

知 设备运行过程中终端和接入交换机突然无法通过DHCP获取地址

DHCP/DHCP Relay

DHCP Snooping

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问题描述

现场反馈，设备运行过程中突然无法通过DHCP获取地址

5130---6520---7560

DHCP服务器配置在7560上，5130下接终端和AP，中间6520二层透传。

过程分析

通过DHCP方式的流统，发现报文是丢在了5130上联6520的聚合口上，即从终端或AP收到的DHCP请求报文没有从5130的上联口发出去。

```
[2#-2F-OFFICE-POE-SW-a.a.a.]dis qos policy interface inbound
```

Interface: GigabitEthernet1/0/19

Direction: Inbound

Policy: dhcp-c

Classifier: dhcp-c

Operator: AND

Rule(s) :

If-match acl 3010

If-match source-mac **xxxx-xxxx-xxxx** //测试终端mac

Behavior: dhcp-c

Accounting enable:

18 (Packets)

Interface: Ten-GigabitEthernet1/0/27

Direction: Inbound

Policy: dhcp-s

Classifier: dhcp-s

Operator: AND

Rule(s) :

If-match acl 3011

If-match source-mac yyyy-yyyy-yyyy

If-match destination-mac xxxx-xxxx-xxxx

Behavior: dhcp-s

Accounting enable:

0 (Packets)

Interface: Ten-GigabitEthernet1/0/28

Direction: Inbound

Policy: dhcp-s

Classifier: dhcp-s

Operator: AND

Rule(s) :

If-match acl 3011

If-match source-mac yyyy-yyyy-yyyy

If-match destination-mac xxxx-xxxx-xxxx

Behavior: dhcp-s

Accounting enable:

0 (Packets)

```
[2#-2F-OFFICE-POE-SW-a.a.a.]dis qos policy interface out
```

```
[2#-2F-OFFICE-POE-SW-a.a.a.]dis qos policy interface outbound
```

Interface: GigabitEthernet1/0/19

Direction: Outbound

Policy: dhcp-s

Classifier: dhcp-s

Operator: AND

Rule(s) :

If-match acl 3011

If-match source-mac yyyy-yyyy-yyyy

If-match destination-mac xxxx-xxxx-xxxx

Behavior: dhcp-s

Accounting enable:

0 (Packets)

Interface: Ten-GigabitEthernet1/0/27

Direction: Outbound

Policy: dhcp-c

Classifier: dhcp-c

Operator: AND

Rule(s) :

解决方法

If-match acl 3010

将bagg1上配置为信任端口，问题已经解决；

Behavior: dhcp-c

Accounting enable:

0 (Packets)

Interface: Ten-GigabitEthernet1/0/28

Direction: Outbound

Policy: dhcp-c

Classifier: dhcp-c

Operator: AND

Rule(s) :

If-match acl 3010

If-match source-mac xxxx-xxxx-xxxx

Behavior: dhcp-c

Accounting enable:

0 (Packets)

在5130配置业务接口同样无法自动获取地址，手工配置地址可以和DHCP网关互通。

设备全局使能了dhcp snooping enable，上行朝向dhcp server的接口bagg1下没有配置为信任端口，因此转发不出去dhcp请求报文；另外，开启了dhcp snooping功能后，dhcp报文会上cpu处理，因此出方向统计不到；

至于为什么之前获取地址正常，后续又不能获取了；

沟通得知，bagg1聚合口是最近才加上去的，终端之前拿地址应该是在只用单根线的时候拿到的，等到地址最后老化超时了，再申请、设备bagg1有没有配置为信任端口，也就拿不到了；

将bagg1上配置为信任端口，问题已经解决；

