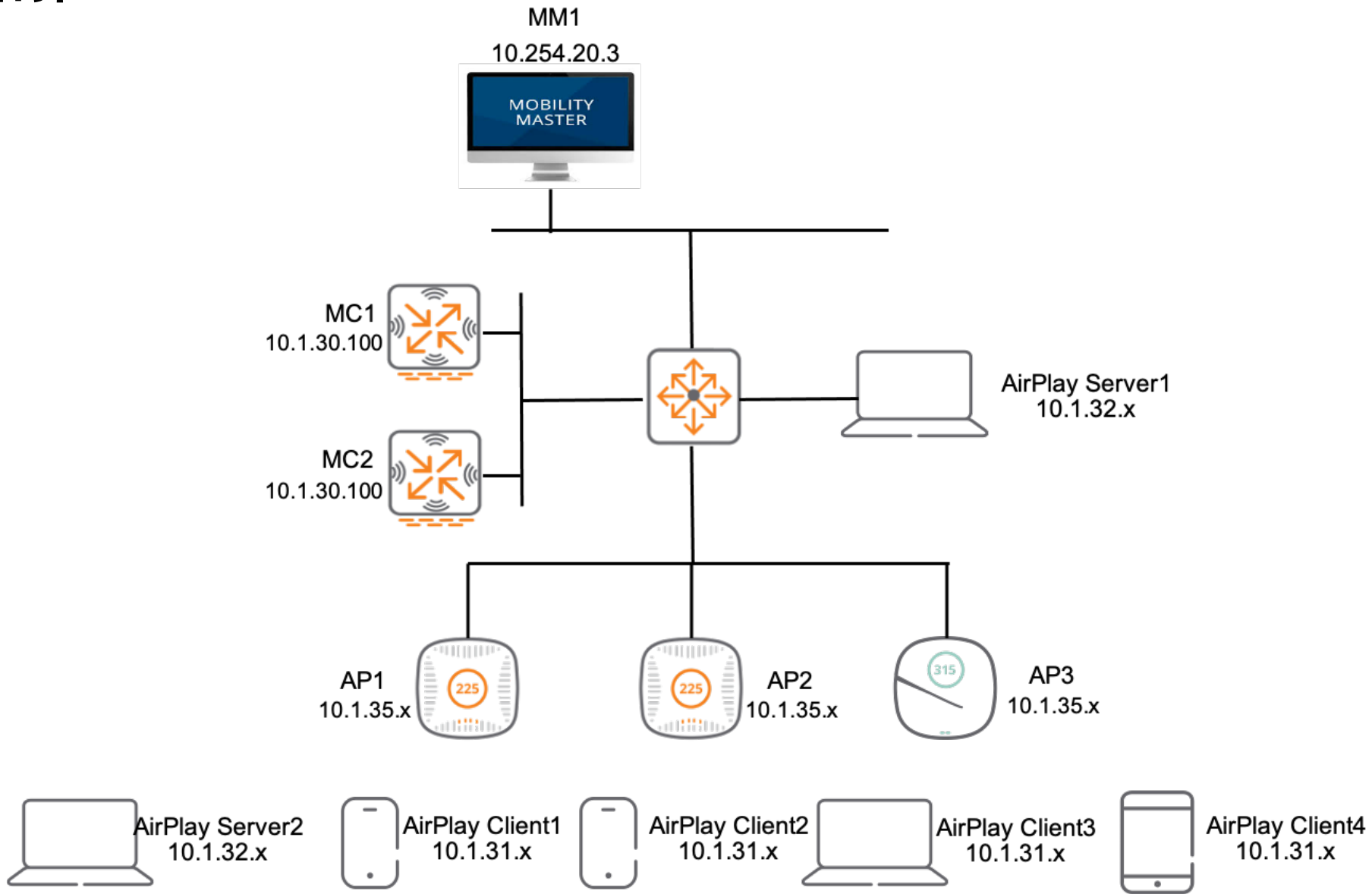# 基于location的airgroup

CCE
2021-11-11

测试拓扑

测试拓扑

Centralized mode AirGroup配置

配置步骤

- 开启openflow
  - mm开启openflow
  - md开启openflow
  - 确认vap、role是否开启了openflow
- 配置airgroup profile
- 开启airgroup centralized mode

mm开启openflow

(MM1) [mm] (config) #**openflow-controller**

(MM1) [mm] (Openflow-controller) #**openflow-controller-enable**

(MM1) [**mynode**] (config) #**show openflow-controller**   **->注意是检查mynode下的openflow配置**

```
Openflow-controller
-------------------
Parameter                  Value
---------                  -----
ofc state                  Enabled
ofc host-ageout-time       3600 sec
ofc mode                   passive
ofc certificate-file       none
ofc key-file               none
ofc ca-certificate-file    none
ofc tls                    Disabled
ofc port                   6633
ofc topology-discovery     Disabled
ofc auxiliary-channel-port 6633
```

md开启openflow

(MM1) [**lab**] (config) #**openflow-profile**　　　　**->注意这里的lab是控制器集群所在的node**

(MM1) [lab] (Openflow-profile) #**openflow-enable**

(**MC1**) #**show openflow-profile**　　　**->注意是检查控制器上的openflow配置**

```
Openflow-profile "default"
-------------------------

Parameter                      Value
---------                      -----
controller-ip                  masterip:6633
State                          Enabled
Openflow mode                  passive
Openflow version               v1.3
Auxiliary State                Disabled
Auxiliary Channel Port         6633
VLAN ID or range(s) of VLAN IDs 1-4094
custom-cert-file               none
custom-key-file                none
ca-certificate-file            none
openflow tls                   Disabled
custom cert                    Disabled
```

