

知 服务器过S10506ping测试丢包

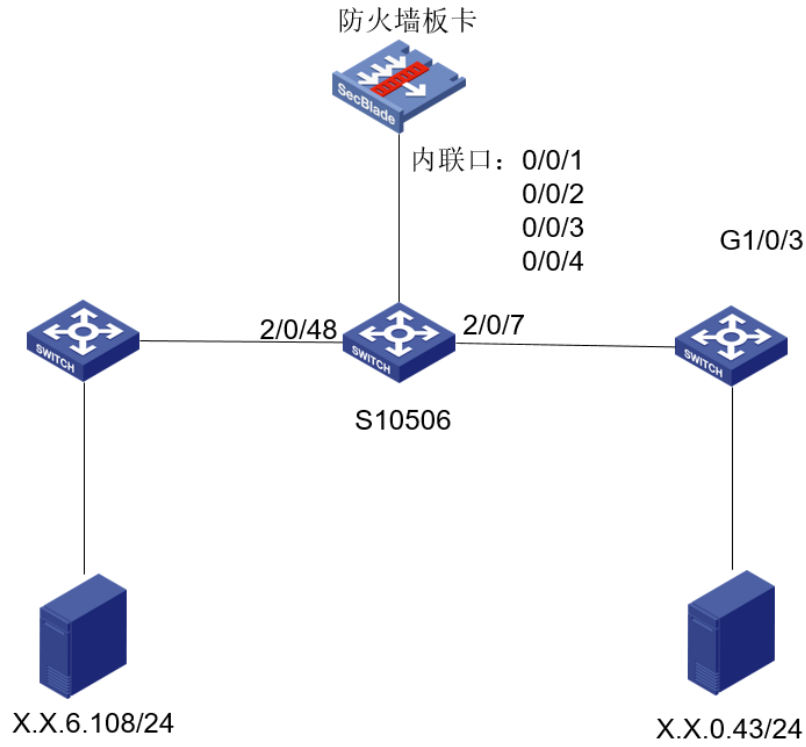
ARP 丢包 贾珊珊 2022-05-17 发表

组网及说明

设备: S10506

软件版本: Release 7596P05

组网: 交换机做二层转发, 服务器的网关在防火墙板卡上



问题描述

现场工程师反馈服务器互ping有丢包，100个包丢8个。建议现场在S10506设备上做流量统计后发现确实丢在该设备上，现场做了两次流量统计，一次匹配0.43to6.108的流量（丢包），一次是回来的流量（未丢包）。流量统计如下：

```
<JNGATW-CS10500-01>dis qos policy interface Ten-GigabitEthernet 2/0/7
```

```
Interface: Ten-GigabitEthernet2/0/7
```

```
Direction: Inbound
```

```
Policy: t1
```

```
Classifier: t1
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3556
```

```
Behavior: t1
```

```
Accounting enable:
```

```
100 (Packets)
```

```
0 (pps)
```

```
Interface: Ten-GigabitEthernet2/0/7
```

```
Direction: Outbound
```

```
Policy: t1
```

```
Classifier: t1
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3556
```

```
Behavior: t1
```

```
Accounting enable:
```

```
0 (Packets)
```

```
0 (pps)
```

```
<JNGATW-CS10500-01>dis qos policy interface Ten-GigabitEthernet 2/0/48
```

```
Interface: Ten-GigabitEthernet2/0/48
```

```
Direction: Inbound
```

```
Policy: t1
```

```
Classifier: t1
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3556
```

```
Behavior: t1
```

```
Accounting enable:
```

```
0 (Packets)
```

```
0 (pps)
```

```
Interface: Ten-GigabitEthernet2/0/48
```

```
Direction: Outbound
```

```
Policy: t1
```

```
Classifier: t1
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3556
```

```
Behavior: t1
```

```
Accounting enable:
```

```
92 (Packets)
```

```
0 (pps)
```

过程分析

首先确认下设备是否有正常接地，之前也有因未接地电信号干扰导致丢包的问题。

其次做下全局流统，看下是否是目的Mac有问题从其他接口出去了：

```
qos policy apply XXX global inbound
```

```
qos policy apply XXX global outbound
```

然后发现全局流统测试发现就是丢包了，而不是发送到其他端口了，因此需要做下内联口流统

Probe

```
debug qacl packet pattern dip 37.56.6.108 255.255.255.255 sl 2 ch 0
```

```
debug qacl packet-pattern sip 37.56.0.43 255.255.255.255 sl 2 ch 0
```

```
debug qacl packet action statistics sl 2 ch 0
```

```
debug qacl packet control sl 2 ch 0 25 out
```

```
debug qacl packet control sl 2 ch 0 33 out
```

```
debug qacl packet control sl 2 ch 0 35 out
```

```
debug qacl packet control sl 2 ch 0 36 out
```

```
debug qacl packet pattern dip 37.56.6.108 255.255.255.255 sl 0 ch 0
```

```
debug qacl packet-pattern sip 37.56.0.43 255.255.255.255 sl 0 ch 0
```

```
debug qacl packet action statistics sl 0 ch 0
```

```
debug qacl packet control sl 0 ch 0 46 in
```

```
debug qacl packet control sl 0 ch 0 50 in
```

ping下查看hg口流统计数

```
debug qacl show packet pattern sl 2 ch 0 25 out
```

```
debug qacl show packet pattern sl 2 ch 0 33 out
```

```
debug qacl show packet pattern sl 2 ch 0 35 out
```

```
debug qacl show packet pattern sl 2 ch 0 36 out
```

```
debug qacl show packet pattern sl 0 ch 0 46 in
```

```
debug qacl show packet pattern sl 0 ch 0 50 in
```

流统结束后，需要undo以上命令来关闭流量统计。

解决方法

流量统计确认是丢在交换机上，后通过产品线确认，是因为现场在对应vlan 210（该业务vlan）中配置了arp snooping，arp snooping会将arp报文上送cpu。现场是之前S105作为网关，后面把网关移动到防火墙插卡，因此在vlan 201和vlan 210配置了网关地址，但是shutdown了，最后删除vlan201和vlan210的地址后正常。

丢包原因是因为Arp snooping是二层特性，本身不需要起虚接口地址的，配置了arp snooping会在二层就上送CPU，不需要到三层的vlan-Int接口，所以shut了但还是会相应arp，导致终端偶发学到的网关Mac有问题。

