



某局点新增AP下终端无法关联问题处理经验案例

wlan接入

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问题描述

某局点WA3520X（1053P04），WA6636（2457）。现场新增WA6636的AP，新增之后发现该AP下的任何终端都关联不上，包括手机和电脑。之前的AP下终端关联没有问题。

过程分析

1、在AC上收集debug wlan client 分析：

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*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/PktRecv: [APID: 50] Received a frame from 9822-ef5d-acfb (length=41)
*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] The Sta had exist when proc auth request.
*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/FSM: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Received authentication request in the Auth state.
*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/PktSend: [APID: 50] Sent a frame to 9822-ef5d-acfb (length=30)
*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/Timer: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Processed authentication request successfully, and sent authentication response.
*Oct 9 10:43:28:161 2022 D=1-W03520X-A STANMR/7/Timer: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Refreshed state timer.
*Oct 9 10:43:29:171 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] The Sta had exist when proc auth request.
*Oct 9 10:43:29:171 2022 D=1-W03520X-A STANMR/7/FSM: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Received authentication request in the Auth state.
*Oct 9 10:43:29:171 2022 D=1-W03520X-A STANMR/7/PktSend: [APID: 50] Sent a frame to 9822-ef5d-acfb (length=30)
*Oct 9 10:43:29:171 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Processed authentication request successfully, and sent authentication response.
*Oct 9 10:43:29:171 2022 D=1-W03520X-A STANMR/7/Timer: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Refreshed state timer.
*Oct 9 10:43:30:179 2022 D=1-W03520X-A STANMR/7/PktRecv: [APID: 50] Received a frame from 9822-ef5d-acfb (length=41)
*Oct 9 10:43:30:179 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] The Sta had exist when proc auth request.
*Oct 9 10:43:30:180 2022 D=1-W03520X-A STANMR/7/FSM: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Received authentication request in the Auth state.
*Oct 9 10:43:30:180 2022 D=1-W03520X-A STANMR/7/PktSend: [APID: 50] Sent a frame to 9822-ef5d-acfb (length=30)
*Oct 9 10:43:30:180 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Processed authentication request successfully, and sent authentication response.
*Oct 9 10:43:30:180 2022 D=1-W03520X-A STANMR/7/Timer: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Refreshed state timer.
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/Timer: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Auth state timer 9822400.
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] [Exceeds limit: 14]Auth rcv fm timeout.
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/PktSend: [APID: 50] Sent a frame to 9822-ef5d-acfb (length=26)
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Can't send delete mobile message to uplink device: Reached the end of the 3G/4G tunnel.
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Sent delete mobile message to downlink device.
*Oct 9 10:43:40:105 2022 D=1-W03520X-A STANMR/7/FSM: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Sent delete mobile message to downlink device successfully.
*Oct 9 10:43:40:106 2022 D=1-W03520X-A STANMR/PK/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440]Receive delete client message for forward.
*Oct 9 10:43:40:106 2022 D=1-W03520X-A STANMR/PK/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440]Failed to get client.
*Oct 9 10:43:40:107 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Del plugin del mob success.
*Oct 9 10:43:40:107 2022 D=1-W03520X-A STANMR/7/Event: [APID: 50] [MCI: 9822-ef5d-acfb, BSSID: 8c94-6a00-8440] Downlink delete mobile message callback.
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分析可知，AC是可以收到终端的AUTH认证报文的，且AC也回复了。那为啥没有进一步的association 报文交互呢？是终端没发起还是发起了AC没收到？

2、考虑到WA6636的AP在2457的版本还是存在target异常复位导致信号异常等已知问题，让现场将AP版本单独升级至2458P01，升级之后发现故障依旧。

3、分析之前的debug是没有association过程，可能原因有：

- Ø 终端没有发出，可能是终端压根没有收到AP的auth回复报文，或者终端收到了但是不发关联报文（后边一点不太可能，因为所有终端都不行）
- Ø 终端发出了关联报文请求，但是AP没有发给AC
- Ø AP发给AC了，但是被AC丢弃了（debug没有任何打印收到了报文，可能性也不大）

4、为了排除AC本身以及AC和AP之间的报文传输导致的原因，让现场做测试：配置本地转发、本地关联和认证，配置之后故障消失，终端正常关联。再次测试将关联点改为AC后，故障又立马复现。

5、通过display fib，发现有一条静态路由的下一跳地址对应的接口是AC的管理口，怀疑和这个有关系，咨询现场确实这条路由是新配置的，现场删除了这个静态路由故障就消失了。

（至于之前的AP没有问题可能是和路由是新增的有关，之前的终端上线走的原来的路由，路由选择不是无线侧来决定的，所以我们只是被动响应有线侧给我们返回的路由表）

解决方法

此问题虽表现为无线终端的关联问题，实际还是有线的路由问题，现场删除新增路由问题得到解决。

