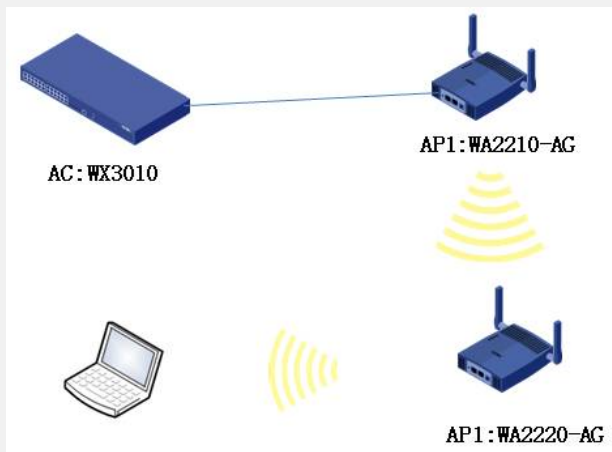


### H3C WX系列AC下两个FIT AP桥接配置

#### 一、 组网需求

无线控制器 (AC)、无线接入点 (FIT AP)、无线笔记本

#### 二、 组网图



本次配置举例中使用AC为WX3010, FIT AP为WA2210-AG/WA2220-AG, AC作为DHCP服务器, AP在AC上自动获取IP地址 (192.168.1.0), 并在AC上注册成功; 笔记终端通过5 GHz接入无线服务, 在AC上获取IP地址 (192.168.2.0), 并通过AC转发外网数据。

#### 三、 特性介绍

无线网桥是无线射频技术和传统的有线网桥技术相结合的产物, 无线网桥可以无缝地将相隔较远距离的局域网连接在一起, 创建统一的企业或小型城域网系统, 在最简单的网络构架中, 网桥的以太网端口连接到局域网中的某个接入层的交换机上, 信号发射端口则通过电缆和天线相连接; 通过这样的方式实现现有网络系统的扩展。其优势和特点就是省去了有线的架设难度, 可以简单的将有线网络或者无线网络孤岛连接到一个现有的网络中, 或者将几个有线或者无线网络的孤岛链接一个局域网。并且在两点之间提供数据传输, 具备基本功能:

? 链路的建立: 通过对等体之间交换消息来建立连接

? 链路的安全: 提供PSK + CCMP的无线安全连接

AC + FIT AP建立桥接组网中, 近端AP 2通过有线与AC通信, 远端AP 1是通过默认的桥接与AP 2建立桥接连接 (该桥接可以维持2分钟, 2分钟之后将断开连接), AP 1通过默认的桥接链路到AC注册, 并下载新的桥接配置, 然后使用新的桥接配置建立桥接关系。AP 1上通过无线接入的终端数据报文, 使用桥接链路将数据报文上传到AC, 由AC统一转发; 如果数据报文从AP的以太网口传过来, 那数据报文通过桥接链路传送到AP 2之后, AP 2二层转发数据。

#### 四、 主要配置步骤

##### 1. 开启端口安全

```
[AC]port-security enable
```

##### 2. 使能MKD服务绑定, 为Mesh Profile使能MKD服务

```
[AC]mkd-service enable mesh-profile 1
```

##### 3. 配置桥接接口

```
[AC]int wlan-mesh 1
```

```
[AC-WLAN-MESH1] port link-type trunk
```

```
[AC-WLAN-MESH1] port trunk permit vlan all
```

```
[AC-WLAN-MESH1]port-security port-mode psk
```

```
[AC-WLAN-MESH1] port-security tx-key-type 11key
```

```
[AC-WLAN-MESH1]port-security preshared-key pass-phrase mesh1234
```

#### 4. 配置桥接mesh-profile

```
[AC]wlan mesh-profile 1
[AC-wlan-mshp-1]mesh-id mesh1
[AC-wlan-mshp-1]bind WLAN-MESH 1
[AC-wlan-mshp-1]mesh-profile enable
```

