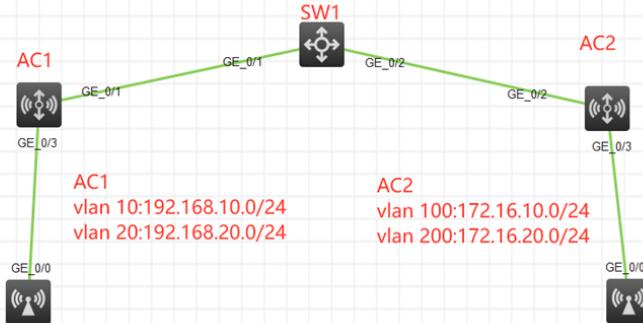


# 跨AC漫游典型组网配置案例

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## 组网及说明



### 组网说明:

本案例采用H3C HCL模拟器来的AC+AP产品来实现跨AC漫游的需求。

### 特别说明:

- 1、在AC1的区域中，vlan10用于AP管理，vlan20用于无线业务接入。
- 2、在AC2的区域中，vlan100用于AP管理，vlan200用于无线业务接入。
- 3、提前收集AP的序列号，可以在设备表面或命令行dis device manuninfo查看。
- 4、本案例采用集中转发。

### 配置思路:

- 1、按照网络拓扑图配置VLAN和IP地址。
- 2、配置AC+AP注册上线。
- 3、分别配置AC1与AC2的漫游，实现跨AC的漫游。

## 配置步骤

```
(1) SW1
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname SW1
[SW1]vlan 10
[SW1-vlan10]quit
[SW1]vlan 20
[SW1-vlan20]quit
[SW1]vlan 100
[SW1-vlan100]quit
[SW1]vlan 200
[SW1-vlan200]quit
[SW1]int vlan 10
[SW1-Vlan-interface10]ip address 192.168.10.1 24
[SW1-Vlan-interface10]quit
[SW1]int vlan 20
[SW1-Vlan-interface20]ip address 192.168.20.1 24
[SW1-Vlan-interface20]quit
[SW1]int vlan 100
[SW1-Vlan-interface100]ip address 172.16.10.1 24
[SW1-Vlan-interface100]quit
[SW1]int vlan 200
[SW1-Vlan-interface200]ip address 172.16.20.1 24
[SW1-Vlan-interface200]quit
[SW1]dhcp enable
[SW1]dhcp server ip-pool vlan10
[SW1-dhcp-pool-vlan10]network 192.168.10.0 mask 255.255.255.0
```

```
[SW1-dhcp-pool-vlan10]gateway-list 192.168.10.1
[SW1-dhcp-pool-vlan10]option 43 ip-address 192.168.10.100
[SW1-dhcp-pool-vlan10]quit
[SW1]dhcp server ip-pool vlan20
[SW1-dhcp-pool-vlan20]network 192.168.20.0 mask 255.255.255.0
[SW1-dhcp-pool-vlan20]gateway-list 192.168.20.1
[SW1-dhcp-pool-vlan20]dns-list 114.114.114.114
[SW1-dhcp-pool-vlan20]quit
[SW1]dhcp server ip-pool vlan100
[SW1-dhcp-pool-vlan100]network 172.16.10.0 mask 255.255.255.0
[SW1-dhcp-pool-vlan100]gateway-list 172.16.10.1
[SW1-dhcp-pool-vlan100]option 43 ip-address 172.16.10.100
[SW1-dhcp-pool-vlan100]quit
[SW1]dhcp server ip-pool vlan200
[SW1-dhcp-pool-vlan200]network 172.16.20.0 mask 255.255.255.0
[SW1-dhcp-pool-vlan200]gateway-list 172.16.20.1
[SW1-dhcp-pool-vlan200]dns-list 114.114.114.114
[SW1-dhcp-pool-vlan200]quit
[SW1]dhcp server forbidden-ip 192.168.10.100
[SW1]dhcp server forbidden-ip 172.16.10.100
[SW1]int range gi 1/0/1 to gi 1/0/2
[SW1-if-range]po li tr
[SW1-if-range]undo po tr pe vlan 1
[SW1-if-range]po tr pe vlan 10 20 100 200
[SW1-if-range]quit
[SW1]save force
Validating file. Please wait...
Saved the current configuration to mainboard device successfully.
[SW1]
```