确认vap、role是否开启了openflow

注意是在控制器上检查**airgroup server、airgroup users**用到的所有**vap**和**role**

(**MC1**) #show wlan virtual-ap airgroup-test1 | include Openflow

Openflow Enable   **Enabled**

(**MC1**) #show rights authenticated | include Openflow
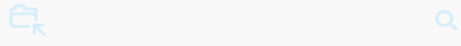
 Openflow**: Enabled**

配置airgroup profile

配置airgroup profile

AirGroup Profile Profile: New Profile

Profile name: centralized_airgroup

AirGroup Disallow vlan:

VLAN_ID_OR_NAME	AIRGROUP_SERVI...	USERS_SERVERS

➕

AirGroup Disallow Role:

ROLE_NAME	AIRGROUP_SERVI...	USERS_SERVERS

➕

AirGroup Autoassociate:

AIRGROUP_SERVI...	AUTO_ASSOCIATE	

➕

AirGroup server enforce registration: ☐

Cancel   Submit

配置airgroup profile

All Profiles

- ⊕ 🗂 AP
- ⊖ 🗂 AirGroup
  - ⊕ 🗂 AirGroup ClearPass
  - ⊕ 🗂 AirGroup Domain
  - ⊕ 🗂 AirGroup IPv6
  - ⊖ 🗂 AirGroup Profile
    - ⊕ 🗂 airgroup_profile
    - ⊖ 🗂 centralized_airgroup
      - 🗂 AirGroup ClearPass
      - 🗂 AirGroup IPv6
      - 🗂 AirGroup Service
      - 🗂 AirGroup active domain
      - 🗂 Network
  - ⊕ 🗂 default

AirGroup Service Profile

	AIRGROUP SERVICE PRO...	⊞
AirGroup Service Profile:		

\+

11

配置airgroup profile

AirGroup Service Profile

AIRGROUP SERVICE PRO...	⊞

default-airplay

AirGroup Service Profile:

+

仅添加需要用到的services，这里仅测试AirPlay，所以只添加default-airplay service

开启AirGroup Centralized mode

Airgroup Location Based Sharing介绍

Airgroup Location Based Sharing介绍

Location Attribute	Tag=Value Format	Description
AP-Name based	ap-name=\<name\>	When the location is set to ap-name, all AirGroup users connected to this AP and to APs which are in the same RF neighborhood can access the shared device.
AP-Group based	ap-group=\<group\>	When the location attribute is set to ap-group, all AirGroup users associated to APs in the specified AP group can access the shared device.
AP-FQLN based	fqln=\<fqln\>	When the location attribute is set to ap-FQLN, all AirGroup users connected to APs on the same floor, and to the APs on a floor above or below the configured APs can access the shared device.

基于location进行airgroup server device share时：

1. 如果配置为基于ap-name，那么连接到指定的ap-name以及这些ap的相邻ap-name的airgroup user都可以发现该airgroup server。

2. 如果配置为基于ap-group，那么只有连接到指定ap-group下的ap的airgroup user才可以发现 airgroup server。

3. 如果配置为基于AP FQLN，那么连接到与指定AP FQLN位于相同floor number以及相邻floor（即楼上和楼下）的AP的airgroup client都可以发现该airgroup server。

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基于AP-Group的airgroup server share

- 配置

GUI

MOBILITY MASTER
MM1

CONTROLLERS ✓ 2 ⓘ 0
ACCESS POINTS ✓ 3 ⓘ 0
CLIENTS 📶 5 📡 0
ALERTS ⚠ 0

← Managed Network > **lab** >

🔍

📁 Mobility Master
   🖥 MM1

📁 Managed Network (2)
   📂 **lab (2)**
     🖥 MC1
     🖥 MC2

Dashboard

Configuration
   WLANs
   Roles & Policies
   Access Points
   AP Groups
   Authentication
   | Services
   Interfaces
   Controllers
   System
   Tasks
   Redundancy
Maintenance

Clusters   **AirGroup**   VPN   Firewall   IP Mobility   External Services   DHCP   WAN

AirGroup service: ⬤——

Mode: ⦿ Centralized   ◯ Distributed

● AirGroup profile: centralized_airgroup ▾

Forced registration: Disabled

› Service-Based Policy

› ClearPass Policy Manager

› IPv6

› Domains

⌄ **Server-Based Policy**

MAC ADDR...	HOST NAME	TYPE	⊞
00:0e:c6:c4:...	newdeMac...	N/A	

Devices:

自动发现的airgroup server会显示在这里

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GUI

Add New Device

MAC address: a4:4e:31:ce:61:a8

Cancel   Submit

⌄ Server-Based Policy

MAC ADDR...	HOST NAME	TYPE	
a4:4e:31:ce...	--	N/A	🗑
00:0e:c6:c4:...	newdeMac...	N/A	

Devices:

+

a4:4e:31:ce:61:a8

Auto associate:	None ⌄
AP name:	
Neighborhood hop(s):	None ⌄
AP group:	group1
AP FQLN:	
User names:	
User roles:	
User groups:	

Cancel   Submit

⌄ Server-Based Policy

MAC ADDR...	HOST NAME	TYPE	
a4:4e:31:ce:...	--	N/A	
00:0e:c6:c4:...	newdeMac...	N/A	🗑

