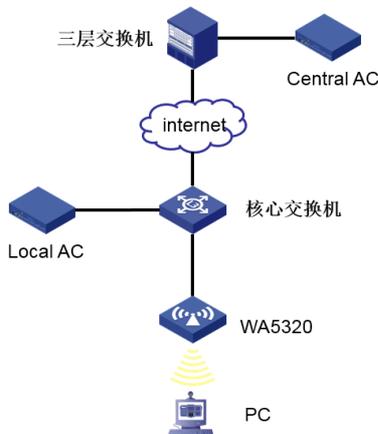


# 某局点分层AC组网AP无法注册到local AC经验案例

分层AC AP管理 苏新楼 2018-06-20 发表

## 组网及说明

现场使用分层AC的组网部署，Central AC 旁挂在总部核心交换机，Local AC旁挂在分支核心交换机



## 问题描述

分层AC组网稳定运行一段时间后，发现AP大面积掉线。重启AP后在Central AC上正常注册，但是无法注册到 Local AC，终端获取不到地址，终端手工配置地址无法上网。

## 过程分析

- (1) 检查Central AC和Local AC的相关配置没有问题。
- (2) 在Central AC查看Local AC和AP的注册情况，均正常。

```
<Central AC>dis wl ap all | in 41 *
41test                385  R/M  WA5320  219801A0Y
41zzh11-5            380  R/M  WA5320  219801A0Y
41zzh11-6            387  R/M  WA5320  219801A0Y
41zzh11-7            388  R/M  WA5320  219801A0Y
41zzh11-8            389  R/M  WA5320  219801A0Y
41zzh11-9            390  R/M  WA5320  219801A0Y
41zzh12-1            395  R/M  WA5320  219801A0Y
41zzh12-2            396  R/M  WA5320  219801A0Y
41zzh12-3            397  R/M  WA5320  219801A0Y
41zzh12-4            398  R/M  WA5320  219801A0Y
41zzh12-5            399  R/M  WA5320  219801A0Y
41zzh12-6            400  R/M  WA5320  219801A0Y
41zzh12-7            401  R/M  WA5320  219801A0Y
```

```
<Central AC>dis wl local-ac all
Total number of local ACs: 25
Total number of connected local ACs: 25

Local AC Information
State : I = Idle, J = Join, JA = JoinAck, IL = ImageL
        C = Config, DC = DataCheck, R = Run
AC name      ACID  State Model      Serial ID
41zx         2     R/M  WX2560H      219801A0MF
bhzx        817   R/M  WX2540H      210235A1JM
hbxz        289   R/M  WX2540H      210235A1JM
czxx        490   R/M  WX2540H      210235A1JM
dlxx        34    R/M  WX2540H      210235A1JM
flzx        91    R/M  WX2540H      210235A1JM
hhzx        495   R/M  WX2540H      210235A1JM
mjzx        288   R/M  WX2560H      219801A0MF
tcxx        492   R/M  WX2540H      210235A1JM
tlzx        290   R/M  WX2540H      210235A1JM
tqzx        89    R/M  WX2540H      210235A1JM
zsxx        44    R/M  WX2540H      210235A1JM
dhlxx       664   R/M  WX2540H      210235A1JM
edlvx       404   R/M  WX2540H      210235A1JM
```

- (3) 在Local AC查看Central AC和AP状态，发现AP在Local AC上无法注册。

```
<41zx>dis wlan local-ac
Local AC Information:
Model          : WX2560H
Serial ID      : 219801A0XXXXXXXXXX
MAC address    : 9428-XXXX-3490
Local AC address : 172.16.240.2
H/W version   : Ver-A
S/W version   : R5208P03
Boot version  : 1.07
Static central AC IPv4 address : 10.8.1.221
Static central AC IPv6 address : Not configured

Central AC Information:
Central AC address : 10.8.1.221
State              : Run
Sent control packets : 19917
Received control packets : 18405
```

```
[41zx-probe]dis system internal wlan ctrl-ap
Total number of connected APs: 0
.
Control AP information
State: I = Idle, J = Join, JA = JoinAck, IL = ImageLoad
C = Config, DC = DataCheck, R = Run
AP_name AP_ID State Chass Slot CPU
41ttest 14 I 0 1 0
41zzh14-2 6 I 0 1 0
41zzh14-5 17 I 0 1 0
```

(4) 从现场反馈的现象来看，其他局点的Local AC以及AP都成功注册并且正常使用，只有该局点下的AP在使用过程中出现了大面积掉线。Central AC和local AC都重启过，重启后AP可以上线，但过一段时间又下线了，产生这样现象可能的原因是由于设备之间带宽不足导致Local AC和Central AC无法同步消息。由于Local AC和Central AC之间同步消息的机制对丢包比较敏感，所以需要排查运营商链路。

从Local AC上ping Central AC测试，在流量经过的核心交换机上做流量统计，测试结果如下：

```
<核心>dis qos policy interface g 1/0/47
```

```
Interface: GigabitEthernet1/0/47
```

```
Direction: Inbound
```

```
Policy: liutong
```

```
Classifier: liutong
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3000
```

```
Behavior: liutong
```

```
Accounting enable:
```

```
20000 (Packets)
```

```
Interface: GigabitEthernet1/0/47
```

```
Direction: Outbound
```

```
Policy: liutong
```

```
Classifier: liutong
```

```
Operator: AND
```

```
Rule(s) :
```

```
If-match acl 3000
```

```
Behavior: liutong
```

```
Accounting enable:
```

```
19812 (Packets)
```

从流量统计结果来看，在Local AC上ping发出20000个报文，回应的报文只有19812个包，丢包严重。

## 解决方法

排查运营商链路丢包问题，故障解决。

Local AC和Central AC之间同步消息的机制对丢包比较敏感，所以设备之间链路质量需要得以保证。