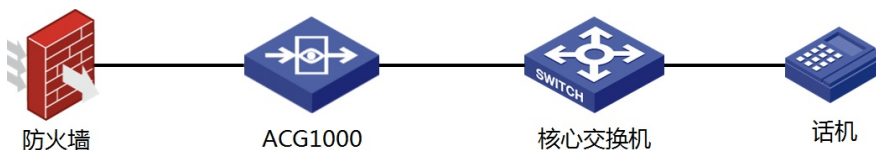


某局点部署ACG1000透明模式下SIP语音电话无法正常拨通

透明模式 ALG NAT 王鸿渐 2019-03-21 发表

组网及说明

拓扑如下：



问题描述

现场某局点出口网络透明部署我司ACG1000设备，出口为第三方防火墙与总部建立IPSEC VPN，核心交换机下挂一个第三方语音话机，使用SIP协议传输语音数据，现发现一旦将ACG设备放入出口网中则会导致话机能注册成功但无法拨打语音电话。

过程分析

首先检查ACG配置，确认BVI网桥接口配置无误，确认IPV4策略未将SIP协议及相关应用禁用。



此时我们在话机侧与ACG上下联端口进行镜像抓包，检查报文收发情况。

```
35_ 135.4779_ 192.168.175.9 192.168.50.200 TCP 66 [TCP Dup ACK 3494#1] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940
36_ 135.5069_ 192.168.50.200 192.168.175.9 TCP 1130 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=12699 Ack=18804 Win=60291 Len=0
37_ 135.5078_ 192.168.175.9 192.168.50.200 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
38_ 135.5078_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 3494#2] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940
39_ 139.5345_ 192.168.50.200 192.168.175.9 TCP 1130 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=12699 Ack=18804 Win=60291 Len=0
40_ 139.5345_ 192.168.50.200 192.168.175.9 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
41_ 139.5351_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 3494#3] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940
42_ 147.5551_ 192.168.50.200 192.168.175.9 TCP 1130 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=12699 Ack=18804 Win=60291 Len=0
43_ 147.5551_ 192.168.50.200 192.168.175.9 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
44_ 147.5559_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 3494#4] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940
45_ 150.7516_ 192.168.175.9 192.168.50.200 SIP 997 Request: NOTIFY sip:8504@192.168.50.200:5060;transport=tcp |
46_ 150.7522_ 192.168.50.200 192.168.175.9 TCP 60 5060 -> 4252 [ACK] Seq=14799 Ack=19735 Win=59260 Len=0
Frame 3611: 1078 bytes on wire (8624 bits), 1078 bytes captured (8624 bits) on interface 0
Ethernet II, Src: [REDACTED], Dst: [REDACTED]
Internet Protocol Version 4, Src: 192.168.50.200, Dst: 192.168.175.9
Transmission Control Protocol, Src Port: 5060, Dst Port: 4252, Seq: 13775, Ack: 18804, Len: 1024
```

下联口抓包

```
218 138.2374_ 192.168.175.9 192.168.50.200 TCP 66 [TCP Dup ACK 216#1] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940 Len=0 SLE=
219 132.2667_ 192.168.50.200 192.168.175.9 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
220 132.2674_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 216#2] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940 Len=0 SLE=
221 136.2941_ 192.168.50.200 192.168.175.9 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
222 136.2948_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 216#3] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940 Len=0 SLE=
223 144.3152_ 192.168.50.200 192.168.175.9 TCP 1078 [TCP Retransmission] 5060 -> 4252 [PSH, ACK] Seq=13775 Ack=18804 Win=60291 Len=0
224 144.3159_ 192.168.175.9 192.168.50.200 TCP 74 [TCP Dup ACK 216#4] 4252 -> 5060 [ACK] Seq=18804 Ack=12699 Win=17940 Len=0 SLE=
225 147.5112_ 192.168.175.9 192.168.50.200 SIP 997 Request: NOTIFY sip:8504@192.168.50.200:5060;transport=tcp |
226 147.5122_ 192.168.50.200 192.168.175.9 TCP 54 5060 -> 4252 [ACK] Seq=14799 Ack=19735 Win=59260 Len=0
227 147.5277_ 192.168.175.9 192.168.50.200 SIP 690 Request: CANCEL sip:9@192.168.50.200:5060;transport=tcp |
228 147.5277_ 192.168.50.200 192.168.175.9 TCP 54 5060 -> 4252 [ACK] Seq=14799 Ack=20359 Win=58736 Len=0
Frame 217: 1078 bytes on wire (8624 bits), 1078 bytes captured (8624 bits) on interface 0
Ethernet II, Src: [REDACTED], Dst: [REDACTED]
Internet Protocol Version 4, Src: 192.168.50.200, Dst: 192.168.175.9
Transmission Control Protocol, Src Port: 5060, Dst Port: 4252, Seq: 13775, Ack: 18804, Len: 1024
Session Initiation Protocol (SUBSCRIBE)
```

解决方法

在设备命令行上做如下配置修改问题解决：

```
H3C-ACG> en
H3C-ACG# configure terminal
H3C(config)#no alg sip
```