

## 一、实验目标

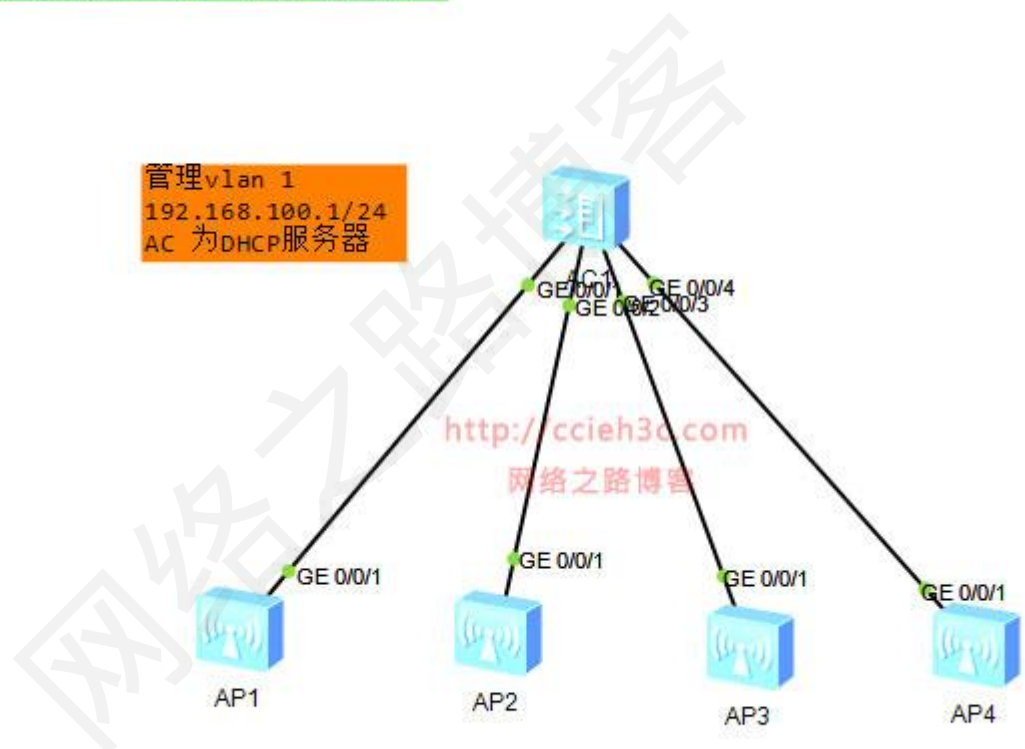
掌握配置WLAN源接口的命令

掌握配置DHCP服务器的命令

掌握手工确认AP上线的方法

## 二、实验拓扑

由浅入深玩转华为WLAN——1 二层组网AP上线



## 三、实验配置

AC基础配置，主要是配置管理VLAN的IP地址，及DHCP服务，因为这里是二层组网，所以不用配置option

```
dhcp enable
interface Vlanif1
ip address 192.168.100.1 255.255.255.0
dhcp select interface
```

```
wlan
wlan ac source interface vlanif1
```

配置检查先检查下DHCP是否分出地址，可以用dis ip pool inter vlan 1 来检查，这里可以看到已经为4个AP分出地址了

```
[HW-AC6005]dis ip pool interface Vlanif1
Pool-name      : Vlanif1
Pool-No        : 0
Lease          : 1 Days 0 Hours 0 Minutes
Domain-name    : -
DNS-server0    : -
NBNS-server0   : -
Netbios-type   : -
Position       : Interface      Status       : Unlocked
Gateway-0      : 192.168.100.1
Mask           : 255.255.255.0
VPN instance   : --

-----
      Start      End    Total  Used  Idle(Expired)  Conflict  Disable
-----
192.168.100.1 192.168.100.254 253    4    249(0)        0         0
-----
```