(2)

```
AC1:
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname AC1
[AC1]vlan 10
[AC1-vlan10]quit
[AC1]vlan 20
[AC1-vlan20]quit
[AC1]vlan 100
[AC1-vlan100]quit
[AC1]vlan 200
[AC1-vlan200]quit
[AC1]dhcp enable
[AC1]int vlan 10
[AC1-Vlan-interface10]ip address 192.168.10.100 24
[AC1-Vlan-interface10]quit
[AC1]ip route-static 0.0.0.0 0.0.0.0 192.168.10.1
[AC1]int gi 1/0/3
[AC1-GigabitEthernet1/0/3]po li acc
[AC1-GigabitEthernet1/0/3]po acc vlan 10
[AC1-GigabitEthernet1/0/3]quit
[AC1]int gi 1/0/1
[AC1-GigabitEthernet1/0/1]po li tr
[AC1-GigabitEthernet1/0/1]undo po tr pe vlan 1
[AC1-GigabitEthernet1/0/1]po tr pe vlan 10 20 100 200
[AC1-GigabitEthernet1/0/1]quit

[AC1]wlan auto-ap enable
[AC1]wlan auto-persistent enable
[AC1]wlan global-configuration
[AC1-wlan-global-configuration]firmware-upgrade disable
[AC1-wlan-global-configuration]quit
```

```
[AC1]wlan service-template weijianing
[AC1-wlan-st-weijianing]ssid weijianing
[AC1-wlan-st-weijianing]vlan 20
[AC1-wlan-st-weijianing]client forwarding-location ac
[AC1-wlan-st-weijianing]service-template enable
[AC1-wlan-st-weijianing]quit

[AC1]wlan service-template ninglihua
[AC1-wlan-st-ninglihua]ssid ninglihua
[AC1-wlan-st-ninglihua]vlan 200
[AC1-wlan-st-ninglihua]client forwarding-location ac
[AC1-wlan-st-ninglihua]service-template enable
[AC1-wlan-st-ninglihua]quit

[AC1]wlan ap AP1 model WA6320-HCL
[AC1-wlan-ap-AP1]serial-id H3C_0e-98-7e-dc-03-00
[AC1-wlan-ap-AP1]vlan 10
[AC1-wlan-ap-AP1-vlan10]quit
[AC1-wlan-ap-AP1]vlan 20
[AC1-wlan-ap-AP1-vlan20]quit
[AC1-wlan-ap-AP1]vlan 100
[AC1-wlan-ap-AP1-vlan100]quit
[AC1-wlan-ap-AP1]vlan 200
[AC1-wlan-ap-AP1-vlan200]quit
[AC1-wlan-ap-AP1]radio 1
[AC1-wlan-ap-AP1-radio-1]radio enable
[AC1-wlan-ap-AP1-radio-1]service-template weijianing vlan 20
[AC1-wlan-ap-AP1-radio-1]service-template ninglihua vlan 200
[AC1-wlan-ap-AP1-radio-1]quit
[AC1-wlan-ap-AP1]radio 2
[AC1-wlan-ap-AP1-radio-2]radio enable
[AC1-wlan-ap-AP1-radio-2]service-template weijianing vlan 20
[AC1-wlan-ap-AP1-radio-2]service-template ninglihua vlan 200
[AC1-wlan-ap-AP1-radio-2]quit
[AC1-wlan-ap-AP1]quit

[AC1]wlan mobility group 1
[AC1-wlan-mg-1]source ip 192.168.10.100
[AC1-wlan-mg-1]member ip 172.16.10.100
[AC1-wlan-mg-1]group enable
[AC1-wlan-mg-1]quit

