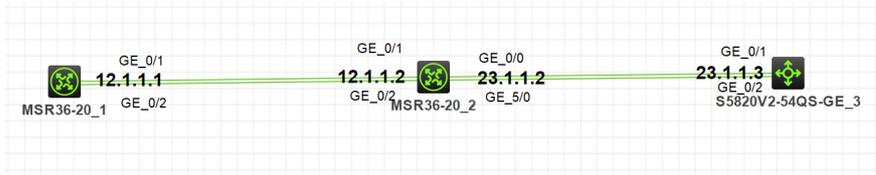


交换机和路由器链路聚合

三层链路聚合 王昕宇 2022-02-28 发表

组网及说明

路由器-----路由器-----交换机
两两间三层口做链路聚合，
实现
子接口上配地址互通



配置步骤

路由器1:

```
#
interface Route-Aggregation1
#
interface Route-Aggregation1.10
 ip binding vpn-instance test
 ip address 12.1.1.1 255.255.255.0
 vlan-type dot1q vid 10
#
```

```
#
interface GigabitEthernet0/1
 port link-mode route
 combo enable copper
 port link-aggregation group 1
#
interface GigabitEthernet0/2
 port link-mode route
 combo enable copper
 port link-aggregation group 1
```

路由器2:

与1对接部分:

```
interface GigabitEthernet0/1
 port link-mode route
 combo enable copper
 port link-aggregation group 1
#
interface GigabitEthernet0/2
 port link-mode route
 combo enable copper
 port link-aggregation group 1
#
```

```
#
interface Route-Aggregation1
#
interface Route-Aggregation1.10
 ip address 12.1.1.2 255.255.255.0
 vlan-type dot1q vid 10
#
```

与3对接部分

```
#
interface GigabitEthernet0/0
 port link-mode route
 combo enable copper
 port link-aggregation group 2
#
```

```
interface GigabitEthernet5/0
 port link-mode route
 combo enable copper
 port link-aggregation group 2
#
```

```
interface Route-Aggregation2
#
interface Route-Aggregation2.20
 ip address 23.1.1.2 255.255.255.0
 vlan-type dot1q vid 20
#
```

交换机3的配置

```

interface Route-Aggregation2
#
interface Route-Aggregation2.20
ip address 23.1.1.3 255.255.255.0

```

配置关键点

交换机没有vlan-type dot1q vid 这条命令

```

interface GigabitEthernet1/70/1
port link-mode route
combo enable fiber
port link aggregation group 2
#

```

路由器由于默认不能识别vlan标签，要在路由器子接口下
 配置vlan-type dot1q vid
 类似普通路由
 子接口配置vlan-id

28	5595.350854	23.1.1.3	23.1.1.2	ICMP	102 Echo (ping) reply	id=0x2b17, seq=0/0,
29	5595.554470	23.1.1.3	23.1.1.2	ICMP	102 Echo (ping) reply	id=0x2b17, seq=1/254

```

<
>
> Frame 19: 102 bytes on wire (816 bits), 102 bytes captured (816 bits)
> Ethernet II, Src: a2:5a:74:f8:03:02 (a2:5a:74:f8:03:02), Dst: a2:23:55:9a:02:02 (a2:23:55:9a:02:02)
> 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 20
> Internet Protocol Version 4, Src: 23.1.1.3, Dst: 23.1.1.2
> Internet Control Message Protocol

```

65	5457.048126	12.1.1.1	12.1.1.2	ICMP		
66	5457.254358	12.1.1.1	12.1.1.2	ICMP		

```

<
>
> Frame 61: 102 bytes on wire (816 bits), 102 bytes captured (816 bits)
> Ethernet II, Src: a2:23:4f:47:01:02 (a2:23:4f:47:01:02), Dst: a2:23:55:9a:02:02 (a2:23:55:9a:02:02)
> 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 10
> Internet Protocol Version 4, Src: 12.1.1.1, Dst: 12.1.1.2
> Internet Control Message Protocol

```

另外:

相同编号的vlan-int、路由子接口，需要绑定相同的vpn才行

比如现网的vlan-int 20和ragg5.20 编号对应20

所以需要绑定相同的vpn

否则直连不通