因为默认华为的AC使用了mac地址对AP的上线进行认证，所以现在还不能看到AP，但是通过dis arp 可以看到AP的MAC

```
[HW-AC6005]dis ap all
All AP information(Normal-0,UnNormal-0):
-----
AP   AP           AP           Profile  AP           AP
/Region
ID   Type          MAC           ID        State        Sysname
-----
Total number: 0

[HW-AC6005]dis arp
IP ADDRESS    MAC ADDRESS    EXPIRE(M)  TYPE    INTERFACE  VPN-INSTANCE
VLAN/CEVLAN  PVC
-----
192.168.100.1 00e0-fc03-800f    I -        Vlanif1
192.168.100.254 00e0-fc03-8e30 20    D-0    GE0/0/1
1/-
```

```
192.168.100.253 00e0-fc03-b310 20 D-0 GE0/0/3
1/-
192.168.100.252 00e0-fc03-da40 20 D-0 GE0/0/2
1/-
192.168.100.251 00e0-fc03-dc50 20 D-0 GE0/0/4
1/-
-----
Total:5      Dynamic:4      Static:0      Interface:1
```

可能通过`dis unauthorized-ap record`查看未通过认证的AP列表

```
[HW-AC6005]dis unauthorized-ap record
```

```
Unauthorized AP record:
```

```
Total number: 4
```

```
-----
AP type: AP6010DN-AGN
```

```
AP sn: 210235448310E6766418
```

```
AP mac address: 00e0-fc03-dc50
```

```
AP ip address: 192.168.100.251
```

```
Record time: 2013-12-06 12:13:25
```

```
-----
AP type: AP6010DN-AGN
```

```
AP sn: 2102354483106D748F23
```

```
AP mac address: 00e0-fc03-8e30
```

```
AP ip address: 192.168.100.254
```

```
Record time: 2013-12-06 12:13:24
```

```
-----
AP type: AP6010DN-AGN
```

```
AP sn: 210235448310BE35BA59
```

```
AP mac address: 00e0-fc03-b310
```

```
AP ip address: 192.168.100.253
```

```
Record time: 2013-12-06 12:12:59
```

```
-----
AP type: AP6010DN-AGN
```

```
AP sn: 210235448310152A7C4D
```

```
AP mac address: 00e0-fc03-da40
```

```
AP ip address: 192.168.100.252
```

```
Record time: 2013-12-06 12:12:58
-----
```

通过命令确认AP上线，下面是见证奇迹的时刻了：

```
[HW-AC6005] wlan
[HW-AC6005-wlan-view] ap-confirm all
Info: Confirm AP completely. Success count: 4. Failure count: 0.
```

```
[HW-AC6005-wlan-view] dis ap all
All AP information(Normal-4,UnNormal-0):
```

AP ID	AP /Region Type	AP MAC	Profile ID	AP State	AP Sysname
0	AP6010DN-AGN	00e0-fc03-dc50	0/0	normal	ap-0
1	AP6010DN-AGN	00e0-fc03-8e30	0/0	normal	ap-1
2	AP6010DN-AGN	00e0-fc03-b310	0/0	normal	ap-2
3	AP6010DN-AGN	00e0-fc03-da40	0/0	normal	ap-3

Total number: 4

## 1 四、补充知识

1、如果已经知道AP的MAC和型号（SN号是可选的），也可以通过下面命令上AP上线

```
wlan
wlan ac source interface vlanif1
ap id 0 type-id 19 mac 00e0-fc03-dc50 sn 210235448310E6766418
ap id 1 type-id 19 mac 00e0-fc03-8e30 sn 2102354483106D748F23
ap id 2 type-id 19 mac 00e0-fc03-b310 sn 210235448310BE35BA59
ap id 3 type-id 19 mac 00e0-fc03-da40 sn 210235448310152A7C4D
```