(3) AC2:
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname AC2
[AC2]vlan 10
[AC2-vlan10]quit
[AC2]vlan 20
[AC2-vlan20]quit
[AC2]vlan 100
[AC2-vlan100]quit
[AC2]vlan 200
[AC2-vlan200]quit
[AC2]dhcp enable
[AC2]int vlan 100
[AC2-Vlan-interface100]ip address 172.16.10.100 24
[AC2-Vlan-interface100]quit
[AC2]ip route-static 0.0.0.0 0.0.0.0 172.16.10.1
[AC2]int gi 1/0/2
[AC2-GigabitEthernet1/0/2]po li tr
[AC2-GigabitEthernet1/0/2]undo po tr pe vlan 1
[AC2-GigabitEthernet1/0/2]po tr pe vlan 10 20 100 200
[AC2-GigabitEthernet1/0/2]quit
```

```
[AC2]int gi 1/0/3
[AC2-GigabitEthernet1/0/3]po li acc
[AC2-GigabitEthernet1/0/3]po acc vlan 100
[AC2-GigabitEthernet1/0/3]quit

[AC2]wlan auto-ap enable
[AC2]wlan auto-persistent enable
[AC2]wlan global-configuration
[AC2-wlan-global-configuration]firmware-upgrade disable
[AC2-wlan-global-configuration]quit

[AC2]wlan service-template weijianing
[AC2-wlan-st-weijianing]ssid weijianing
[AC2-wlan-st-weijianing]vlan 20
[AC2-wlan-st-weijianing]client forwarding-location ac
[AC2-wlan-st-weijianing]service-template enable
[AC2-wlan-st-weijianing]quit

[AC2]wlan service-template ninglihua
[AC2-wlan-st-ninglihua]ssid ninglihua
[AC2-wlan-st-ninglihua]vlan 200
[AC2-wlan-st-ninglihua]client forwarding-location ac
[AC2-wlan-st-ninglihua]service-template enable
[AC2-wlan-st-ninglihua]quit

[AC2]wlan ap AP2 model WA6320-HCL
[AC2-wlan-ap-AP2]serial-id H3C_0e-98-85-b6-04-00
[AC2-wlan-ap-AP2]vlan 10
[AC2-wlan-ap-AP2-vlan10]quit
[AC2-wlan-ap-AP2]vlan 20
[AC2-wlan-ap-AP2-vlan20]quit
[AC2-wlan-ap-AP2]vlan 100
[AC2-wlan-ap-AP2-vlan100]quit
[AC2-wlan-ap-AP2]vlan 200
[AC2-wlan-ap-AP2-vlan200]quit
[AC2-wlan-ap-AP2]radio 1
[AC2-wlan-ap-AP2-radio-1]radio enable
[AC2-wlan-ap-AP2-radio-1]service-template weijianing vlan 20
[AC2-wlan-ap-AP2-radio-1]service-template ninglihua vlan 200
[AC2-wlan-ap-AP2-radio-1]quit
[AC2-wlan-ap-AP2]radio 2
[AC2-wlan-ap-AP2-radio-2]radio enable
[AC2-wlan-ap-AP2-radio-2]service-template weijianing vlan 20
[AC2-wlan-ap-AP2-radio-2]service-template ninglihua vlan 200
[AC2-wlan-ap-AP2-radio-2]quit
[AC2-wlan-ap-AP2]quit

[AC2]wlan mobility group 1
[AC2-wlan-mg-1]source ip 172.16.10.100
[AC2-wlan-mg-1]member ip 192.168.10.100
[AC2-wlan-mg-1]group enable
[AC2-wlan-mg-1]quit
```

