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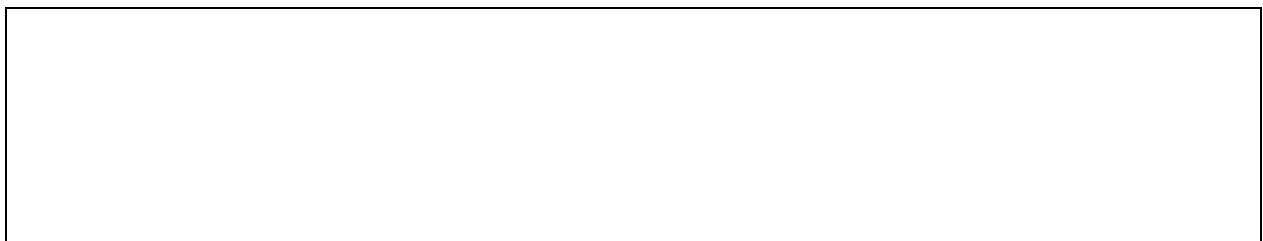
1 Introduction
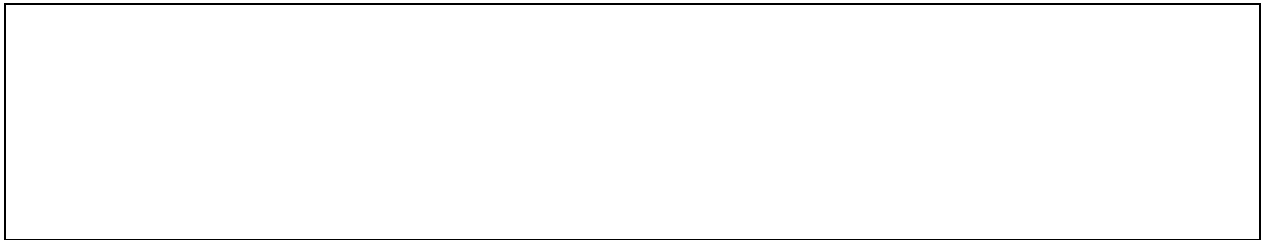
2 Solution 1: Device AP mode + Smart Phone App

