

知 某局点5130S-EI上行口组播报文打满导致通信异常

组播VLAN

IGMP Snooping

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组网及说明

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问题描述

某局点5130S-EI设备下挂组播源和组播接收者，设备上使能IGMP-snooping，组播源发送组播报文之后，设备的上行口几分钟之内被组播报文打满，带宽利用率达到100%，导致和上行网络通信异常

过程分析

1、查看上行接口，可以看到上行接口output方向的带宽利用率已经被打满

```
display interface Bridge-Aggregation 101
```

Bridge-Aggregation101

Current state: UP

Line protocol state: UP

IP packet frame type: Ethernet II, hardware address: 9c06-5c82-32c3

Description: Bridge-Aggregation101 Interface

Bandwidth: 2000000 kbps

2Gbps-speed mode, full-duplex mode

Link speed type is autonegotiation, link duplex type is autonegotiation

PVID: 1

Port link-type: Trunk

VLAN Passing: 1(default vlan), 65-79, 3016-3019

VLAN permitted: 1(default vlan), 2-4094

Trunk port encapsulation: IEEE 802.1q

Last clearing of counters: Never

Last 300 seconds input: 63 packets/sec 5340 bytes/sec 0%

Last 300 seconds output: 183050 packets/sec 246354250 bytes/sec 100%

Input (total): 225397 packets, 18389254 bytes

23069 unicasts, 157228 broadcasts, 45100 multicasts, 0 pauses

Input (normal): 225397 packets, - bytes

23069 unicasts, 157228 broadcasts, 45100 multicasts, 0 pauses

Input: 0 input errors, 0 runts, 0 giants, 0 throttles

0 CRC, 0 frame, - overruns, 0 aborts

- ignored, - parity errors

Output (total): 607593879 packets, 817655701112 bytes

36177 unicasts, 23064 broadcasts, 607534638 multicasts, 0 pauses

Output (normal): 607593937 packets, - bytes

36177 unicasts, 23064 broadcasts, 607534696 multicasts, 0 pauses

Output: 0 output errors, - underruns, - buffer failures

0 aborts, 0 deferred, 0 collisions, 0 late collisions

0 lost carrier, - no carrier

2、查看组播相关配置，相关vlan开启了igmp-snooping功能

vlan 75

igmp-snooping enable

igmp-snooping drop-unknown

igmp-snooping querier

igmp-snooping query-interval 30

igmp-snooping general-query source-ip 1.1.1.1

igmp-snooping special-query source-ip 1.1.1.1

3、查看igmp-snooping表项，可以看到上行接口加入到了router ports

```
display igmp-snooping router-port
```

VLAN 75:

Router ports (1 in total):

BAGG101 (00:02:33)

5130S设备上起了查询器，正常来说应该不会有router port，和现场确认之后，上行设备使能了三层组播相关配置，导致5130S上行口被加入了router ports，5130S下面连接的组播源发送的组播报文会从router ports发送出去，导致上行设备带宽打满

解决方法

1、现场上行网络没有其他组播业务，可以删除上行设备的三层组播配置

2、删除5130S设备上的查询区配置

按照现场实际组网，选用两种方法之一