(4) 分别查看AC1和AC2下属的AP均已上线

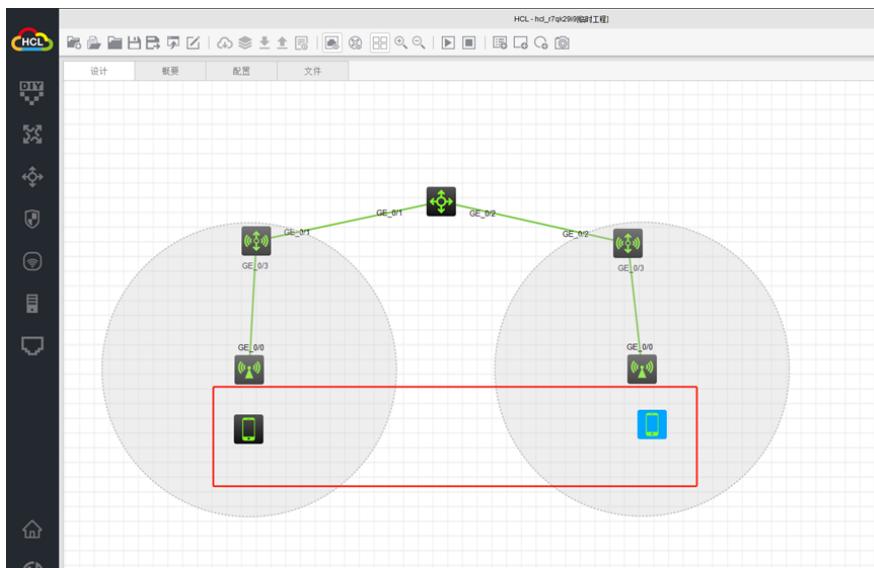
```
[AC1]dis wlan ap all
Total number of APs: 1
Total number of connected APs: 1
Total number of connected manual APs: 1
Total number of connected auto APs: 0
Total number of connected common APs: 1
Total number of connected WTUS: 0
Total number of inside APs: 0
Maximum supported APs: 60000
Remaining APs: 59999
Total AP licenses: 60000
Local AP licenses: 60000
Server AP licenses: 0
Remaining local AP licenses: 59999
Sync AP Licenses: 0

          AP information
State : I = Idle,      J = Join,      JA = JoinAck,     IL = ImageLoad
        C = Config,    DC = DataCheck,   R = Run,       M = Master,   B = Backup
AP name           APID  State Model      Serial ID
AP1              1      R/M   WA6320-HCL  H3C_OE-98-7E-DC-03-00
[AC1]
```

```
[AC2]dis wlan ap all
Total number of APs: 1
Total number of connected APs: 1
Total number of connected manual APs: 1
Total number of connected auto APs: 0
Total number of connected common APs: 1
Total number of connected WTUS: 0
Total number of inside APs: 0
Maximum supported APs: 60000
Remaining APs: 59999
Total AP licenses: 60000
Local AP licenses: 60000
Server AP licenses: 0
Remaining local AP licenses: 59999
Sync AP Licenses: 0

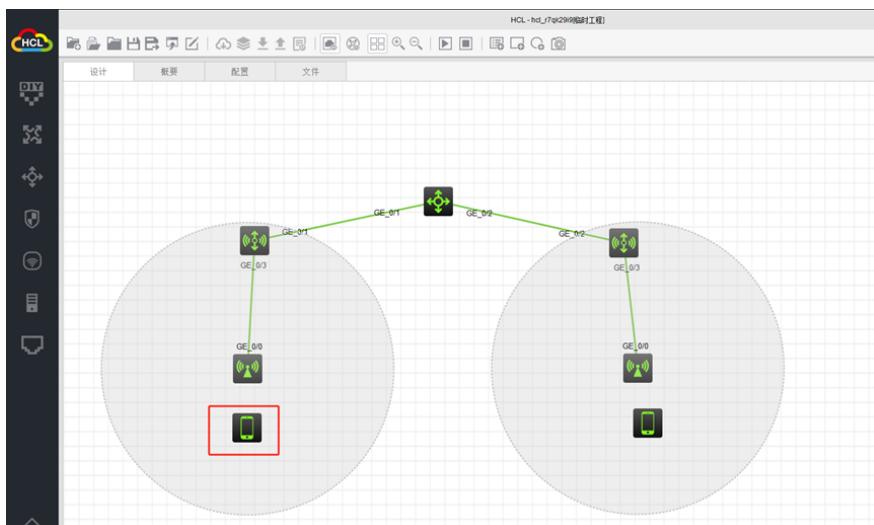
          AP information
State : I = Idle,      J = Join,      JA = JoinAck,     IL = ImageLoad
        C = Config,    DC = DataCheck,   R = Run,       M = Master,   B = Backup
AP name           APID  State Model      Serial ID
AP2              1      R/M   WA6320-HCL  H3C_OE-98-85-B6-04-00
[AC2]
```

