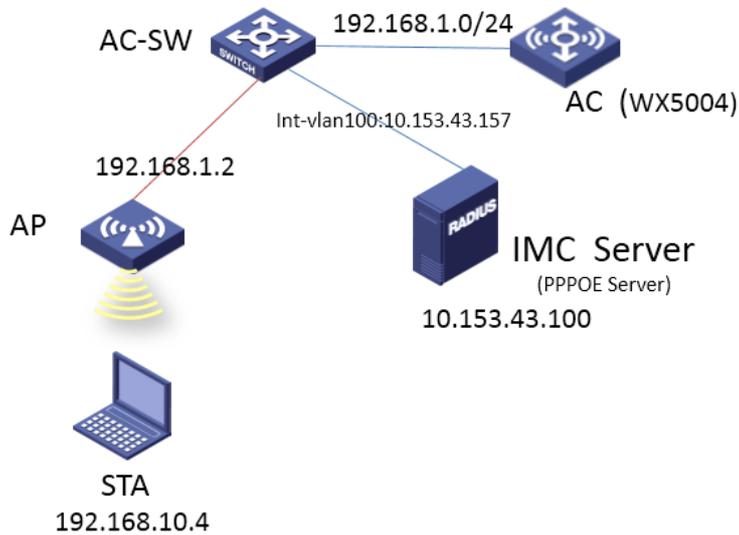


WX系列 无线PPPOE远程认证典型配置

一、组网配置



本配置举例中，使用WX5004作为无线控制器，版本号为R3507P14。AC作为AP网关（vlan-interface1:192.168.1.254/24）并配置DHCP server为AP分配IP地址。AC作为STA网关(vlan-interface10: 192.168.10.254/24)并配置DHCP Server为STA分配IP地址。交换机为AP提供POE供电。

二、配置步骤

1、AC侧配置

```
dis cu
#
version 5.20, Release 2308P10
#
sysname WX5004
#
ftp server enable
#
domain default enable system
#
telnet server enable
#
port-security enable
#管理vlan
vlan 1
#业务vlan
vlan 10
#服务器互联vlan
vlan 100
#配置radius策略，服务器ip地址： 10.153.43.100，密钥： wcq
```

```
radius scheme pppoe
server-type extended
primary authentication 10.153.43.100
primary accounting 10.153.43.100
key authentication cipher wcq
key accounting cipher wcq
user-name-format without-domain
nas-ip 10.153.43.157
#pppoe域的配置
domain pppoe
authentication ppp radius-scheme pppoe
authorization ppp radius-scheme pppoe
accounting ppp radius-scheme pppoe
access-limit disable
state active
idle-cut disable
self-service-url disable
#
domain system
access-limit disable
state active
idle-cut disable
self-service-url disable
#AP注册地址池
dhcp server ip-pool pool-ap
network 192.168.1.0 mask 255.255.255.0
gateway-list 192.168.1.254
#无线客户端地址池
dhcp server ip-pool pool-sta
network 192.168.10.0 mask 255.255.255.0
gateway-list 192.168.10.254
#
user-group system
group-attribute allow-guest
#
local-user admin
password cipher $c$3$rebkKGCv78uZ2NnmpbWYHdWKy/tQlIx3
authorization-attribute level 3
service-type portal
#
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
#配置无线服务模板
wlan service-template 1 clear

ssid h3c-www
bind WLAN-ESS 1
service-template enable
#配置虚拟模板
interface Virtual-Template1
ppp authentication-mode chap domain pppoe
ppp ipcp dns 202.106.0.20
remote address pool pool-sta
ip address 192.168.10.254 255.255.255.0
#将PPPOE的虚接口绑定到vlan10上
interface Vlan-interface10
pppoe-server bind Virtual-Template 1
#接入服务器的vlan三层虚接口ip为 10.153.43.157
interface Vlan-interface100
ip address 10.153.43.157 255.255.255.0
#
interface GigabitEthernet1/0/1
port access vlan 100
#
interface GigabitEthernet1/0/2
#
interface GigabitEthernet1/0/3
port link-type trunk
port trunk permit vlan all
#
interface GigabitEthernet1/0/4
#
interface WLAN-ESS1
port access vlan 10
#
nqa entry imclinktopologypleaseignore ping
type icmp-echo
destination ip 10.153.43.254
frequency 270000
#
wlan ap ap1 model WA1208E-GP-H20 id 1
serial-id C4CA-D90A-1520
radio 1
max-power 10
service-template 1
radio enable
#
ip route-static 0.0.0.0 0.0.0.0 10.153.43.100
```

```
#
undo info-center logfile enable
#
snmp-agent
snmp-agent local-engineid 800063A2033CE5A684342E
snmp-agent community read public
snmp-agent community write private
snmp-agent sys-info version all
snmp-agent target-host trap address udp-domain 10.153.43.100 params securityname public v2c
#
dhcp enable
#
nqa schedule imclinktopologypleaseignore ping start-time now
```

