ldp
#接口使能mpls, mpls ldp
interface GigabitEthernet0/1
port link-mode route
ip address 12.1.1.2 255.255.255.0
mpls
mpls ldp
#配置底层路由协议
ospf 1
area 0.0.0
network 2.2.2.2 0.0.0.0
network 12.1.1.2 0.0.0.0
network 23.1.1.2 0.0.0.0
```

1.3 SR66设备配置

```
#配置mpls lsr-id
```

```
mpls lsr-id 1.1.1.1
```

```
#使能mpls
```

```
mpls
```

```
#使能mpls l2vpn
```

```
l2vpn
```

```
mpls l2vpn
```

```
#使能mpls ldp
```

```
mpls ldp
```

```
#配置LDP远端对等体
```

```
mpls ldp remote-peer 1
```

```
remote-ip 3.3.3.3
```

```
#配置loopback接口
```

```
interface LoopBack0
```

```
ip address 1.1.1.1 255.255.255.255
```

```
#接口使能mpls, mpls ldp
```

```
interface GigabitEthernet0/0/1
```

```
ip address 12.1.1.1 255.255.255.0
```

```
mpls
```

```
mpls ldp
```

```
#在连接CE的接口上创建Martini方式的VC连接
```

```
interface GigabitEthernet0/0/2
```

```
mpls l2vc 3.3.3.3 1
```

```
#配置底层路由协议
```

```
ospf 1
```

```
area 0.0.0.0
```

```
network 1.1.1.1 0.0.0.0
```

```
network 12.1.1.1 0.0.0.0
```

2. 实验验证

2.1 MSR3011E侧查看Martini方式VC的相关信息

```
<MSR3011E>display mpls l2vc
Total ldp vc : 1      1 up      0 down      0 blocked
Transport   client          VC          Local          Remote
VC ID       Intf           State        VC Label    VC Label
1           Vlan10         up          1025        1041
<MSR3011E>display mpls l2vc remote-info
total remote ldp vc : 1
Transport   Group          Peer          Remote          Remote
VC ID       ID            Addr          Encap          VC Label  C Bit  Remote
1           0             1.1.1.1      ethernet      1041      0      1500
```

2.2 SR66侧查看Martini方式VC的相关信息

```
<SR66>display mpls l2vc
Total ldp vc : 1      1 up      0 down      0 blocked
Transport   client          VC          Local          Remote
VC ID       Intf           State        VC Label    VC Label
1           GE0/0/2        up          1041        1025
<SR66>display mpls l2vc remote-info
total remote ldp vc : 1
Transport   Group          Peer          Remote          Remote
VC ID       ID            Addr          Encap          VC Label  C Bit  Remote
1           0             3.3.3.3      ethernet      1025      0      1500
```

2.3在SR66侧用PC ping MSR56侧的PC

```
命令提示符  
Microsoft Windows XP [版本 5.1.2600]  
<C> 版权所有 1985-2001 Microsoft Corp.  
C:\Documents and Settings\Administrator>ping 192.168.1.2  
Pinging 192.168.1.2 with 32 bytes of data:  
Reply from 192.168.1.2: bytes=32 time=3ms TTL=255  
Ping statistics for 192.168.1.2:  
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
    Minimum = 3ms, Maximum = 3ms, Average = 3ms  
C:\Documents and Settings\Administrator>ping 192.168.1.3  
Pinging 192.168.1.3 with 32 bytes of data:  
Reply from 192.168.1.3: bytes=32 time=8ms TTL=128  
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128  
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128  
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128  
Ping statistics for 192.168.1.3:  
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
    Minimum = 3ms, Maximum = 8ms, Average = 4ms  
C:\Documents and Settings\Administrator>
```

1. Martini方式使用LDP作为信令，需要配置ldp remote-peer
2. MSR3011E在VLAN接口上创建Martini方式的VC连接