3 Solution 2: Vendor Customize Simple Config

3.1 STA mode + Promiscuous mode

p

```
# ATWM=3[with_len]
#ATWM match ATWM, search cnt 1
[ATWM]: _AT_WLAN_PROMISC_

Switch to channel(1)
DA: c4 6e 1f 58 42 bc, SA: 00 e0 4c 87 00 00, len=6
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=56
DA: ff ff ff ff ff ff, SA: 00 1f 3b 81 48 89, len=47

Switch to channel(2)
DA: ff ff ff ff ff ff, SA: 00 1f 3b 81 48 89, len=154

Switch to channel(3)

Switch to channel(4)
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=56

Switch to channel(5)
DA: 34 bd c8 ac 14 20, SA: d0 22 be 22 00 a9, len=6
DA: 34 bd c8 ac 14 20, SA: d0 22 be 22 00 a9, len=6
```

```
# ATWM=3
#M match ATWM, search cnt 1
[ATWM]: _AT_WLAN_PROMISC_

Switch to channel(1)
DA: 01 00 5e 00 00 fb, SA: c4 6e 1f 58 42 bc, len=0
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=0
DA: 01 00 5e 00 00 fb, SA: c4 6e 1f 58 42 bc, len=0
DA: 01 00 5e 00 00 fb, SA: c4 6e 1f 58 42 bc, len=0
DA: ff ff ff ff ff ff, SA: ac cf 5c 61 eb 27, len=0
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=0

Switch to channel(2)

Switch to channel(3)
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=0
DA: 01 00 0c cc cc cd, SA: 24 e9 b3 23 f0 92, len=0

Switch to channel(4)
DA: 20 10 7a 7c bb 34, SA: 5c f3 fc 3e a9 b8, len=0
```
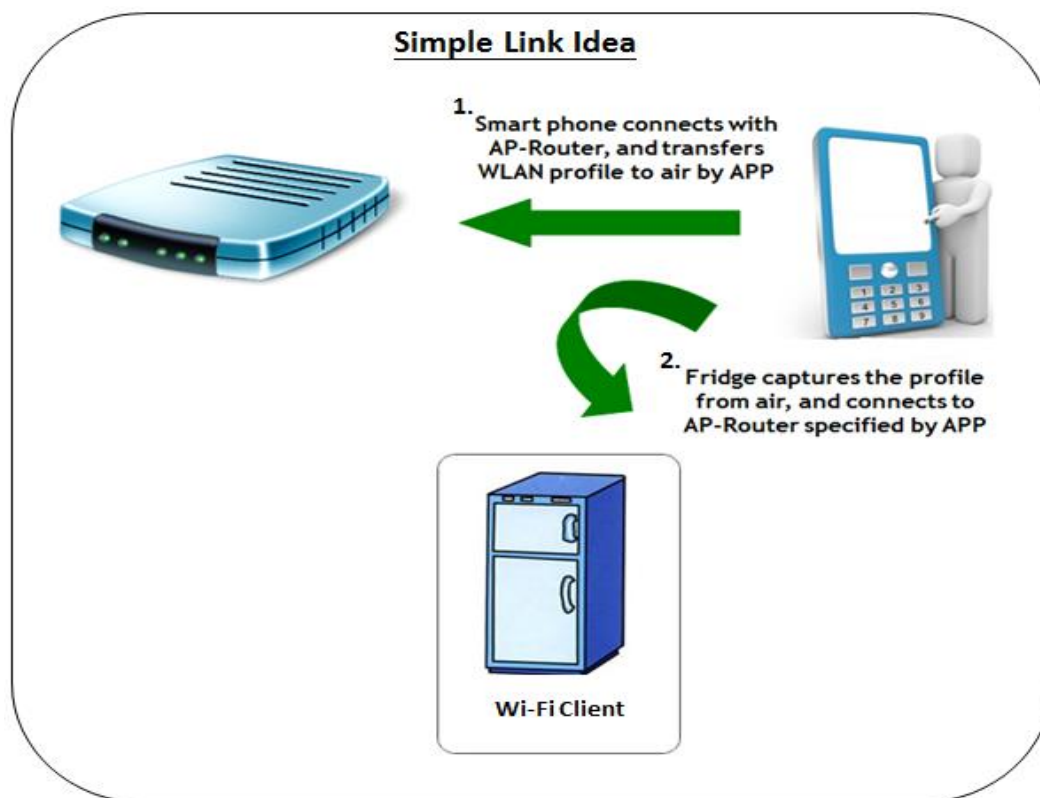
4 Solution 3: Realtek Simple Config

4.1 Simple Config Usage

Install Android APP

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Simple Config APK description

Config Progress

configures

device without PIN   *configures device with PIN code*

one

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Configuration without PIN code

