

某局点 S125F-AF VPLS转发QINQ报文 丢失一层Vlan tag问题

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组网及说明

S125F-AF---CR16K, 现场S125F-AF和CR16K之间建立了VPLS隧道, S125F-AF下收到QINQ报文向上转发给CR16K。报文如下格式如下。

1	2021-04-18 15:25:24.828473	Unionman_07:bc:7a	Broadcast	PPPoED
2	2021-04-18 15:25:24.828473	IETF-VRRP-VRID_05	Unionman_07:bc:7a	PPPoED
3	2021-04-18 15:25:29.838106	Unionman_07:bc:7a	Broadcast	PPPoED
4	2021-04-18 15:25:29.872886	IETF-VRRP-VRID_05	Unionman_07:bc:7a	PPPoED
5	2021-04-18 15:25:34.840740	Unionman_07:bc:7a	Broadcast	PPPoED
6	2021-04-18 15:25:34.960378	IETF-VRRP-VRID_05	Unionman_07:bc:7a	PPPoED

```
<
> Frame 1: 68 bytes on wire (544 bits), 68 bytes captured (544 bits) on interface \Device\NPF_{7108BF40-
> Ethernet II, Src: Unionman_07:bc:7a (64:e0:ab:07:bc:7a), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
> 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 1919
> 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 2002
> PPP-over-Ethernet Discovery
```

问题描述

现场在CR16K上抓包发现，收到包中只有内层的VLAN TAG 2002。

No.	Time	Source	Destination	Protocol	Len
1	2021-04-18 15:27:56.737892	Unionman_07:bc:7a	Broadcast	PPPoED	
2	2021-04-18 15:28:01.742973	Unionman_07:bc:7a	Broadcast	PPPoED	
3	2021-04-18 15:28:06.747770	Unionman_07:bc:7a	Broadcast	PPPoED	
4	2021-04-18 15:28:43.418213	Unionman_07:bc:7a	Broadcast	PPPoED	
5	2021-04-18 15:28:48.419823	Unionman_07:bc:7a	Broadcast	PPPoED	
6	2021-04-18 15:28:53.425344	Unionman_07:bc:7a	Broadcast	PPPoED	

```
<
> Frame 2: 82 bytes on wire (656 bits), 82 bytes captured (656 bits) on interface \Device\NPF_{7108BF40-B13D-47B
> Ethernet II, Src: NewM3CTe_c5:84:01 (78:aa:82:c5:84:01), Dst: Hangzhou_f1:d1:03 (58:66:ba:f1:d1:03)
> MultiProtocol Label Switching Header, Label: 131734, Exp: 0, S: 1, TTL: 255
> Ethernet II, Src: Unionman_07:bc:7a (64:e0:ab:07:bc:7a), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
> 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 2002
> PPP-over-Ethernet Discovery
```

过程分析

现场测试了单层vlan报文进入S125F-AF业务正常。最后把S125到CR16K的VPLS隧道删除，qinq业务也会恢复正常。

解决方法

将S125的工作模式修改为bridgee，并重启设备后，QINQ报文正常转发。和研发确认，S125F-AF使用VPLS时需要修改系统模式为bridgee，否则会出现异常。

system-working-mode bridgee