#### 5. 配置无线服务

```
[AC]wlan ser 1 clear
[AC-wlan-st-1]wlan service-template 1 clear
[AC-wlan-st-1]ssid H3C-WLAN
[AC-wlan-st-1]bind WLAN-ESS 0
[AC-wlan-st-1]service-template enable
```

#### 6. 配置AP模板

```
[AC]wlan ap 1 model WA2220-AG id 1
[AC-wlan-ap-1]serial-id 000F-E2F2-0340
[AC-wlan-ap-1]radio 1
[AC-wlan-ap-1-radio-1]service-template 1
[AC-wlan-ap-1-radio-1] radio enable
[AC-wlan-ap-1-radio-1]quit
[AC-wlan-ap-1]radio 2
[AC-wlan-ap-1-radio-2]channel 11
[AC-wlan-ap-1-radio-2]mesh-profile 1
[AC-wlan-ap-1-radio-2]mesh peer-mac-address 0023-892f-42a0
[AC-wlan-ap-1-radio-2]radio enable
[AC]wlan ap 2 model WA2210-AG id 2
[AC-wlan-ap-2] serial-id 0023-892F-42A0
[AC-wlan-ap-2] portal-service enable
[AC-wlan-ap-2]radio 1
[AC-wlan-ap-2-radio-1]channel 11
[AC-wlan-ap-2-radio-1]mesh-profile 1
[AC-wlan-ap-2-radio-1]mesh peer-mac-address 0023-892f-42a0
[AC-wlan-ap-2-radio-1]radio enable
```

AP 1为远端AP， AP 2 为近端AP。

### 五、 配置信息：

#### 1. AC软件版本

```
[AC]_ ver
H3C Comware Platform Software
Comware Software, Version 5.20, Release 3111P12
Comware Platform Software Version COMWAREV500R002B71D024
H3C WX3010 Software Version V300R001B71D024
Copyright (c) 2004-2011 Hangzhou H3C Tech. Co., Ltd. All rights reserved.
Compiled Nov 29 2011 16:26:24, RELEASE SOFTWARE
H3C WX3010 uptime is 0 week, 0 day, 23 hours, 32 minutes
H3C WX3010 with 1 RMI XLS 208 750MHz Processor
256M bytes DDR2
56M bytes Flash Memory
```

