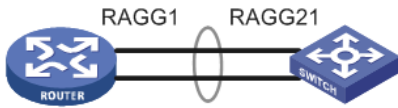


某局点MSR5660和S6800直连不通的经验处理案例

二层转发 ARP 孙轶宁 2019-09-26发表

组网及说明



如图，MSR56的RAGG1和68的RAGG21互联

问题描述

MSR56的RAGG1和68的RAGG21互联，两边直连ping不通

过程分析

1、检查MSR56和68上的ARP，发现都学到了对方的ARP

路由器的ARP

```
<RT>dis arp
```

```
Type: S-Static D-Dynamic O-Openflow R-Rule I-Invalid
IP address  MAC address  SVLAN/VSI Interface/Link ID  Aging Type
10.137.138.2  542b-de5a-f15d --   RAGG1           8      D
```

交换机的ARP

```
=====
=====
```

```
=====display arp all=====
Type: S-Static D-Dynamic O-Openflow R-Rule M-Multiport I-Invalid
IP address  MAC address  VLAN/VSI Interface/Link ID  Aging Type
10.137.138.1  7c1e-06ed-e976 --   RAGG21          1193  D
```

2、端口镜像抓包发现路由器发送的报文的源目MAC与ARP学到的完全不一致

No.	Time	Source	Destination	Protocol	Length	Info
5	9.218	10.137.138.1	10.137.138.2	ICMP	98	Echo (ping) request id=0x07fa, seq=0/0, ttl=255

Frame 5: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface
Ethernet II, Src: 7c1e:06:ed:e9:72 (7c:1e:06:ed:e9:72), Dst: Hangzhou_41:5e:5b (00:0f:e2:41:5e:5b)
Internet Protocol Version 4, Src: 10.137.138.1 (10.137.138.1), Dst: 10.137.138.2 (10.137.138.2)
Internet Control Message Protocol

3、通过display interface ragg对应的接口，发现路由器接口的MAC地址异常，是全0

MSR56的聚合口信息

```
Route-Aggregation1
```

```
Current state: UP
```

```
Line protocol state: UP
```

```
Description: Route-Aggregation1 Interface
```

```
Bandwidth: 20000000 kbps
```

```
Maximum transmission unit: 1500
```

```
Internet address: 10.137.138.1/30 (Primary)
```

```
IP packet frame type: Ethernet II, hardware address: 0000-0000-0000
```

```
IPv6 packet frame type: Ethernet II, hardware address: 0000-0000-0000
```

4、尝试undo这个聚合口重新创建，以及尝试重新创建这个其他编号的聚合口，发现MAC地址仍然是全0。

5、向现场了解，现场曾经对这台MSR56的SPU进行热插拔操作，而SPU是不支持热插拔的，因此怀疑是现场对SPU热插拔操作造成此问题。建议客户重启设备，重启后问题解决。

解决方法

出现这个问题的原因就是现场对MSR56的SPU进行热插拔操作，SPU是不支持热插拔的，因此重启整机后问题解决。