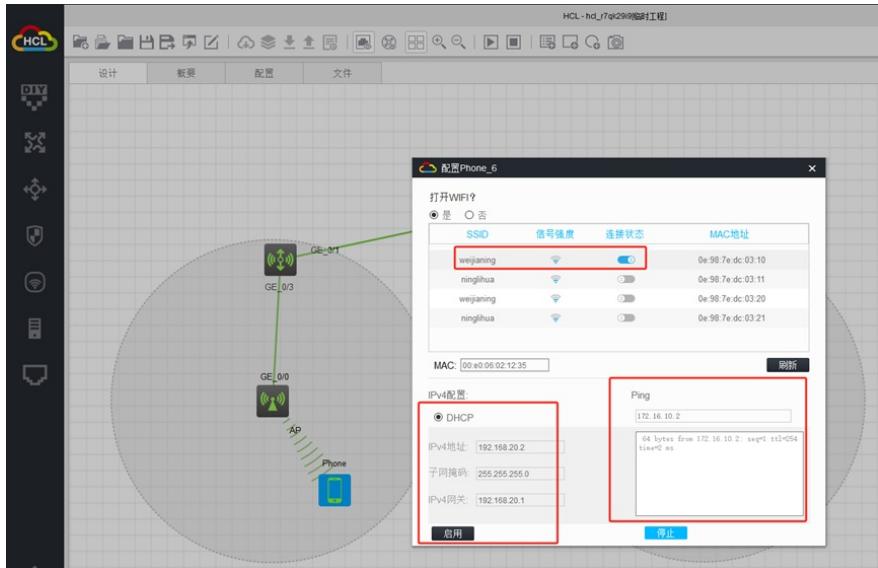
(5) 添加两个手机进来，分别放在AC1和AC2的区域，并启动



选中第一台手机，右键“配置”

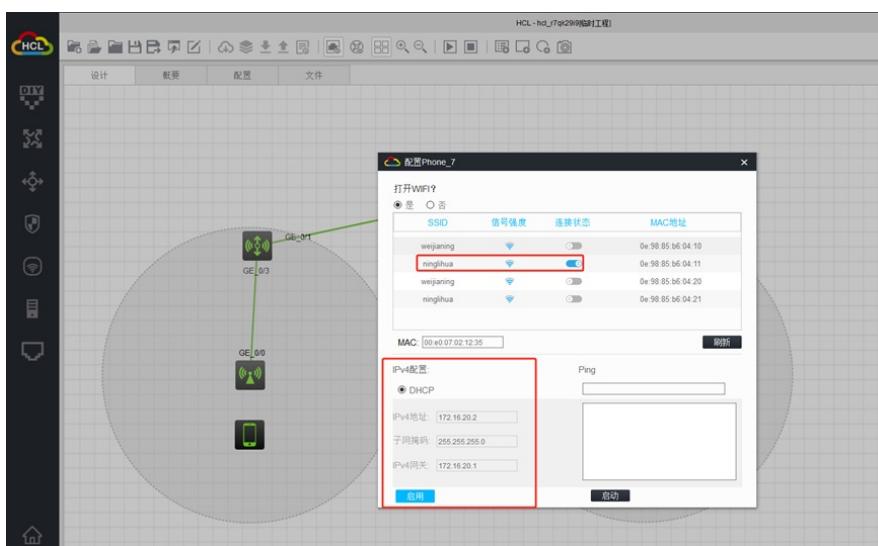
打开WIFI，并连接SSID为weijianing的信号，可以拿到IP地址，并可以跨网段PING通。