Devices:

+

00:0e:c6:c4:88:cd

Auto associate:	None ⌄
AP name:	
Neighborhood hop(s):	None ⌄
AP group:	group1
AP FQLN:	
User names:	
User roles:	
User groups:	

Cancel   Submit

CLI

```
(MM1) [lab] #airgroup policy ap-group device-mac a4:4e:31:ce:61:a8 group1
(MM1) [lab] #airgroup policy ap-group device-mac 00:0e:c6:c4:88:cd group1
```

```
(MM1) [lab] #airgroup policy ap-group device-mac a4:4e:31:ce:61:a8
add                     Add shared AP-group(s) to the current list
remove                  Remove shared AP-group(s) from the current list
STRING                  comma separated Shared AP-group(s). max charecters:250

(MM1) [lab] #airgroup policy ap-group device-mac a4:4e:31:ce:61:a8 group1,group2
(MM1) [lab] #show airgroup policy-entries

AirGroup Device Policy Information
-----------------------------------
```

Device	device-owner	shared AP-name	shared AP-FQLN	shared AP-group	shared users	shared groups	shared roles	CPPM-Req	CPPM-Resp	source	Auto-Associate	Neighborhood
a4:4e:31:ce:61:a8	N/A			group1 group2						CLI		1 hop(s)

```
Num Policy Entries:1
(MM1) [lab] #
```

注意这里lab是cluster所在的node，airgroup policy是在enable模式下配置的，不会下发到lab下面的设备节点以及设备上
可以一次设置或者一次增加多个ap-group，ap-group之间用逗号间隔，但是最长支持250个字符

确认配置

```
(MM1) [lab] #show airgroup policy-entries

AirGroup Device Policy Information
-----------------------------------
Device              device-owner  shared AP-name  shared AP-FQLN  shared AP-group  shared users  shared groups  shared roles  CPPM-Req  CPPM-Resp  source  Auto-Associate  Neighborhood
------              ------------  --------------  --------------  ---------------  ------------  -------------  ------------  --------  ---------  ------  --------------  ------------
a4:4e:31:ce:61:a8   N/A                                           group1                                                                           CLI                     1 hop(s)
00:0e:c6:c4:88:cd   N/A                                           group1                                                                           CLI                     1 hop(s)
Num Policy Entries:2
(MM1) [lab] #
```

Neighborhood参数只对ap-name起作用，对ap-group、ap-fqln不起作用

基于AP-Group的airgroup server share

- 验证

验证

```
(MM1) [lab] #show airgroup servers

Showing AirGroup servers under /md/lab

AirGroup Servers
----------------
MAC                IP             Type  Host Name          Service          VLAN  Wired/Wireless  Role           Group  Username  AP-Name
---                --             ----  ---------          -------          ----  --------------  ----           -----  --------  -------
a4:4e:31:ce:61:a8  10.1.32.253    mDNS  Wired03            default-airplay  32    wireless        authenticated                   AP2
00:0e:c6:c4:88:cd  10.1.32.254    mDNS  newdeMacBook-Pro-2 default-airplay  32    N/A
Num Servers: 2.



(MM1) [lab] #show airgroup users

Showing AirGroup users under /md/lab

AirGroup Users
--------------
MAC                IP             Type  Host Name   VLAN  Wired/Wireless  Role           Group  Username  AP-Name
---                --             ----  ---------   ----  --------------  ----           -----  --------  -------
6c:70:9f:1a:f5:c1  10.1.31.252    mDNS              31    wireless        authenticated                   AP2
94:e6:f7:a4:01:d7  10.1.31.251    mDNS  windows10   31    wireless        authenticated                   AP1
2a:c2:d4:93:3e:df  10.1.31.250    mDNS              31    wireless        authenticated                   AP2
3e:6a:43:d9:d0:20  10.1.31.254    mDNS  iPhone      31    wireless        authenticated                   AP1
Num Users: 4.
(MM1) [lab] #
```