2、配置关键点

①配置虚拟模板

```
interface Virtual-Template1
#采用CHAP方法验证对端设备，使用指定的域PPPOE进行验证
ppp authentication-mode chap domain pppoe
#配置dns服务器
ppp ipcp dns 202.106.0.20
#为客户端分配IP地址使用地址池pool-sta
remote address pool pool-sta
#虚拟接口模板的IP地址为192.168.10.254/24
ip address 192.168.10.254 255.255.255.0
#将PPPOE的虚接口绑定到vlan10上
```

```
interface Vlan-interface10
pppoe-server bind Virtual-Template 1
②将PPPOE的虚接口绑定到vlan10上
```

```
interface Vlan-interface10
pppoe-server bind Virtual-Template 1
```

③配置无线服务模板

```
wlan service-template 1 clear
ssid h3c-www
bind WLAN-ESS 1
service-template enable
```

④配置AP管理模板

```
wlan ap ap1 model WA1208E-GP-H20 id 1
serial-id C4CA-D90A-1520
radio 1
max-power 10
service-template 1
radio enable
```

⑤配置radius策略，服务器ip地址：10.153.43.100，密钥：wcq

```
radius scheme pppoe
server-type extended
```

```
primary authentication 10.153.43.100
primary accounting 10.153.43.100
key authentication cipher wcq
key accounting cipher wcq
user-name-format without-domain
nas-ip 10.153.43.157
#pppoe域的配置
domain pppoe
authentication ppp radius-scheme pppoe
authorization ppp radius-scheme pppoe
accounting ppp radius-scheme pppoe
```

3、IMC侧配置

请借鉴《WX系列AC与IMCv7平台配合进行远程portal认证的典型配置》IMC相关配置。

三、实验结果验证

连接ssid“h3c-www”，在PC上新建PPPOE拨号连接，用户名wuchengqi，密码wcq，成功认证接入。

1.PPPOE认证前，客户端无法ping通服务器10.153.43.100



```
命令提示符
Microsoft Windows [版本 6.1.7600]
版权所有 (c) 2009 Microsoft Corporation。保留所有权利。
C:\Users\wl0207>ping 10.153.43.100
正在 Ping 10.153.43.100 具有 32 字节的数据:
请求超时。
请求超时。
请求超时。
请求超时。

10.153.43.100 的 Ping 统计信息:
    数据包: 已发送 = 4, 已接收 = 0, 丢失 = 4 (100% 丢失),
C:\Users\wl0207>
```

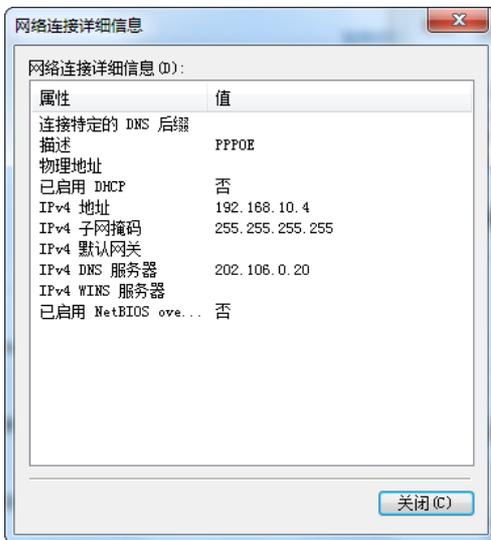
2.认证成功后，客户端可以ping通服务器10.153.43.100



```
命令提示符
C:\Users\wl0207>ping 10.153.43.100
正在 Ping 10.153.43.100 具有 32 字节的数据:
来自 10.153.43.100 的回复: 字节=32 时间=1ms TTL=127
来自 10.153.43.100 的回复: 字节=32 时间=1ms TTL=127
来自 10.153.43.100 的回复: 字节=32 时间=3ms TTL=127
来自 10.153.43.100 的回复: 字节=32 时间=8ms TTL=127

10.153.43.100 的 Ping 统计信息:
    数据包: 已发送 = 4, 已接收 = 4, 丢失 = 0 (0% 丢失),
    往返行程的估计时间<以毫秒为单位>:
        最短 = 1ms, 最长 = 8ms, 平均 = 3ms
C:\Users\wl0207>
```

3.查看PC所连接网络的详细信息，PC所获得IP地址：192.168.10.4，DNS服务器地址：202.106.0.20



4.查看客户端信息

```

<wx5004>dis connection
Index=21 ,Username=wuchengq1@pppoe
IP=192.168.10.4
IPV6=N/A
Total 1 connection(s) matched.
<wx5004>dis wlan c
<wx5004>dis wlan client
Total Number of Clients      : 1
Client Information
SSID: h3c-www
-----
MAC Address   User Name      APID/RID IP Address      VLAN
-----
6c88-1459-898c -NA-          1 /1  10.153.49.29    10
  
```