

WX系列无线（二层/三层）漫游测试典型配置

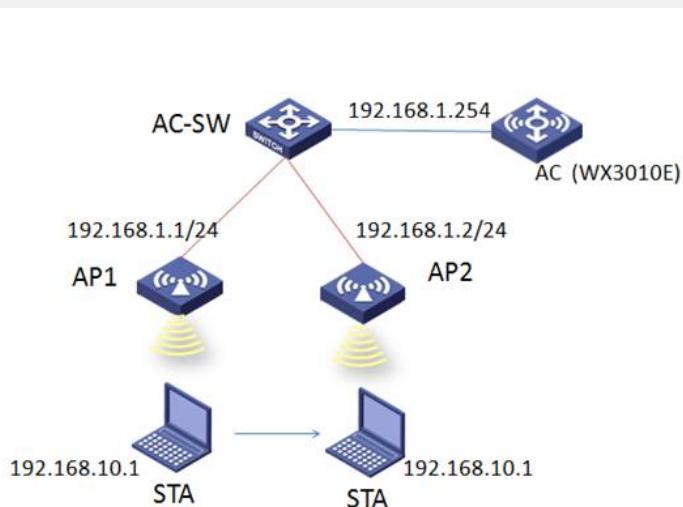
wlan接入 吴聘琪 2013-12-20 发表

wx系列无线漫游测试的配置

一、组网需求

AC、AP1和AP2在VLAN 1中，客户端先通过AP1接入无线网络，然后漫游到同一无线控制器相连的AP2上。

1. 组网图



二、配置步骤：

1.AC侧配置（二层漫游）

```
[WX3010E]dis cu
#
version 5.20, Release 3308P23
#
sysname WX3010E
#
domain default enable system
#
telnet server enable
#
port-security enable
#
oap management-ip 192.168.0.101 slot 0
#
wlan auto-ap enable
#
password-recovery enable
#
vlan 1
#
vlan 10
#
```

```
domain system
access-limit disable
state active
idle-cut disable
self-service-url disable
#
dhcp server ip-pool pool-ap
network 192.168.1.0 mask 255.255.255.0
#
dhcp server ip-pool pool-client
network 192.168.10.0 mask 255.255.255.0
gateway-list 192.168.10.254
dns-list 8.8.8.8
#
user-group system
group-attribute allow-guest
#
local-user admin
password cipher $c$3$xwQerkLRnNejWOuUGcohWGXGHyZUXS0g
authorization-attribute level 3
service-type telnet
#
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 romain
bind WLAN-ESS 1
service-template enable
#
interface Bridge-Aggregation1
port link-type trunk
port trunk permit vlan all
#
interface NULL0
#
interface Vlan-interface1
ip address 192.168.1.254 255.255.255.0
#
interface Vlan-interface10
ip address 192.168.10.254 255.255.255.0
#
```

```
interface GigabitEthernet1/0/1
port link-type trunk
port trunk permit vlan all
port link-aggregation group 1
#
interface GigabitEthernet1/0/2
port link-type trunk
port trunk permit vlan all
port link-aggregation group 1
#
interface WLAN-ESS1
port access vlan 10
#
wlan ap ap1_0003 model WA2612 id 3
serial-id 219801A0CJC124002846
radio 1
max-power 15
service-template 1
radio enable
#
wlan ap ap2_0037 model WA2612-AGN id 4
serial-id 210235A35WB09C000028
radio 1
max-power 15
service-template 1
radio enable
#
dhcp enable
#
arp-snooping enable
#
load xml-configuration
#
user-interface con 0
user-interface vty 0 4
authentication-mode scheme
user privilege level 3
#
Return
2.AC侧配置 (三层漫游)
[WX3010E]dis cu
#
version 5.20, Release 3308P23
#
sysname WX3010E
#
domain default enable system
```

```
#  
telnet server enable  
#  
port-security enable  
#  
oap management-ip 192.168.0.101 slot 0  
#  
wlan auto-ap enable  
#  
password-recovery enable  
#  
vlan 1  
#  
vlan 10 to 11  
#  
domain system  
access-limit disable  
state active  
idle-cut disable  
self-service-url disable  
#  
dhcp server ip-pool client  
network 192.168.11.0 mask 255.255.255.0  
gateway-list 192.168.11.254  
dns-list 8.8.8.8  
#  
dhcp server ip-pool pool-ap  
network 192.168.1.0 mask 255.255.255.0  
#  
dhcp server ip-pool pool-client  
network 192.168.10.0 mask 255.255.255.0  
gateway-list 192.168.10.254  
dns-list 8.8.8.8  
#  
user-group system  
group-attribute allow-guest  
#  
local-user admin  
password cipher $c$3$xwQerkLRnNejWOuUGcohWGXGHyZUXS0g  
authorization-attribute level 3  
service-type telnet  
#  
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 romain
bind WLAN-ESS 1
service-template enable
#
interface Bridge-Aggregation1
port link-type trunk
port trunk permit vlan all
#
interface NULL0
#
interface Vlan-interface1
ip address 192.168.1.254 255.255.255.0
#
interface Vlan-interface10
ip address 192.168.10.254 255.255.255.0
#
interface Vlan-interface11
ip address 192.168.11.254 255.255.255.0
#
interface GigabitEthernet1/0/1
port link-type trunk
port trunk permit vlan all
port link-aggregation group 1
#
interface GigabitEthernet1/0/2
port link-type trunk
port trunk permit vlan all
port link-aggregation group 1
#
interface WLAN-ESS1
port link-type hybrid
undo port hybrid vlan 1
port hybrid vlan 10 to 11 untagged
mac-vlan enable
#
wlan ap ap1_0003 model WA2612 id 3
serial-id 219801A0CJC124002846
radio 1
max-power 15
service-template 1 vlan-id 10
radio enable
#
wlan ap ap2_0037 model WA2612-AGN id 4
```

```
serial-id 210235A35WB09C000028
radio 1
max-power 15
service-template 1 vlan-id 11
radio enable
#
dhcp enable
#
arp-snooping enable
#
load xml-configuration
#
user-interface con 0
user-interface vty 0 4
authentication-mode scheme
user privilege level 3
#
Return
```