Config Register points to FLASH

Hardware Version is Ver.A

CPLD Version is 003

Basic Bootrom Version is 1.16

Extend Bootrom Version is 1.16

[Slot 0]WX3010LSW Hardware Version is NA

[Slot 1]WX3010RPU Hardware Version is Ver.A

## 2. 配置信息

dis cu

#

version 5.20, Release 3111P12

#

sysname AC

#

domain default enable system

#

telnet server enable

#

port-security enable

#

portal trap server-down

#

oap management-ip 192.168.0.101 slot 0

#

vlan 1

#

vlan 2 to 100

#

domain system

access-limit disable

state active

idle-cut disable

self-service-url disable

#

dhcp server ip-pool 1

network 192.168.1.0 mask 255.255.255.0

gateway-list 192.168.1.1

#

dhcp server ip-pool 2

network 192.168.2.0 mask 255.255.255.0

gateway-list 192.168.2.1

#

user-group system

#

local-user admin

password simple admin

```
authorization-attribute level 3
access-limit 1024
service-type telnet
#
wlan mesh-profile 1
mesh-id mesh1
bind WLAN-MESH 1
mesh-profile enable
#
wlan rrm
dot11a mandatory-rate 6 12 24
dot11a supported-rate 9 18 36 48 54
dot11b mandatory-rate 1 2
dot11b supported-rate 5.5 11
dot11g mandatory-rate 1 2 5.5 11
dot11g supported-rate 6 9 12 18 24 36 48 54
#
wlan service-template 1 clear
ssid H3C-WLAN
bind WLAN-ESS 0
service-template enable
#
interface NULL0
#
interface Vlan-interface1
ip address 192.168.1.1 255.255.255.0
#
interface Vlan-interface2
ip address 192.168.2.1 255.255.255.0
#
interface GigabitEthernet1/0/1
port link-type trunk
port trunk permit vlan all
#
interface WLAN-ESS0
#
interface WLAN-ESS1
port access vlan 2
#
interface WLAN-MESH1
port link-type trunk
port trunk permit vlan all
port-security port-mode psk
port-security tx-key-type 11key
port-security preshared-key pass-phrase cipher 2MbQwnFxVluBQNiR6GZCe
W==
```

```
#
wlan ap 1 model WA2220-AG id 1
serial-id 000F-E2F2-0340

radio 1
service-template 1
radio enable

radio 2
channel 11
mesh-profile 1
mesh peer-mac-address 0023-892f-42a0
radio enable
```

```
#
wlan ap 2 model WA2210-AG id 2
serial-id 0023-892F-42A0
portal-service enable

radio 1
channel 11
mesh-profile 1
mesh peer-mac-address 000f-e2f2-0340
mesh peer-mac-address 000f-e2f2-0350
radio enable
```

```
#
dhcp enable

#
mkd-service enable mesh-profile 1
```

```
#
load xml-configuration

#
user-interface aux 0
user-interface vty 0 4
authentication-mode scheme
user privilege level 3

#
return
```

## 六、 结果验证:

### 1. 查看桥接链路

```
[WA2210-AG]dis wlan mesh-link all
```

#### Peer Link Information

```
-----
Nbr-Mac   BSSID      Interface  Link-state Uptime (hh:mm:ss)
-----000f-e2f2-0350 0023-892f-42a0 WLAN
-MESHLINK7 Active    5: 8:50
```

### 2. 查看桥接链路详细信息

```
[WA2210-AG-hidecmd]dis wlan mesh neighbors all
```

#### Mesh Neighbor Parameters

Neighbor MINDEX :20488  
BSS ID :0023-892f-42a0  
Peer Mac Addr :000f-e2f2-0350  
Mesh ID :mesh1  
Neighbor state :Connected peer  
Mean RSSI :84  
Zero Config State :No

-----  
Link FSM State :Established  
Peer's LinkId :0008  
Interface Index :00CC0000  
-----

[WA2210-AG-hidecmd]

### 3. 查看接入终端信息

[AC]dis wlan cl

Total Number of Clients : 1

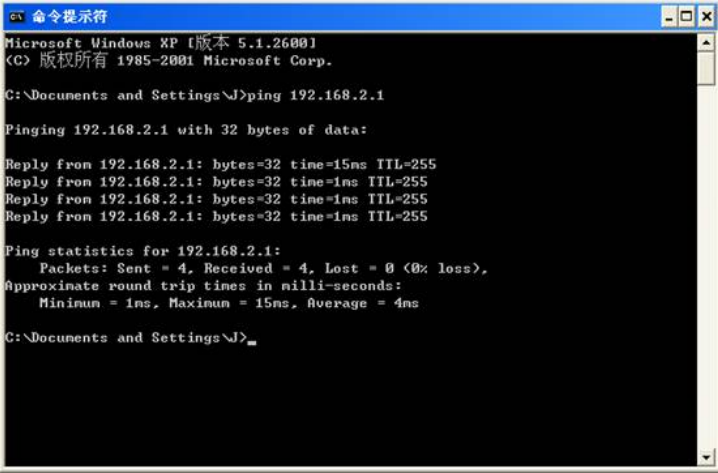
Total Number of Clients Connected : 1

#### Client Information

MAC Address	BSSID	AID	State	PS Mode	QoS Mode
001e-654c-6708	000f-e2f2-0340	1	Running	Active	WMM

[AC]

### 4. 终端ping AC



```
命令提示符
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\J>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Reply from 192.168.2.1: bytes=32 time=15ms TTL=255
Reply from 192.168.2.1: bytes=32 time=1ms TTL=255
Reply from 192.168.2.1: bytes=32 time=1ms TTL=255
Reply from 192.168.2.1: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.2.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 15ms, Average = 4ms

C:\Documents and Settings\J>_
```