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验证

```
(MM1) [lab] #show airgroup policy-entries

AirGroup Device Policy Information
----------------------------------
Device             device-owner   shared AP-name   shared AP-FQLN   shared AP-group   shared users   shared groups   shared roles   CPPM-Req   CPPM-Resp   source   Auto-Associate   Neighborhood
------             ------------   --------------   --------------   ---------------   ------------   -------------   ------------   --------   ---------   ------   --------------   ------------
a4:4e:31:ce:61:a8  N/A                                              group1                                                                     CLI               No
00:0e:c6:c4:88:cd  N/A                                              group1                                                                     CLI               1 hop(s)
Num Policy Entries:2

(MM1) [lab] #show airgroup aps

Showing AirGroup info from /md/lab

AirGroup APs
------------
IP  Name  Group   MAC               BSSID- A          BSSID- B/G        FQLN                          Neighbor count- A   Neighbor count- B/G   Neighbor AP name   BAND
--  ----  ------  ---               --------          ----------        ----                          -----------------   -------------------   ----------------   ----
    AP1   group1  40:e3:d6:c3:f9:14 40:e3:d6:bf:91:50 40:e3:d6:bf:91:40 AP1.floor 1.building1.campus1 2                   0                     AP3                A
                                                                                                                                                AP2                A
    AP3   group3  24:f2:7f:c3:da:38 24:f2:7f:bd:a3:90 24:f2:7f:bd:a3:80 AP3.floor 2.building1.campus1 2                   0                     AP1                A
                                                                                                                                                AP2                A
    AP2   group2  04:bd:88:cd:5e:20 04:bd:88:55:e2:10 04:bd:88:55:e2:00 AP2.floor 1.building2.campus1 2                   0                     AP1                A
                                                                                                                                                AP3                A
Num APs:3

(MM1) [mynode] (config) #show ap database

AP Database
-----------
Name  Group   AP Type  IP Address    Status         Flags  Switch IP     Standby IP
----  -----   -------  ----------    ------         -----  ---------     ----------
AP1   group1  225      10.1.35.252   Up 9h:30m:12s          10.1.30.101   10.1.30.100
AP2   group2  225      10.1.35.253   Up 9h:30m:9s           10.1.30.101   10.1.30.100
AP3   group3  315      10.1.35.254   Up 9h:30m:43s          10.1.30.100   10.1.30.101
```
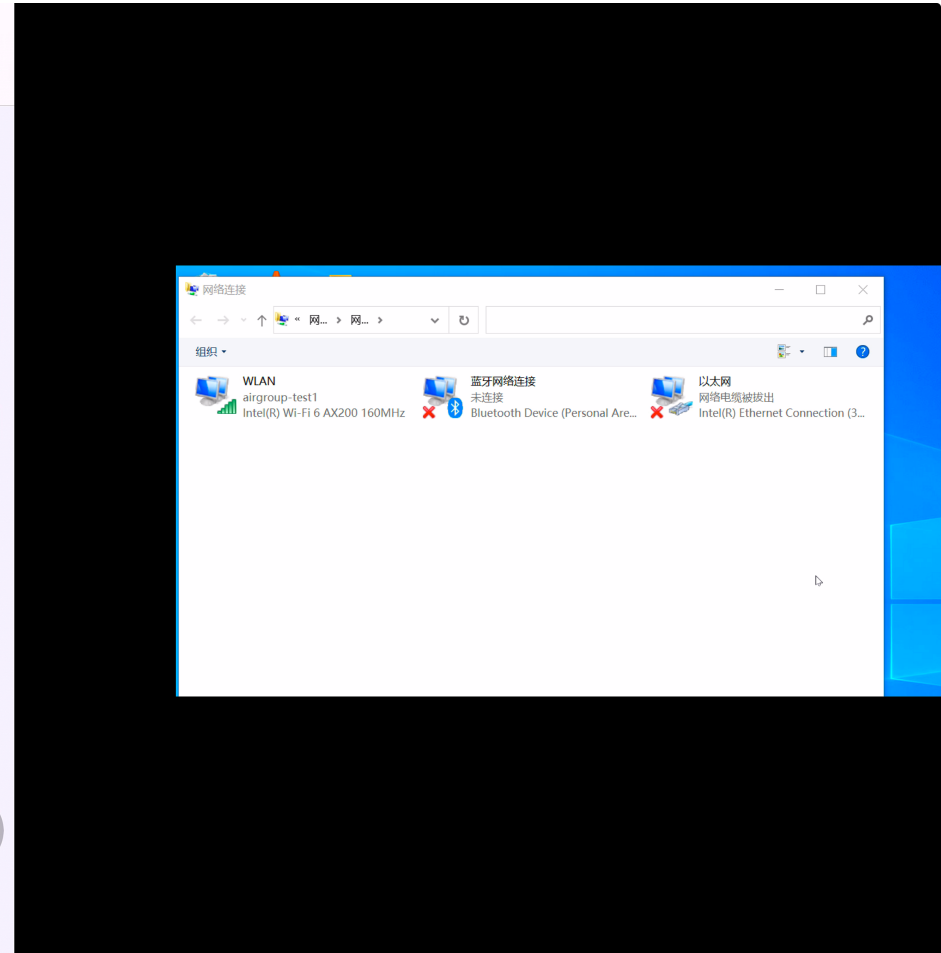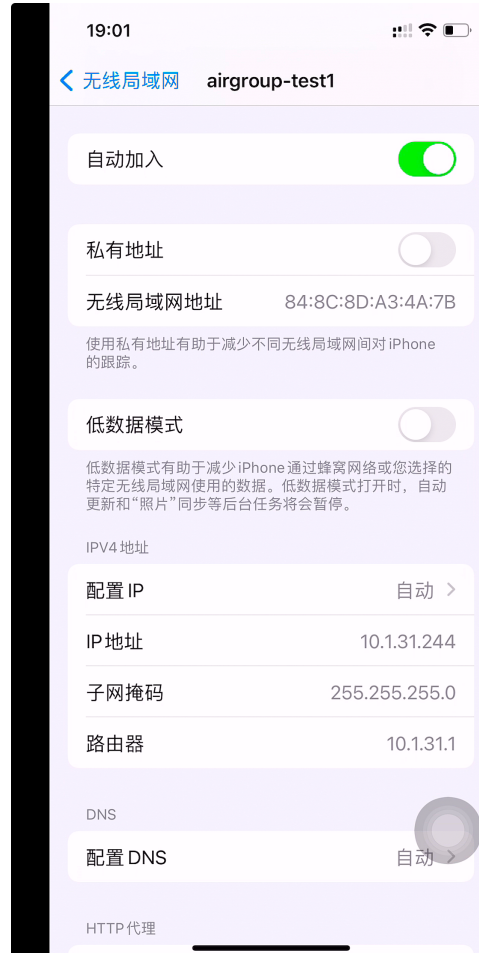
