某局点S5130S-28S-HPWR-EI 设备丢包问题处理

二层转发 ARP 丢包 **郑标** 2020-03-24 发表

组网及说明

10.10.136.222（电脑） ----te2/0/45-hexin-te2/0/7-----1/0/26--3f-4--1/0/2-----10.10.133.167（摄像头）核心是网关

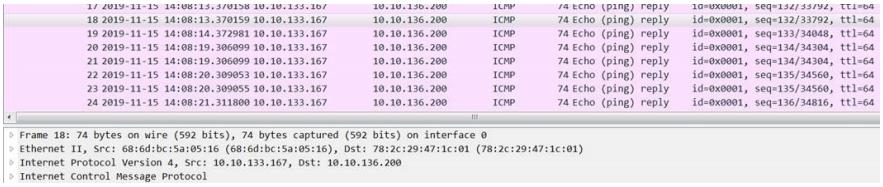
问题描述

10.10.136.222 ping 摄像头10.10.133.167丢包，流统计发现是摄像头回包正常1/0/2口进来正常，1/0/26出方向报文少了。

过程分析

对接入设备3f-4的1/0/2口inbound以及1/0/26口outbound方向的报文同时抓包分析发现，被丢弃的报文都是目的mac错了，一般来说，这种三层互访，目的mac都是网关的mac，不知道怎么会变成686d-bc5a-0476，和源mac对比一下，这感觉也是一个摄像头，估计是摄像头学错网关arp了，有其他摄像头给他回了arp reply，所以就学成了摄像头的地址，请找摄像头那边处理一下，可能是有地址冲突，有一个摄像头地址和网关地址一样了，可以排查一下：

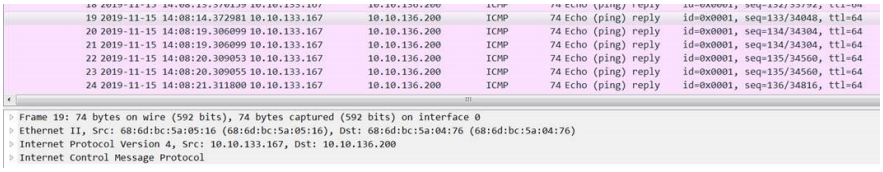
第17，18个报文，是正常的，是同一个报文，入出口都镜像到，所以时间很近，是双份的，可以看到目的MAC是782c-2947-1c01。



17	2019-11-15 14:08:13.370158	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=132/33792, ttl=64
18	2019-11-15 14:08:13.370159	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=132/33792, ttl=64
19	2019-11-15 14:08:14.372981	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=133/34048, ttl=64
20	2019-11-15 14:08:19.306099	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=134/34304, ttl=64
21	2019-11-15 14:08:19.306099	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=134/34304, ttl=64
22	2019-11-15 14:08:20.309053	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=135/34560, ttl=64
23	2019-11-15 14:08:20.309055	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=135/34560, ttl=64
24	2019-11-15 14:08:21.311800	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=136/34816, ttl=64

```
▷ Frame 18: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
▷ Ethernet II, Src: 68:6d:bc:5a:05:16 (68:6d:bc:5a:05:16), Dst: 78:2c:29:47:1c:01 (78:2c:29:47:1c:01)
▷ Internet Protocol Version 4, Src: 10.10.133.167, Dst: 10.10.136.200
▷ Internet Control Message Protocol
```

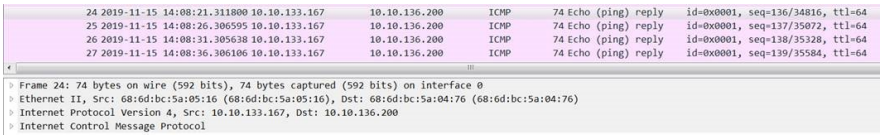
第19个报文，只有一份，就是没有转出去的，可以看到，目的mac是686d-bc5a-0476。



19	2019-11-15 14:08:14.372981	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=133/34048, ttl=64
20	2019-11-15 14:08:19.306099	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=134/34304, ttl=64
21	2019-11-15 14:08:19.306099	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=134/34304, ttl=64
22	2019-11-15 14:08:20.309053	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=135/34560, ttl=64
23	2019-11-15 14:08:20.309055	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=135/34560, ttl=64
24	2019-11-15 14:08:21.311800	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=136/34816, ttl=64

```
▷ Frame 19: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
▷ Ethernet II, Src: 68:6d:bc:5a:05:16 (68:6d:bc:5a:05:16), Dst: 68:6d:bc:5a:04:76 (68:6d:bc:5a:04:76)
▷ Internet Protocol Version 4, Src: 10.10.133.167, Dst: 10.10.136.200
▷ Internet Control Message Protocol
```

第24个报文，包括后面所有丢弃的报文都是这样的，目的mac错了。



24	2019-11-15 14:08:21.311800	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=136/34816, ttl=64
25	2019-11-15 14:08:26.306595	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=137/35072, ttl=64
26	2019-11-15 14:08:31.305638	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=138/35328, ttl=64
27	2019-11-15 14:08:36.306106	10.10.133.167	10.10.136.200	ICMP	74 Echo (ping) reply	id=0x0001, seq=139/35584, ttl=64

```
▷ Frame 24: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface 0
▷ Ethernet II, Src: 68:6d:bc:5a:05:16 (68:6d:bc:5a:05:16), Dst: 68:6d:bc:5a:04:76 (68:6d:bc:5a:04:76)
▷ Internet Protocol Version 4, Src: 10.10.133.167, Dst: 10.10.136.200
▷ Internet Control Message Protocol
```

解决方法

现场一台服务器与摄像头地址冲突了，排查后问题解决。