

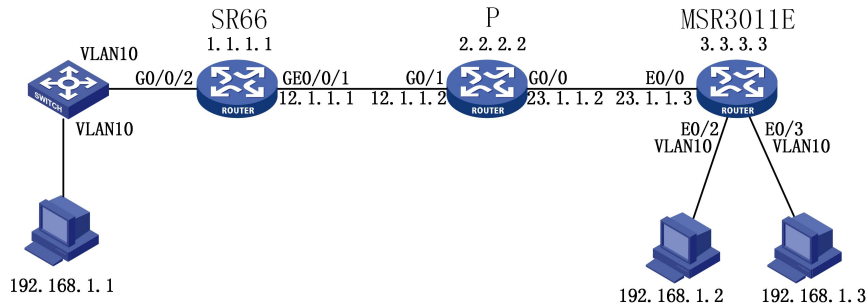
知 MSR v5使用VLAN接口与SR66对接Martini模式典型配置

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 0.0.0.0
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 0.0.0.0
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      C      Remote
VC ID      ID     Addr      Encap       VC Label    Bit   MTU
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      C      Remote
VC ID      ID     Addr      Encap       VC Label    Bit   MTU
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
Reply from 192.168.1.2: bytes=32 time=3ms TTL=255
Reply from 192.168.1.2: bytes=32 time=3ms TTL=255
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