验证

```
(MM1) [mynode] (config) #show global-user-table list

Global Users
------------
     IP              MAC              Name      Current switch    Role            Auth   AP name   Roaming    Essid             Bssid              Phy     Profile                    Type    User Type
----------     -----------     ------    --------------   ----            ----   -------   -------    -----             -----              ---     -------                    ----    ---------
10.1.31.245  7c:04:d0:71:b2:9c              10.1.30.100    authenticated           AP2     Wireless   airgroup-test2    04:bd:88:55:e2:10  a-VHT   airgroup-test2_aaa_prof    N/A     WIRELESS
10.1.32.253  a4:4e:31:ce:61:a8              10.1.30.100    authenticated           AP2     Wireless   airgroup          04:bd:88:55:e2:11  a-HT    airgroup_aaa_prof          N/A     WIRELESS
10.1.31.252  6c:70:9f:1a:f5:c1              10.1.30.101    authenticated           AP2     Wireless   airgroup-test2    04:bd:88:55:e2:10  a-HT    airgroup-test2_aaa_prof    iPad    WIRELESS
10.1.31.244  84:8c:8d:a3:4a:7b              10.1.30.101    authenticated           AP1     Wireless   airgroup-test1    40:e3:d6:bf:91:50  a-VHT   airgroup-test1_aaa_prof    N/A     WIRELESS
10.1.31.251  94:e6:f7:a4:01:d7              10.1.30.101    authenticated           AP1     Wireless   airgroup-test1    40:e3:d6:bf:91:50  a-VHT   airgroup-test1_aaa_prof    Win 8   WIRELESS

Total entries = 5
```
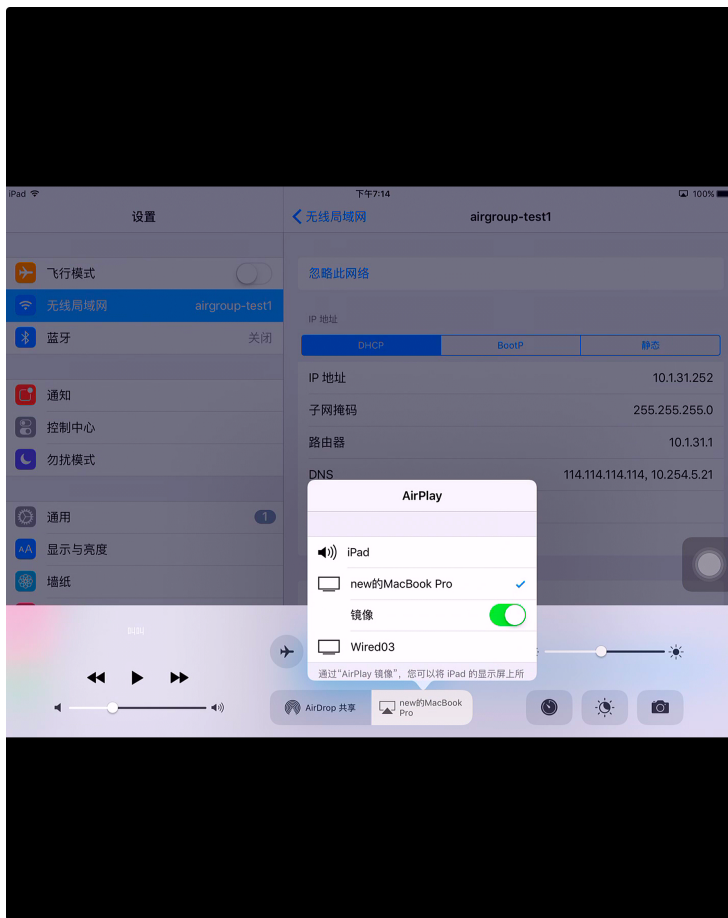
验证

```
(MM1) [mynode] (config) #show global-user-table list

Global Users
------------
     IP              MAC          Name    Current switch    Role       Auth   AP name   Roaming    Essid          Bssid              Phy     Profile                   Type    User Type
---------    -----------------    ------  --------------    ----       ----   -------   -------    -------        -------            ---     -------                   ----    ---------
10.1.32.253  a4:4e:31:ce:61:a8            10.1.30.100       authenticated         AP2       Wireless   airgroup       04:bd:88:55:e2:11   a-HT    airgroup_aaa_prof         N/A     WIRELESS
10.1.31.244  84:8c:8d:a3:4a:7b            10.1.30.101       authenticated         AP2       Wireless   airgroup-test2  04:bd:88:55:e2:10   a-VHT   airgroup-test2_aaa_prof   N/A     WIRELESS
10.1.31.245  7c:04:d0:71:b2:9c            10.1.30.100       authenticated         AP1       Wireless   airgroup-test1  40:e3:d6:bf:91:50   a-VHT   airgroup-test1_aaa_prof   N/A     WIRELESS
10.1.31.252  6c:70:9f:1a:f5:c1            10.1.30.101       authenticated         AP1       Wireless   airgroup-test1  40:e3:d6:bf:91:50   a-HT    airgroup-test1_aaa_prof   iPad    WIRELESS
10.1.31.251  94:e6:f7:a4:01:d7            10.1.30.101       authenticated         AP2       Wireless   airgroup-test2  04:bd:88:55:e2:10   a-VHT   airgroup-test2_aaa_prof   Win 8   WIRELESS

Total entries = 5
```

