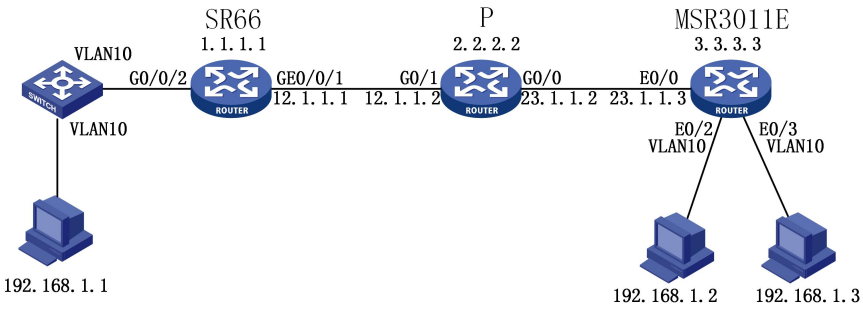
MSR v5使用VLAN接口与SR66对接Martini模式典型配置

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
```

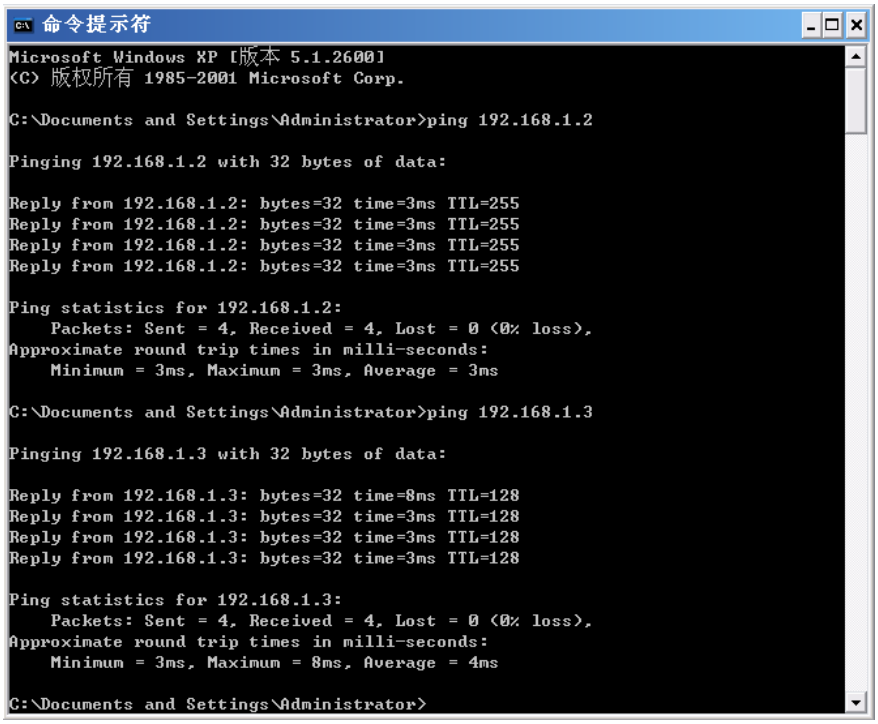
2.2 SR66侧查看Martini方式VC的相关信息

```
<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



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