2、如果想重启一个AP，可以在WLAN配置视图下使用命令 `ap reset id x` 或 `ap reset all` 重启AP，重启时候记得抓包哦，亲！

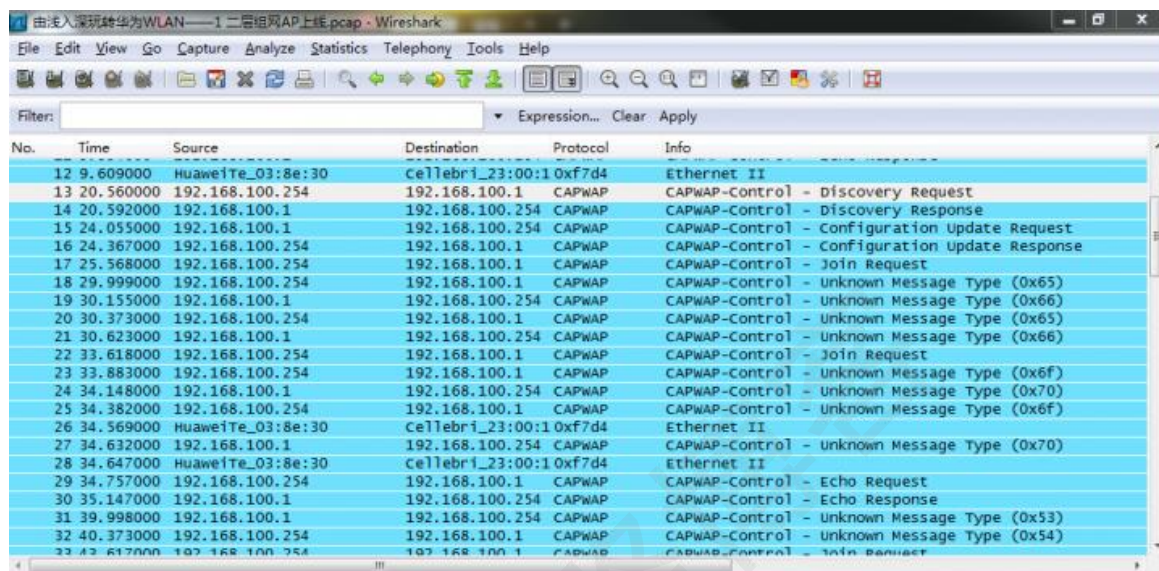
```
[HW-AC6005-wlan-view] ap-reset id 0
Warning: Reset AP! Continue? [Y/N]y
Info: Reset AP completely.
[HW-AC6005-wlan-view] dis ap all
All AP information(Normal-3,UnNormal-1):
```

AP ID	AP /Region Type	AP MAC	Profile ID	AP State	AP Sysname
0	AP6010DN-AGN	00e0-fc03-dc50	0/0	fault	ap-0
1	AP6010DN-AGN	00e0-fc03-8e30	0/0	normal	ap-1

2	AP6010DN-AGN	00e0-fc03-b310	0/0	normal	ap-2
3	AP6010DN-AGN	00e0-fc03-da40	0/0	normal	ap-3

-----  
Total number: 4

下面是我抓到的包，这里就是完整的AP上线时CAPWAP的交互报文



No.	Time	Source	Destination	Protocol	Info
12	9.609000	HuaweiTe_03:8e:30	Cellebri_23:00:10:f7d4	Ethernet II	
13	20.560000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Discovery Request
14	20.592000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Discovery Response
15	24.055000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Configuration Update Request
16	24.367000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Configuration Update Response
17	25.568000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Join Request
18	29.999000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Unknown Message Type (0x65)
19	30.155000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Unknown Message Type (0x66)
20	30.373000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Unknown Message Type (0x65)
21	30.623000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Unknown Message Type (0x66)
22	33.618000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Join Request
23	33.883000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Unknown Message Type (0x6f)
24	34.148000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Unknown Message Type (0x70)
25	34.382000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-Control - Unknown Message Type (0x6f)
26	34.569000	HuaweiTe_03:8e:30	Cellebri_23:00:10:f7d4	Ethernet II	
27	34.632000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-Control - Unknown Message Type (0x70)
28	34.647000	HuaweiTe_03:8e:30	Cellebri_23:00:10:f7d4	Ethernet II	
29	34.757000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-control - Echo Request
30	35.147000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-control - Echo Response
31	39.998000	192.168.100.1	192.168.100.254	CAPWAP	CAPWAP-control - Unknown Message Type (0x53)
32	40.373000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-control - Unknown Message Type (0x54)
33	43.617000	192.168.100.254	192.168.100.1	CAPWAP	CAPWAP-control - Join Request

博主也只是业余时间写写技术文档，请大家见谅，大家觉得不错的话，可以推荐给朋友

哦，博主会努力推出更好的系列文档的。如果大家有任何疑问或者文中有错误跟疏忽的地

方，欢迎大家留言指出，博主看到后会第一时间修改，谢谢大家的支持，更多技术文章尽

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一定會感激現在拼命的自己  
如果現在的你沒有拼命的努力，那麼你必將失去以後你人生所有的機會



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