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基于AP-Name的airgroup server share

- 配置

GUI

Neighborhood hop:
None: airgroup server只共享给此AP，此AP的邻居AP下的user不能发现此server
1/2/3：airgroup server共享给此AP，以及此AP的1/2/3跳邻居AP下的user

CLI

```
(MM1) [lab] #airgroup policy ap-name device-mac 00:0e:c6:c4:88:cd AP2,AP3
(MM1) [lab] #airgroup policy ap-name device-mac a4:4e:31:ce:61:a8 AP2,AP3
(MM1) [lab] #no airgroup policy ap-neighborhood device-mac 00:0e:c6:c4:88:cd
(MM1) [lab] #no airgroup policy ap-neighborhood device-mac a4:4e:31:ce:61:a8

(MM1) [lab] #airgroup policy ap-name device-mac 00:0e:c6:c4:88:cd
add                          Add shared AP-name(s) to the current list
remove                       Remove shared AP-name(s) from the current list
STRING                       comma separated Shared AP-name(s). max charecters:250

(MM1) [lab] #airgroup policy ap-name device-mac 00:0e:c6:c4:88:cd add
STRING                       comma separated Shared AP-name(s). max charecters:250
```

注意这里lab是cluster所在的node，airgroup policy是在enable模式下配置的，不会下发到lab下面的设备节点以及设备上

可以一次设置或者一次增加多个ap-name，但是最长支持250个字符

通过CLI添加的airgroup policy默认neighborhood为1 hop，需要通过no airgroup policy ap-neighborhood device-mac xx:xx:xx:xx:xx:xx来删除neighborhood，即neighborhood为no

确认配置

```
(MM1) [lab] #show airgroup policy-entries

AirGroup Device Policy Information
----------------------------------
Device              device-owner  shared AP-name  shared AP-FQLN  shared AP-group  shared users  shared groups  shared roles  CPPM-Req  CPPM-Resp  source  Auto-Associate  Neighborhood
------              ------------  --------------  --------------  ---------------  ------------  -------------  ------------  --------  ---------  ------  --------------  ------------
a4:4e:31:ce:61:a8   N/A           AP2                                                                                                             CLI                     No
                                  AP3
00:0e:c6:c4:88:cd   N/A           AP2                                                                                                             CLI                     No
                                  AP3
Num Policy Entries:2
```

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基于AP-Name的airgroup server share

- 验证

验证

```
(MM1) [lab] #show airgroup servers

Showing AirGroup servers under /md/lab

AirGroup Servers
----------------
MAC                 IP            Type   Host Name           Service              VLAN   Wired/Wireless   Role            Group   Username   AP-Name
---                 --            ----   ---------           -------              ----   --------------   ----            -----   --------   -------
a4:4e:31:ce:61:a8   10.1.32.253   mDNS   Wired03             default-airplay      32     wireless         authenticated                      AP2
00:0e:c6:c4:88:cd   10.1.32.254   mDNS   newdeMacBook-Pro-2  default-airplay      32     N/A
Num Servers: 2.


(MM1) [lab] #show airgroup users

Showing AirGroup users under /md/lab

AirGroup Users
--------------
MAC                 IP            Type   Host Name           VLAN   Wired/Wireless   Role            Group   Username   AP-Name
---                 --            ----   ---------           ----   --------------   ----            -----   --------   -------
7c:04:d0:71:b2:9c   10.1.31.245   mDNS   majinghaodeiPhone   31     wireless         authenticated                      AP3
6c:70:9f:1a:f5:c1   10.1.31.252   mDNS   iPad-mini           31     wireless         authenticated                      AP1
94:e6:f7:a4:01:d7   10.1.31.251   mDNS   windows10           31     wireless         authenticated                      AP2
84:8c:8d:a3:4a:7b   10.1.31.244   mDNS                       31     wireless         authenticated                      AP2
Num Users: 4.
```