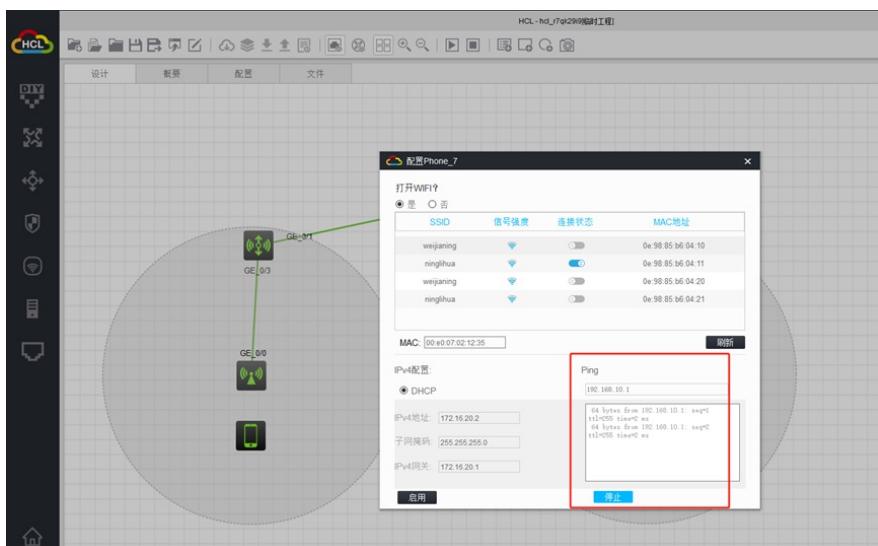


选中第二台手机，右键“配置”

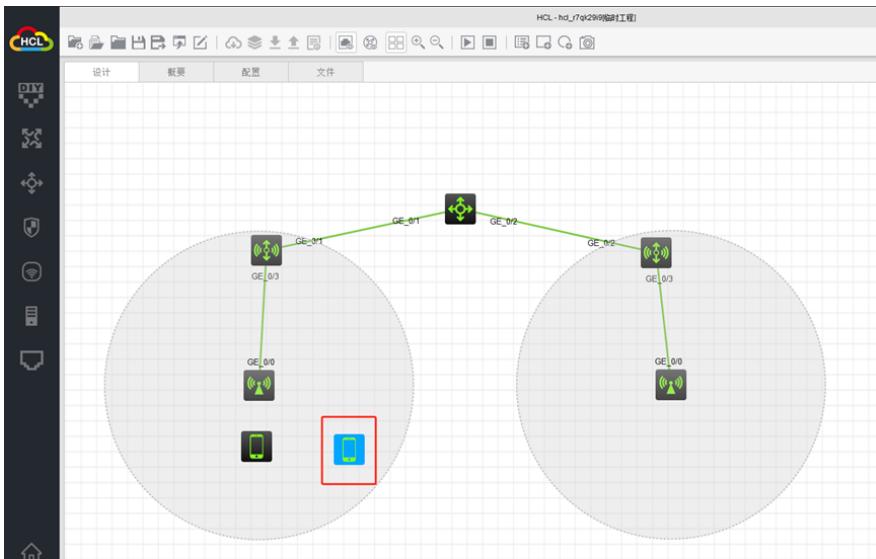
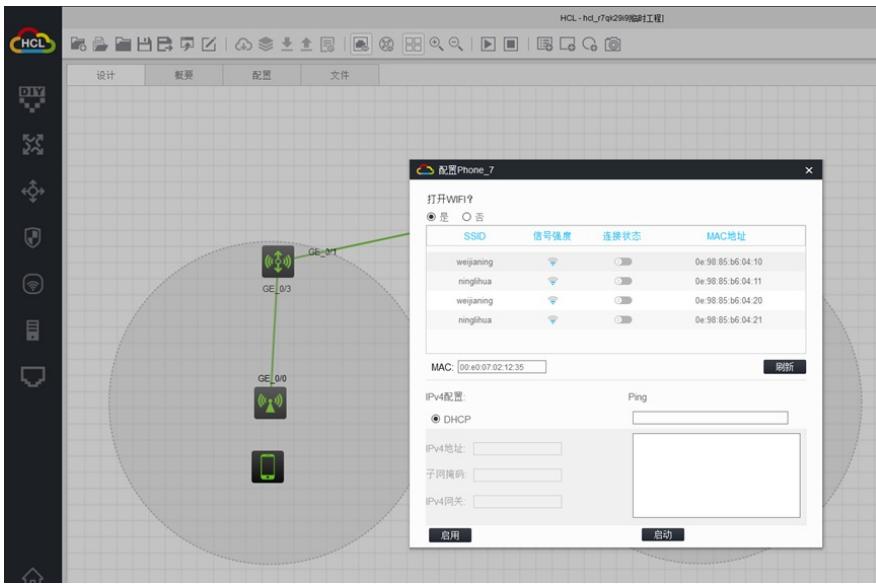
打开WIFI，并连接SSID为ninglihua的信号，可以拿到IP地址



