

## 知 WA系列FAT AP本地实现同一SSID不同VLAN功能（即静态mac-vlan功能）的配置

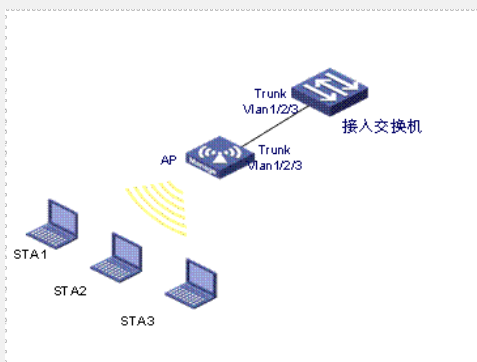
wlan接入 VLAN 宋斌 2011-08-11 发表

### WA系列FAT AP本地实现同一SSID不同VLAN功能（即静态mac-vlan功能）的配置

#### 一、组网需求：

WA系列FAT AP（如WA2220-AG）、H3C PoE交换机、便携机（安装有11b/g无线网卡）

#### 二、组网图：



#### 三、特性介绍：

基于MAC划分VLAN是VLAN的一种划分方法。它按照报文的源MAC地址来定义VLAN成员，将指定报文加入该VLAN的tag后发送。该功能通常会和安全（比如802.1X）技术联合使用，以实现终端的安全、灵活接入。

本配置举例中，通过在无线口上使能mac-vlan，并在全局静态mac-vlan表中添加STA mac，STA上线后将加入静态mac-vlan表中指定的VLAN。

FAT AP产品支持静态mac-vlan功能，3台STA连接同一SSID获得不同的VLAN的IP地址。

#### 四、配置信息：

```
#
version 5.20, Release 1115
#
sysname H3C
#
mac-vlan mac-address 001f-3b75-b9df vlan 1 priority 0
mac-vlan mac-address 001c-bfca-0e32 vlan 2 priority 0
mac-vlan mac-address 0009-5ba2-7428 vlan 3 priority 0
#
domain default enable system
#
telnet server enable
#
vlan 1
#
vlan 2 to 3
#
domain system
access-limit disable
state active
idle-cut disable
self-service-url disable
#
user-group system
#
```

```
local-user admin
password simple h3capadmin
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 static_mac_vlan
service-template enable
#
interface NULL0
#
interface Vlan-interface1
ip address 192.168.1.254 255.255.255.0
#
interface Ethernet1/0/1
port link-type trunk
port trunk permit vlan all
#
interface WLAN-BSS1
port link-type hybrid
port hybrid vlan 1 to 3 untagged
mac-vlan enable
#
interface WLAN-Radio1/0/1
#
interface WLAN-Radio1/0/2
channel 1
service-template 1 interface wlan-bss 1
#
dhcp enable
#
load xml-configuration
#
user-interface con 0
user-interface vty 0 4
authentication-mode scheme
#
return
```

## 五、主要配置步骤：

# 配置无线服务模板

```
[AP]wlan service-template 1
[AP-wlan-st-1]ssid static_mac_vlan
[AP-wlan-st-1]service-template enable
[AP-wlan-st-1]quit
```

#配置无线BSS口为hybrid口，VLAN 1、VLAN2、VLAN3

```
[AP]interface WLAN-BSS1
[AP-WLAN-BSS1]port link-type hybrid
[AP-WLAN-BSS1]port hybrid vlan 1 to 3 untagged
```

#在无线BSS口上使能mac-vlan

```
[AP-WLAN-BSS1]mac-vlan enable
```

#在静态mac-vlan列表中添加STA mac

```
[AP]mac-vlan mac-address 001f-3b75-b9df vlan 1 priority 0
[AP]mac-vlan mac-address 001c-bfca-0e32 vlan 2 priority 0
```

```
[AP]mac-vlan mac-address 0009-5ba2-7428 vlan 3 priority 0
```

# 建立AP, 并在AP下绑定服务模板

```
[AP] interface WLAN-Radio1/0/2  
[AP-WLAN- Radio1/0/2] service-template 1 interface wlan-bss 1
```

## 六、 结果验证:

在AP上执行display wlan client verbose可以看到对应的STA所属VLAN信息:

```
[AP]display wlan client verbose  
Total Number of Clients      : 3  
Total Number of Clients Connected : 3  
Client Information  
-----  
MAC Address      : 0009-5ba2-7428  
AID              : 2  
Radio Interface  : WLAN-Radio1/0/2  
SSID             : static_mac_vlan  
BSSID            : 000f-e27e-1730  
Port             : WLAN-BSS1  
VLAN             : 3  
State            : Running  
Power Save Mode  : Active  
Wireless Mode    : 11g  
QoS Mode         : WMM  
Listen Interval (Beacon Interval) : 10  
RSSI             : 56  
SNR              : 40  
Rx/Tx Rate       : 54/18  
Client Type      : PRE-RSNA  
Authentication Method : Open System  
AKM Method       : None  
4-Way Handshake State : -NA-  
Group Key State  : -NA-  
Encryption Cipher : Clear  
Roam Status      : Normal  
Up Time (hh:mm:ss) : 01:34:48  
-----  
Client Information  
-----  
MAC Address      : 001c-bfca-0e32  
AID              : 1  
Radio Interface  : WLAN-Radio1/0/2  
SSID             : static_mac_vlan  
BSSID            : 000f-e27e-1730  
Port             : WLAN-BSS1  
VLAN             : 2  
State            : Running  
Power Save Mode  : Active  
Wireless Mode    : 11g  
QoS Mode         : WMM  
Listen Interval (Beacon Interval) : 10  
RSSI             : 55  
SNR              : 41  
Rx/Tx Rate       : 54/54  
Client Type      : PRE-RSNA  
Authentication Method : Open System  
AKM Method       : None  
4-Way Handshake State : -NA-  
Group Key State  : -NA-  
Encryption Cipher : Clear  
Roam Status      : Normal  
Up Time (hh:mm:ss) : 01:31:50  
-----
```

### Client Information

---

MAC Address : 001f-3b75-b9df  
AID : 3  
Radio Interface : WLAN-Radio1/0/2  
SSID : static\_mac\_vlan  
BSSID : 000f-e27e-1730  
Port : WLAN-BSS1  
VLAN : 1  
State : Running  
Power Save Mode : Active  
Wireless Mode : 11g  
QoS Mode : WMM  
Listen Interval (Beacon Interval) : 10  
RSSI : 53  
SNR : 43  
Rx/Tx Rate : 54/54  
Client Type : PRE-RSNA  
Authentication Method : Open System  
AKM Method : None  
4-Way Handshake State : -NA-  
Group Key State : -NA-  
Encryption Cipher : Clear  
Roam Status : Normal  
Up Time (hh:mm:ss) : 01:34:41

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