验证

```
(MM1) [lab] #show airgroup policy-entries

AirGroup Device Policy Information
----------------------------------
Device            device-owner  shared AP-name  shared AP-FQLN  shared AP-group  shared users  shared groups  shared roles  CPPM-Req  CPPM-Resp  source  Auto-Associate  Neighborhood
------            ------------  --------------  --------------  ---------------  ------------  -------------  ------------  --------  ---------  ------  --------------  ------------
a4:4e:31:ce:61:a8  N/A           AP2                                                                                                              CLI                      No
                                 AP3
00:0e:c6:c4:88:cd  N/A           AP2                                                                                                              CLI                      No
                                 AP3
Num Policy Entries:2
(MM1) [lab] #show airgroup aps

Showing AirGroup info from /md/lab

AirGroup APs
------------
IP  Name  Group   MAC              BSSID- A          BSSID- B/G        FQLN                          Neighbor count- A  Neighbor count- B/G  Neighbor AP name  BAND
--  ----  -----   ---              --------          ----------        ----                          -----------------  -------------------  ----------------  ----
    AP1   group1  40:e3:d6:c3:f9:14  40:e3:d6:bf:91:50  40:e3:d6:bf:91:40  AP1.floor 1.building1.campus1  2                  0                    AP3               A
                                                                                                                                                AP2               A
    AP3   group3  24:f2:7f:c3:da:38  24:f2:7f:bd:a3:90  24:f2:7f:bd:a3:80  AP3.floor 2.building1.campus1  2                  0                    AP1               A
                                                                                                                                                AP2               A
    AP2   group2  04:bd:88:cd:5e:20  04:bd:88:55:e2:10  04:bd:88:55:e2:00  AP2.floor 1.building2.campus1  2                  0                    AP3               A
                                                                                                                                                AP1               A
Num APs:3

    (MM1) [mynode] (config) #show ap database

    AP Database
    -----------
    Name  Group   AP Type  IP Address    Status       Flags  Switch IP     Standby IP
    ----  -----   -------  ----------    ------       -----  ---------     ----------
    AP1   group1  225      10.1.35.252   Up 9h:30m:12s        10.1.30.101   10.1.30.100
    AP2   group2  225      10.1.35.253   Up 9h:30m:9s         10.1.30.101   10.1.30.100
    AP3   group3  315      10.1.35.254   Up 9h:30m:43s        10.1.30.100   10.1.30.101
```
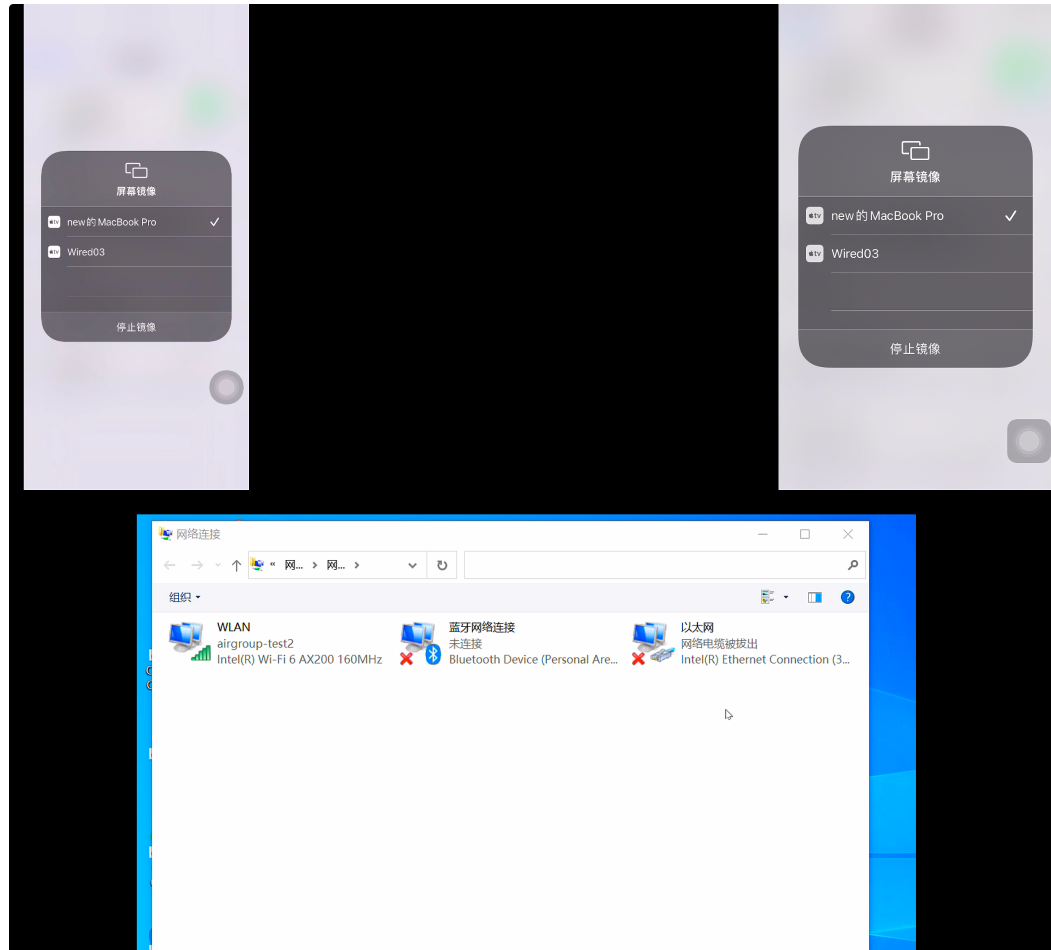
验证

