

MSR路由器 MPLS L3VPN + RIP多实例配置

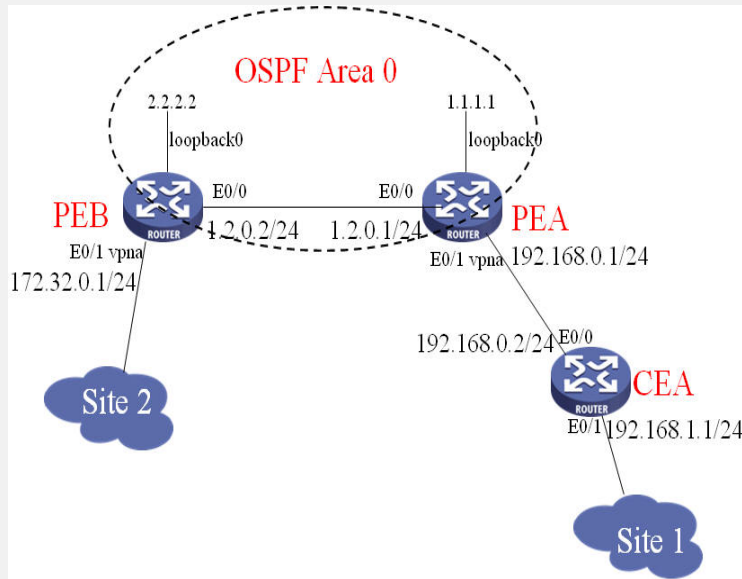
关键词：MSR;MPLS;L3VPN;RIP多实例

一、组网需求：

2台PE各接一个vpna的站点，PEA连接vpna站点1出口CEA，PEA与CEA通过RIP多实例学习CEA下挂站点路由

设备清单：MSR路由器3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 192.168.0.2 255.255.255.0
rip version 2 multicast
#
interface Ethernet0/1
port link-mode route
ip address 192.168.1.1 255.255.255.0
rip version 2 multicast
#
rip 1
undo summary
version 2
network 192.168.0.0
network 192.168.1.0
#
```

PEA配置：

```
router id 1.1.1.1
#
ip vpn-instance vpna
route-distinguisher 1:1
vpn-target 1:1 export-extcommunity
vpn-target 1:1 import-extcommunity
#
mpls lsr-id 1.1.1.1
```

```
#
mpls
#
mpls ldp
#
interface Ethernet0/0
port link-mode route
ip address 1.2.0.1 255.255.255.0
mpls
mpls ldp
#
interface Ethernet0/1
port link-mode route
ip binding vpn-instance vpna
ip address 192.168.0.1 255.255.255.0
rip version 2 multicast
#
interface LoopBack0
ip address 1.1.1.1 255.255.255.255
#
bgp 1
undo synchronization
group 1 internal
peer 1 connect-interface LoopBack0
peer 2.2.2.2 group 1
#
ipv4-family vpv4
peer 1 enable
peer 2.2.2.2 enable
peer 2.2.2.2 group 1
#
ipv4-family vpn-instance vpna
network 192.168.0.0
import-route rip 1
#
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
#
rip 1 vpn-instance vpna
undo summary
version 2
network 192.168.0.0
import-route direct
import-route bgp
#
PEB配置:
#
router id 2.2.2.2
#
ip vpn-instance vpna
route-distinguisher 2:1
vpn-target 1:1 export-extcommunity
vpn-target 1:1 import-extcommunity
#
mpls lsr-id 2.2.2.2
#
mpls
#
mpls ldp
#
interface Ethernet0/0
port link-mode route
```

```
ip address 1.2.0.2 255.255.255.0
mpls
mpls ldp
#
interface Ethernet0/1
port link-mode route
ip binding vpn-instance vpna
ip address 172.32.0.1 255.255.255.0
#
interface LoopBack0
ip address 2.2.2.2 255.255.255.255
#
bgp 1
undo synchronization
peer 1.1.1.1 as-number 1
peer 1.1.1.1 connect-interface LoopBack0
#
ipv4-family vpv4
peer 1.1.1.1 enable
#
ipv4-family vpn-instance vpna
import-route direct
#
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
#
```

四、配置关键点：

1. PEA上配置需要注意RIP进程1要绑定vpn实例；
2. PEA的BGP和rip进程1的vpn路由要互相引入。