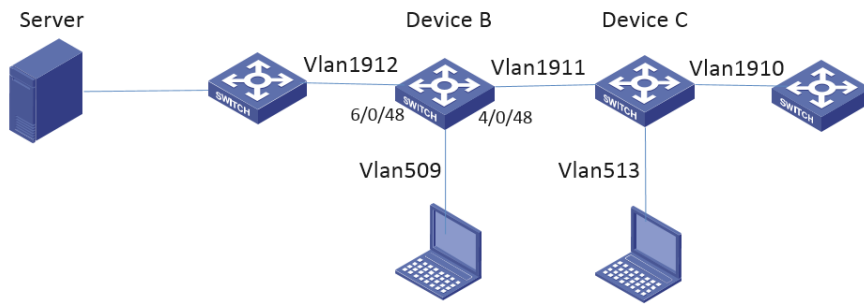


某局点S7506E下组播接收者无法接收组播视频流的经验案例

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组网及说明



device B和device C下的用户无法接收到组播视频流量。

问题描述

现场有组播的视频业务，经过一系列中间设备后device B和device C下的用户无法接收到组播视频流量，组播采用的是PIM SM的方式。

过程分析

1、首先检查配置无误，以Device C的配置为例。

上下行vlan三层接口配置pim sm，全局配置multicast routing，连接终端侧vlan三层接口配置igmp enable。

```
interface Vlan-interface1910
ip address 10.xxx.xx.222 255.255.255.252
pim sm
#
interface Vlan-interface1911
description link-Device B
ip address 10.xxx.xx.217 255.255.255.252
pim sm
#
multicast routing
#
pim
#
interface Vlan-interface513
ip address 10.xxx.xx.254 255.255.255.0
igmp enable
```

2、检查Pim邻居关系正常且igmp组、rp、bsr信息也正常，可以和前面业务正常设备作对比。

```
<Device C>dis pim neighbor
```

```
Total Number of Neighbors = 2
```

Neighbor	Interface	Uptime	Expires	DR-Priority	Mode
10.xxx.xx.221	Vlan1910	16:55:46	00:01:38	1	P
10.xxx.xx.218	Vlan1911	00:56:38	00:01:26	1	P

```
< Device C >dis igmp group
```

```
IGMP groups in total: 1
```

```
Vlan-interface513(10.xxx.xx.254):
```

```
IGMP groups reported in total: 1
```

Group address	Last reporter	Uptime	Expires
239.8.8.8	10.xxx.xx.14	16:38:16	00:02:23

检查发现Device C没有sg表项和multicast routing-table表项，而上一跳的Device B上述表项均正常，怀疑组播流到Device B后未正常转发至Device C：

```
<Device C>dis pim routing-table
```

```
Total 1 (*, G) entries; 0 (S, G) entries
```

```
(*, 239.8.8.8)
```

```
RP: 10.xxx.xx.254
```

```
Protocol: pim-sm, Flag: WC
```

```
UpTime: 16:40:47
```

```
Upstream interface: Vlan-interface1911
```

```
Upstream neighbor: 10.xxx.xx.218
```

```
RPF prime neighbor: 10.xxx.xx.218
```

```
Downstream interface information:
```

```
Total number of downstream interfaces: 2
```

```
1: Vlan-interface1910
```

```
Protocol: pim-sm, UpTime: 01:07:48, Expires: 00:02:43
```

```
2: Vlan-interface513
```

```
Protocol: igmp, UpTime: 16:38:17, Expires: -
```

3、在Device B部署流量统计，发现组播流量到达Device B后未转发至Device C。

```
<Device B>dis acl 3333
```

```
Advanced IPv4 ACL 3333, 1 rule,
```

```
ACL's step is 5, start ID is 0
```

```
rule 10 permit ip destination 239.8.8.8 0
```

```
<Device B>display qos policy interface ten 4/0/48
```

```
Interface: Ten-GigabitEthernet4/0/48 //与Device C互联
```

Direction: Outbound

Policy: 1

Classifier: 1

Operator: AND

组播源修改后解决。

If-match acl 3333

Behavior: 1

Accounting enable:

0 (Packets)

0 (pps)

< Device B > display qos policy interface ten 6/0/48

Interface: Ten-GigabitEthernet6/0/48 //与业务正常设备互联

Direction: Inbound

Policy: 1

Classifier: 1

Operator: AND

Rule(s) :

If-match acl 3333

Behavior: 1

Accounting enable:

22527 (Packets)

129 ps)

4、进一步收集Device B的诊断信息排查发现有较多IPV4_TTL的softcar丢弃计数和IPV4_TTL丢包，通过wireshark翻译出来发现是组播报文，默认ttl=1的报文会上送CPU处理。

====debug rxtx softcar show chassis 0 slot 6====

ID	Type	RcvPps	Rcv_All	DisPkt_All	Pps	Dyn	Swi	Hash	ACLmax
45	IPV4_TTL	6	370127	165	100	S	On	SMAC	8

The last discarded packet of IPV4_TTL :

0000 01 00 5e 08 08 08 14 51 7e 46 34 01 81 00 07 78

0010 08 00 45 00 05 40 6c a4 00 00 01 11 46 71 0a 83

....