3.SW侧配置：略

三、配置关键点：

1.AC侧主要配置（二层漫游）

1.配置服务模板

```
#创建一个clear类型的无线服务模板1
[WX3010E]wlan service-template 1 clear
#设置当前服务模板的SSID为romain
[WX3010E]ssid romain
#在服务模板1下绑定无线接口1
[WX3010E]bind WLAN-ESS 1
#使能服务模板
[WX3010E]service-template enable
```

2.配置无线接口

```
[WX3010E]interface WLAN-ESS1
[WX3010E]port access vlan 10
3.配置AP管理模板
#在AP视图下的射频接口上绑定服务模板1
wlan ap ap1_0003 model WA2612 id 3
serial-id 219801A0CJC124002846
radio 1
max-power 15
service-template 1
radio enable
#在AP视图下的射频接口上绑定服务模板1
wlan ap ap2_0037 model WA2612-AGN id 4
serial-id 210235A35WB09C000028
radio 1
max-power 15
```

```

service-template 1
radio enable

2.AC侧主要配置 (三层漫游)

1. 增加vlan信息，添加STA接入的VLAN 11和VLAN 12
[WX3010E]vlan 10 to 11

2. 配置服务模板
#创建一个clear类型的无线服务模板1
[WX3010E]wlan service-template 1 clear
#设置当前服务模板的SSID为romain
[WX3010E]ssid romain
#在服务模板1下绑定无线接口1
[WX3010E]bind WLAN-ESS 1
#使能服务模板
[WX3010E]service-template enable

3.配置无线接口为hybrid混合类型，三层漫游必须配置mac-vlan enable
[WX3010E]interface WLAN-ESS1
[WX3010E]port link-type hybrid
[WX3010E]undo port hybrid vlan 1
[WX3010E]port hybrid vlan 10 to 11 untagged
[WX3010E]mac-vlan enable

4.配置两个AP模板，在射频接口下绑定同一服务模板和不同的vlan-id
#配置AP管理模板，射频接口下绑定服务模板1，vlan-id为 10
wlan ap ap1_0003 model WA2612 id 3
serial-id 219801A0CJC124002846
radio 1
max-power 15
service-template 1 vlan-id 10
radio enable

#配置AP管理模板，射频接口下绑定服务模板1，vlan-id为11
wlan ap ap2_0037 model WA2612-AGN id 4
serial-id 210235A35WB09C000028
radio 1
max-power 15
service-template 1 vlan-id 11
radio enable

