

知 The wireless terminal drops from time to time

Wireless 龚训杰 2020-12-11 Published

Network Topology

AC—SW—AP

Problem Description

On-site PC will occasionally disconnect the network, and manual reconnection can be restored. The disconnection time is generally from midnight to early morning, the client cannot automatically connect, and there is a log of the client's online and offline on the AC. The server for Portal authentication is IMC, and the reason for the offline display on the IMC side is admin reset. It is suspected that the device sent a message to the terminal to cause the terminal to go offline.

Process Analysis

By capturing packets on the server side, you can see that an NTF_LOGOUT packet was sent before the device's accounting stop packet because of the DHCP relay security del.

```
20696 2020-10-27 02:07:28.817049 192.168.100.160 192.168.42.66 Portal 105 NTF_LOGOUT
20697 2020-10-27 02:07:28.817495 192.168.42.66 192.168.100.160 Portal 80 Portal NTF_HEARTBEAT
20698 2020-10-27 02:07:29.820154 192.168.100.160 192.168.42.66 RADIUS 467 Accounting-Request id=14
20699 2020-10-27 02:07:29.820660 192.168.42.66 192.168.100.160 RADIUS 62 Accounting-Response id=14
!!!
Frame 20696: 105 bytes on wire (840 bits), 105 bytes captured (840 bits) on interface \Device\NPF_{9F46B909-9AB3-41F3-B99F-6700DA049F8E},
Ethernet II, Src: 6c:e5:f7:d8:36:01 (6c:e5:f7:d8:36:01), Dst: VMware_a9:2b:92 (00:50:56:a9:2b:92)
Internet Protocol Version 4, Src: 192.168.100.160, Dst: 192.168.42.66
User Datagram Protocol, Src Port: 2000, Dst Port: 50100
Portal Protocol
  Version: Version 2 (2)
  Type: NTF_LOGOUT (8)
  Pap/chap: PAP (1)
  Rsvd: 0
  SerialNo: 0x54ab
  ReqID: 0x0000
  UserIP: 10.32.100.51
  UserPort: 0x0000
  ErrCode: 0
  AttrNum: 2
  Authenticator: 037d869364b2e0cf129d5eb73ccca30c
  Attributes:TextInfoBasIp
    TextInfo: DHCP relay security del
    BasIp: 192.168.100.160

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  AttrNum: 2
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  Attributes:TextInfoBasIp
    TextInfo: DHCP relay security del
    BasIp: 192.168.100.160
```

The reason is that the aging of DHCP entries on the AC kicks the terminal offline. It all happened in the middle of the night. It is estimated that the computer is dormant and the contract has not been renewed in time.

```
dhcp server ip-pool vlan3100
gateway-list 10.32.100.1
network 10.32.100.0 mask 255.255.252.0
dns-list 192.168.41.60 192.168.41.62
expired day 0 hour 8
nbns-list 192.168.41.60
```

Solution

The problem is solved after changing the configuration to 24 hours
expired day 0 hour 24