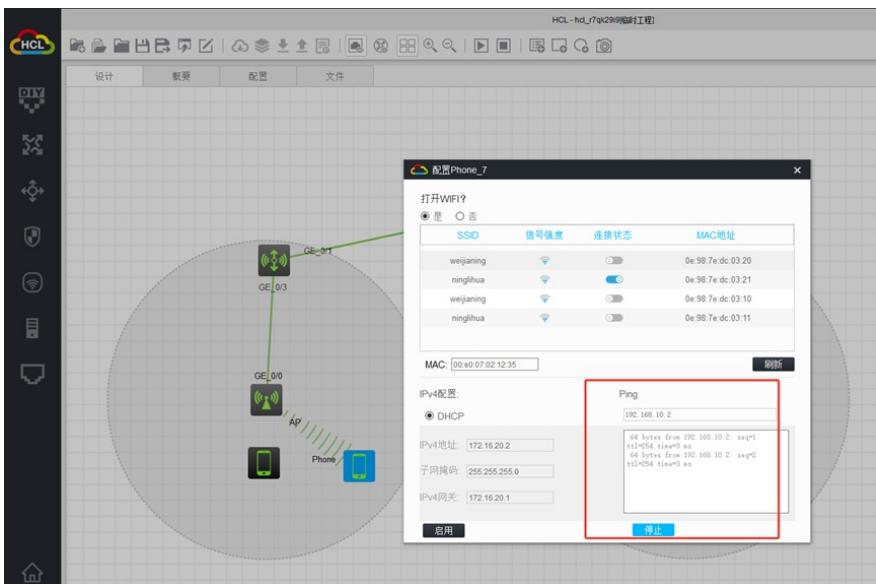
第二台手机能跨网段PING通。



把第二台手机关闭WIFI，并移动到AC1所在的区域，继续连接SSID为ninglihua的信号。



第二台手机可以在AC1区域内连接SSID为ninglihua的无线信号，而且可以获取到IP地址和跨网段PING通。



至此，第二台手机可以跨AC实现漫游。

分别查看AC1和AC2对接漫游的状态。

```
<AC1>dis wlan mobility group
Mobility group name: 1
Tunnel type: IPv4
Source IPv4: 192.168.10.100
Source IPv6: Not configured
Authentication method: Not configured
Auto discovery: Disabled
Mobility group status: Enabled
Member entries: 1
IP address State Online time
172.16.10.100 UP 00hr 46min 41sec
<AC1>
```

```
[AC2]dis wlan mobility group
Mobility group name: 1
Tunnel type: IPv4
Source IPv4: 172.16.10.100
Source IPv6: Not configured
Authentication method: Not configured
Auto discovery: Disabled
Mobility group status: Enabled
Member entries: 1
IP address State Online time
192.168.10.100 UP 00hr 46min 51sec
[AC2]
```

根据第二台手机测试漫游的情况和AC之间对接的漫游的状态，该网络可以实现跨AC漫游。

至此，跨AC漫游的典型组网配置案例已完成！