```

五、验证结果：

1.二层漫游：

1.查看客户端首次接入无线服务的信息

```
[wx3010E]dis wlan client verbose
Total Number of Clients : 1
client Information
-----+-----+-----+-----+-----+-----+-----+-----+
MAC Address : 54e4-3a57-095a
User Name : -NA-
AP ID : 1
-----+-----+-----+-----+-----+-----+-----+-----+
AP Name : ap2_0037
Radio ID : 1
SSID : Romain
BSSID : 0023-89c2-2810
Port : WLAN-DBSS1:0
VLAN : 10
State : Running
Power Save Mode : Sleep
Wireless Mode : 11gn
Channel Band-width : 20MHz
SM Power Save Enable : Enabled
SM Power Save Mode : Static
Short GI for 20MHz : Not Supported
Short GI for 40MHz : Not Supported
Support MCS Set : 0,1,2,3,4,5,6,7
BLOCK ACK-TID 0 : BOTH
```

2.将AP2_0037踢下线，再次查看客户端信息，关联到AP1_0003后IP地址不变

```
<WX3010E>dis wlan client verbose
Total Number of Clients : 1
client Information
-----
```

MAC Address	:	54e4-3a57-095a
User Name	:	-NA-
ATD	:	1
AP Name	:	ap1_0003
Radio Id	:	1
SSID	:	main
BSSID	:	5866-ba67-6080
Port	:	WLAN-DBSS1:1
VLAN	:	10
State	:	Running
Power Save Mode	:	Sleep
Wireless Mode	:	11gn
Channel Band-width	:	20MHz
SM Power Save Enable	:	Enabled
SM Power Save Mode	:	Static
Short GI for 20MHz	:	Supported
short GI for 40MHz	:	Not Supported
Support MCS Set	:	0,1,2,3,4,5,6,7

```
[WX3010E]dis wlan client
Total Number of Clients : 1
client Information
-----
```

SSID: main			
MAC Address	User Name	APID/RID IP Address	VLAN
54e4-3a57-095a	-NA-	3 /1 192.168.10.1	10

2.三层漫游:

- 查看客户端首次接入无线服务的信息

```
<WX3010E>dis wlan client verbose
Total Number of Clients : 1
client Information
-----
```

MAC Address	:	54e4-3a57-095a
User Name	:	-NA-
ATD	:	1
AP Name	:	ap1_0003
Radio Id	:	1
SSID	:	main
BSSID	:	5866-ba67-6080
Port	:	WLAN-DBSS1:11
VLAN	:	10
State	:	Running
Power Save Mode	:	Sleep
Wireless Mode	:	11gn
Channel Band-width	:	20MHz
SM Power Save Enable	:	Enabled
SM Power Save Mode	:	Static
Short GI for 20MHz	:	Supported
short GI for 40MHz	:	Not Supported
Support MCS Set	:	0,1,2,3,4,5,6,7

- 将AP1_0003踢下线，再次查看客户端信息，关联到AP2_0037后且IP地址不变

```
<WX3010E>dis wlan client verbose
Total Number of Clients : 1
client Information
-----
```

MAC Address	:	54e4-3a57-095a
User Name	:	-NA-
ATD	:	1
AP Name	:	ap2_0037
Radio Id	:	1
SSID	:	main
BSSID	:	0023-89c2-2810
Port	:	WLAN-DBSS1:10
VLAN	:	10
State	:	Running
Power Save Mode	:	Sleep
Wireless Mode	:	11gn
Channel Band-width	:	20MHz
SM Power Save Enable	:	Enabled
SM Power Save Mode	:	Static
Short GI for 20MHz	:	Not Supported
short GI for 40MHz	:	Not Supported
Support MCS Set	:	0,1,2,3,4,5,6,7

```
<WX3010E>dis wlan client
Total Number of Clients : 1
client Information
-----
```

SSID: main			
MAC Address	User Name	APID/RID IP Address	VLAN
54e4-3a57-095a	-NA-	4 /1 192.168.10.1	10