entered via "ATWQ" command

-

-

Configuration with PIN Code

P

-

-

4.2 Simple Config Testing

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K K	

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K   K

P

P

```
# ATWQ=12345678
# Command ATWQ
 ATWQ match ATWQ, search cnt 1
[ATWQ]: _AT_WLAN_SIMPLE_CONFIG_

ioctl[SIOCGIWESSID] ssid = NULL, not connected

ioctl[SIOCGIWESSID] ssid = NULL, not connected
ioctl[SIOCGIWESSID] ssid = NULL, not connected
======= Connection Information =======

wifi->security_type = RTW_SECURITY_OPEN

wifi.password =

wifi.password_len = 0

wifi.ssid = rtk

wifi.ssid_len = 3

===== start to connect target AP =====
RTL8195A[Driver]: set ssid [rtk]
RTL8195A[Driver]: start auth
RTL8195A[Driver]: auth success, start assoc
RTL8195A[Driver]: association success(res=1)

IP address : 192.168.1.100

WIFI  wlan0 Setting:
==============================
        MODE => STATION
        SSID => rtk
    CHANNEL => 1
   SECURITY => OPEN
   PASSWORD =>

[MEM] After do cmd, available heap 52936

# ATWI=192.168.1.254
# Command ATWI
 ATWI match ATWI, search cnt 1
[ATWI]: _AT_WLAN_PING_TEST_
[ATWI]Target address: 192.168.1.254
[ATWI]Repeat Count: 5

[ping_test] PING 192.168.1.254 120(148) bytes of data

[ping_test] 128 bytes from 192.168.1.254: icmp_seq=1 time=2 ms
[ping_test] 128 bytes from 192.168.1.254: icmp_seq=2 time=2 ms
[ping_test] 128 bytes from 192.168.1.254: icmp_seq=3 time=2 ms
[ping_test] 128 bytes from 192.168.1.254: icmp_seq=4 time=3 ms
[ping_test] 128 bytes from 192.168.1.254: icmp_seq=5 time=2 ms
[MEM] After do cmd, available heap 52936
```
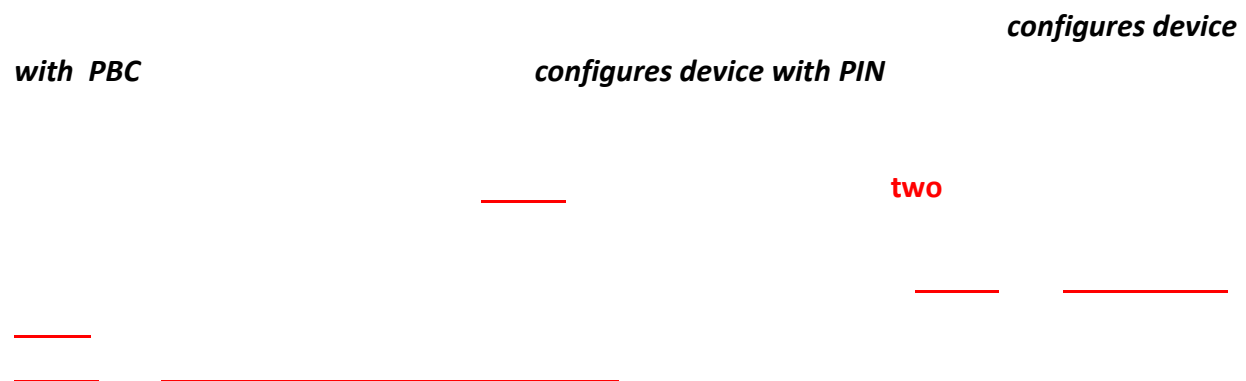
4.3 Simple Config Resources

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5 Solution 3: Realtek WPS Config

5.1 WPS Config Usage

Config Progress

configures device

with PBC   *configures device with PIN*

_____   **two**

_____   _____

____

_____   _____

device pin code   75798024

Configuration with PBC

Configuration with PIN

5.2 WPS Config Testing

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K

```
# ATWW=pin
# Command ATWW
 ATWW match ATWW, search cnt 2
[ATWW]: _AT_WLAN_WPS_

ioctl[SIOCGIWESSID] ssid = NULL, not connected
[pin]device pin code = 75798024

[pin]find out first triger wps AP = rtk

Start WPS PIN

[pin]target ssid = rtk
RTL8195A[Driver]: set ssid [rtk]
RTL8195A[Driver]: start auth
RTL8195A[Driver]: auth success, start assoc
RTL8195A[Driver]: association success(res=3)
RTL8195A[Driver]: WPS: Building Message M1
RTL8195A[Driver]: Receive WPS_M2
RTL8195A[Driver]: WPS: Building Message M3
RTL8195A[Driver]: Receive WPS_M4
RTL8195A[Driver]: WPS: Building Message M5
RTL8195A[Driver]: Receive WPS_M6
RTL8195A[Driver]: WPS: Building Message M7
RTL8195A[Driver]: Receive WPS_M8
RTL8195A[Driver]: WPS: Received M8
RTL8195A[Driver]: WPS: Building Message WSC_Done

[pin]get credential from queue

[pin]dev_cred.ssid = rtk

[pin]dev_cred.key =

[pin]dev_cred.auth_type = u

[pin]dev_cred.encr_type = u

wps_config_wifi_setting

wps_wifi.ssid = rtk

wps_wifi.ssid_len = 3

security_type = RTW_SECURITY_OPEN

wps_wifi.security_type = 0

wps_wifi.password =

wps_wifi.password_len = 0
=============== wifi_certificate_info ===============
```

```
=============== wifi_certificate_info ===============
wps_wifi.ssid = rtk

security_type = 0

wps_wifi.password =

ssid_len = 3

password_len = 0
RTL8195A[Driver]: set ssid [rtk]
RTL8195A[Driver]: start auth
RTL8195A[Driver]: auth success, start assoc
RTL8195A[Driver]: association success(res=3)

IP address : 192.168.1.100

WIFI  wlan0 Setting:
===============================
     MODE => STATION
     SSID => rtk
  CHANNEL => 2
 SECURITY => OPEN
 PASSWORD =>

[MEM] After do cmd, available heap 52912
```