```
(MM1) [mynode] #show global-user-table list

Global Users
------------
   IP            MAC           Name      Current switch   Role            Auth    AP name   Roaming    Essid            Bssid              Phy     Profile                   Type    User Type
   --            ---           ----      --------------   ----            ----    -------   -------    -----            -----              ---     -------                   ----    ---------
10.1.31.245   7c:04:d0:71:b2:9c        10.1.30.100      authenticated            AP3       Wireless   airgroup-test3   24:f2:7f:bd:a3:90   a-VHT   airgroup-test3_aaa_prof   N/A     WIRELESS
10.1.32.253   a4:4e:31:ce:61:a8        10.1.30.100      authenticated            AP1       Wireless   airgroup         40:e3:d6:bf:91:51   a-HT    airgroup_aaa_prof         N/A     WIRELESS
10.1.31.244   84:8c:8d:a3:4a:7b        10.1.30.101      authenticated            AP2       Wireless   airgroup-test2   04:bd:88:55:e2:10   a-VHT   airgroup-test2_aaa_prof   iPhone  WIRELESS
10.1.31.251   94:e6:f7:a4:01:d7        10.1.30.101      authenticated            AP2       Wireless   airgroup-test2   04:bd:88:55:e2:10   a-VHT   airgroup-test2_aaa_prof   Win 8   WIRELESS
10.1.31.252   6c:70:9f:1a:f5:c1        10.1.30.101      authenticated            AP1       Wireless   airgroup-test1   40:e3:d6:bf:91:50   a-HT    airgroup-test1_aaa_prof   iPad    WIRELESS

Total entries = 5
```
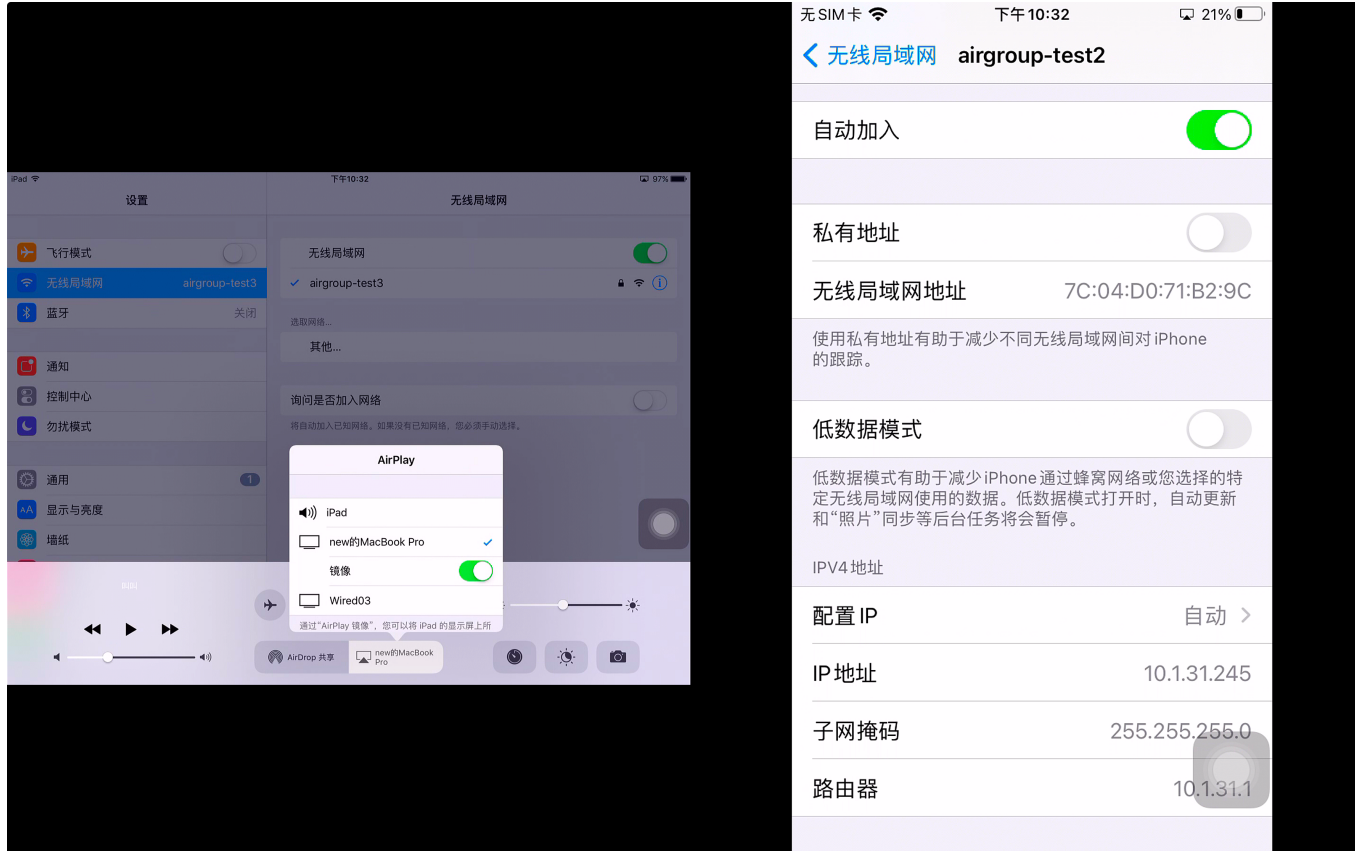
验证

```
(MM1) [mynode] #show global-user-table list

Global Users
------------
     IP            MAC            Name     Current switch   Role            Auth   AP name   Roaming    Essid          Bssid              Phy      Profile                    Type      User Type
-----------  -----------------  -------  ---------------  --------------  ----   -------   --------   ------------   -----------------  ----     -----------------------    ------    ----------
10.1.32.253  a4:4e:31:ce:61:a8           10.1.30.100      authenticated          AP1       Wireless   airgroup       40:e3:d6:bf:91:51  a-HT     airgroup_aaa_prof          N/A       WIRELESS
10.1.31.244  84:8c:8d:a3:4a:7b           10.1.30.101      authenticated          AP1       Wireless   airgroup-test1 40:e3:d6:bf:91:50  a-VHT    airgroup-test1_aaa_prof    iPhone    WIRELESS
10.1.31.245  7c:04:d0:71:b2:9c           10.1.30.100      authenticated          AP2       Wireless   airgroup-test2 04:bd:88:55:e2:10  a-VHT    airgroup-test2_aaa_prof    N/A       WIRELESS
10.1.31.252  6c:70:9f:1a:f5:c1           10.1.30.101      authenticated          AP3       Wireless   airgroup-test3 24:f2:7f:bd:a3:90  a-HT     airgroup-test3_aaa_prof    iPad      WIRELESS
10.1.31.251  94:e6:f7:a4:01:d7           10.1.30.101      authenticated          AP1       Wireless   airgroup-test1 40:e3:d6:bf:91:50  a-VHT    airgroup-test1_aaa_prof    Win 8     WIRELESS

Total entries = 5
```