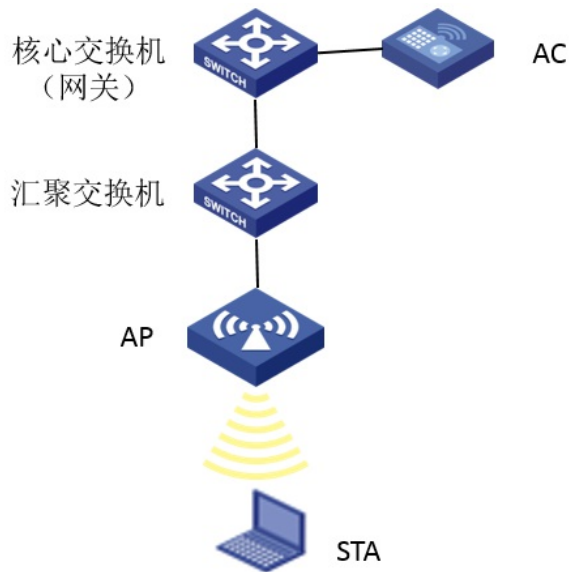


知 不定终端随机漫游慢 (获取地址慢)

wlan接入 终结者 ARP DHCP king666 2019-09-24发表

组网及说明

组网如下



问题描述

终端在AP1下接入无线网络,走到AP2下后终端显示地址获取中,等待一分多钟后才能连接上AP2,从AP2到AP1也存在同样现象。现象不定终端,随机出现。



过程分析

- 1、遇到漫游慢的问题我们首先查看漫游前后两个AP的功率，发现均为默认功率。AP部署位置合理，开启主动触发客户端重连接功能option client reconnect enable rssi 20，问题依旧。
- 2、通过分析AP2的诊断信息发现有线接口存在很大的广播组播流量。广播报文大多来自终端，也有一部分来自网关。

```
Last time when physical state changed to up:2019-09-08 23:53:01
Last time when physical state changed to down:2019-09-08 23:52:47
Last 300 second input: 2358 packets/sec 321781 bytes/sec 0%
Last 300 second output: 78 packets/sec 33196 bytes/sec 0%
Input (total): 761683285 packets, 87590307101 bytes
                5297301 unicasts, 496230501 broadcasts, 260155469 multicasts, 0 pauses
Input (normal): 761683271 packets, 87590307101 bytes
                5297301 unicasts, 496230501 broadcasts, 260155469 multicasts, 0 pauses
```

怀疑是大量的广播组播报文影响，所以在AP上行口抓了包。

- 3、分析报文发现有大量的来自网关和无线终端的arp广播，这些广播报文对DHCP报文的冲击很大，导致DHCP报文交互异常，客户端的discover反复发送，却没有收到server回复的offer报文，严重影响终端获取地址。

7219	2019-09-18	16:45:17.220107000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0x986fa69b
8256	2019-09-18	16:45:17.676493000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0x986fa69b
8257	2019-09-18	16:45:17.676817000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0x986fa69b
8923	2019-09-18	16:45:17.922158000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0xf936bd12
8927	2019-09-18	16:45:17.922650000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0xf936bd12
9087	2019-09-18	16:45:17.976630000	10.130.30.107	10.130.30.1	DHCP	342	DHCP	Request	-	Transaction ID 0xcce7c1481
9093	2019-09-18	16:45:17.978186000	10.130.30.1	10.130.30.107	DHCP	342	DHCP	ACK	-	Transaction ID 0xcce7c1481
9199	2019-09-18	16:45:18.008267000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0x8a6b1a53
9202	2019-09-18	16:45:18.008611000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Discover	-	Transaction ID 0x8a6b1a53
0157	2019-09-18	16:45:18.235107000	0.0.0.0	255.255.255.255	DHCP	362	DHCP	Discover	-	Transaction ID 0x809b02a0
0160	2019-09-18	16:45:18.235426000	0.0.0.0	255.255.255.255	DHCP	362	DHCP	Discover	-	Transaction ID 0x809b02a0
0164	2019-09-18	16:45:18.237474000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Request	-	Transaction ID 0xf936bd12
0165	2019-09-18	16:45:18.237819000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Request	-	Transaction ID 0xf936bd12
0277	2019-09-18	16:45:18.267976000	0.0.0.0	255.255.255.255	DHCP	342	DHCP	Request	-	Transaction ID 0x986fa69b

- 4、找到问题原因后就要排查广播组播报文从哪里来，怎么抑制如此大量的报文进入AP有线口。首先排查有线网络中有没有环路，经交换同事排查后确认无环路存在。但是找到大量发送arp报文的终端，排查难度大。

- 5、与客户商定后在核心和汇聚交换机上开启端口隔离，阻止不同端口下的广播泛洪至整个无线网络（客户整个无线网络使用同一个vlan）。

```
# 创建隔离组2。
```

```
<Device> system-view
```

```
[Device] port-isolate group 2
```

```
[Device-port-isolate-group2] quit
```

```
# 将端口GigabitEthernet1/0/1、GigabitEthernet1/0/2、GigabitEthernet1/0/3加入隔离组2。
```

```
[Device] interface gigabitethernet 1/0/1
```

```
[Device-GigabitEthernet1/0/1] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/1] quit
```

```
[Device] interface gigabitethernet 1/0/2
```

```
[Device-GigabitEthernet1/0/2] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/2] quit
```

```
[Device] interface gigabitethernet 1/0/3
```

```
[Device-GigabitEthernet1/0/3] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/3] quit
```

之后问题解决。

解决方法

通过在核心和汇聚交换机上配置端口隔离，阻止不同端口下的广播报文泛洪至整个无线网络。

```
# 创建隔离组2。
```

```
<Device> system-view
```

```
[Device] port-isolate group 2
```

```
[Device-port-isolate-group2] quit
```

```
# 将端口GigabitEthernet1/0/1、GigabitEthernet1/0/2、GigabitEthernet1/0/3加入隔离组2。
```

```
[Device] interface gigabitethernet 1/0/1
```

```
[Device-GigabitEthernet1/0/1] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/1] quit
```

```
[Device] interface gigabitethernet 1/0/2
```

```
[Device-GigabitEthernet1/0/2] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/2] quit
```

```
[Device] interface gigabitethernet 1/0/3
```

```
[Device-GigabitEthernet1/0/3] port-isolate enable group 2
```

```
[Device-GigabitEthernet1/0/3] quit
```