

### MSR路由器 MPLS L3VPN + 静态路由配置

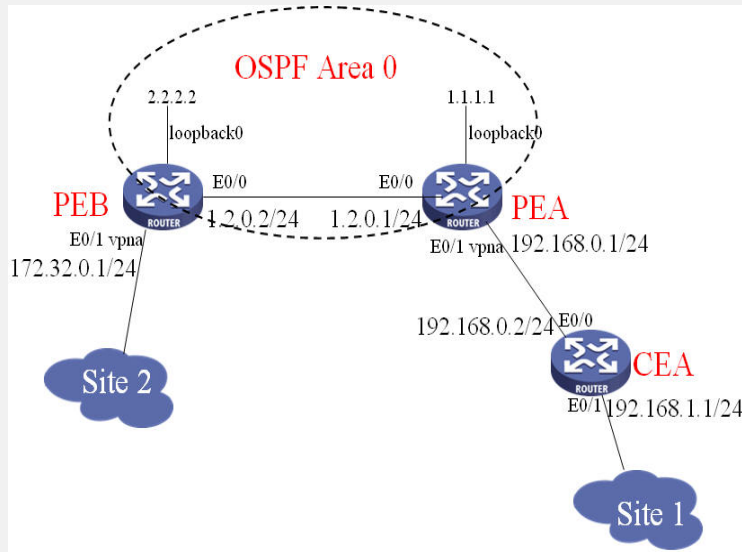
关键词：MSR;MPLS;BGP;VPN;静态路由

#### 一、组网需求：

2台PE各接着一个vpna的站点，PEA连接vpna站点1出口CEA，PEA与CEA通过静态路由访问CEA下挂站点

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
#
interface Ethernet0/1
port link-mode route
ip address 192.168.1.1 255.255.255.0
#
ip route-static 0.0.0.0 0.0.0.0 192.168.0.1
#
```

##### 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
#
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 static
#
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
#
ip route-static vpn-instance vpna 192.168.1.0 255.255.255.0 192.168.0.2
#
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 vpnv4
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. CEA上需要配置访问其他vpn路由的静态路由；
2. PEA上需要配置访问CEA下挂vpna站点1的静态路由
3. PEA的BGP要引入静态vpna路由。