# S5120系列交换机Voice Vlan自动模式配置方法（命令行版）

VLAN 闫宁 2020-08-25 发表

## 组网及说明

**1 配置需求或说明**

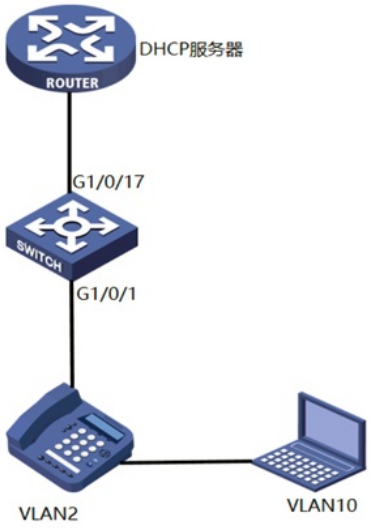
**1.1 适用产品系列**

本案例适用于如S5120-52P-LI、S5120-28P-SI、S5120-48P-EI等S5000PV2、S5120系列的交换机。

**1.2 配置需求及实现的效果**

为了保障语音数据能够优先转发，需要将语音电话和PC地址区分开，将语音电话地址设置成192.168.2网段划分到VLAN2，将PC地址设置成192.168.10网段划分到VLAN10，路由器器作为DHCP服务器给语音电话和PC下发IP地址。

**2 组网图**




## 配置步骤

**3 配置步骤**

**3.1 配置交换机**

#开启POE，为话机供电

system-view

[H3C]interface GigabitEthernet1/0/1

[H3C-GigabitEthernet1/0/1]poe enable

[H3C-GigabitEthernet1/0/1]quit

#创建话机所属VLAN2以及PC所属VLAN10

[H3C]vlan 2

[H3C-vlan2]quit

[H3C]vlan 10

[H3C-vlan10]quit

#设置允许通过的OUI地址为MAC地址前缀为6ca8-4900-0000，即当报文的前缀为6ca8-4900-0000时，设备会把它当成语音报文来处理

[H3C]voice vlan mac-address 6ca8-4900-0000 mask ffff-ff00-0000 description avaya

#将端口GigabitEthernet1/0/1设定为Hybrid端口,开启使能端口Voice VLAN功能

[H3C]interface GigabitEthernet 1/0/1

[H3C-GigabitEthernet1/0/1]port link-type hybrid

[H3C-GigabitEthernet1/0/1]voice vlan 2 enable

#设置PC所属vlan为vlan10

[H3C-GigabitEthernet1/0/1]port hybrid pvid vlan 10

[H3C-GigabitEthernet1/0/1]port hybrid vlan 10 untagged

[H3C-GigabitEthernet1/0/1]quit

#设备连接dhcp服务器的接口1/0/17,允许VLAN2，VLAN10通过

[H3C]interface GigabitEthernet 1/0/17

[H3C-GigabitEthernet1/0/17]port link-type trunk

[H3C-GigabitEthernet1/0/17]port trunk permit vlan 2 10

[H3C-GigabitEthernet1/0/17]quit

#保存配置
[H3C]save force
**3.2 配置DHCP服务器**
#创建VLAN2，VLAN10及其对应的VLAN接口，为该虚接口配置IP地址
system-view
[H3C]vlan 2
[H3C-vlan2]quit
[H3C]vlan 10
[H3C-vlan10]quit
[H3C] interface Vlan-interface 2
[H3C-Vlan-interface2]ip address 192.168.2.1 255.255.255.0
[H3C-Vlan-interface2]quit
[H3C] interface Vlan-interface 10
[H3C-Vlan-interface10]ip address 192.168.10.1 255.255.255.0
[H3C-Vlan-interface2]quit
#设备连接交换机的接口1/0/7,允许VLAN2，VLAN10通过
[H3C]interface GigabitEthernet 1/0/7
[H3C-GigabitEthernet1/0/7]port link-type trunk
[H3C-GigabitEthernet1/0/7]port trunk permit vlan 2 10
[H3C-GigabitEthernet1/0/7]quit
#设置话机VLAN2的DHCP地址池
[H3C]dhcp server ip-pool vlan2
[H3C-dhcp-pool-vlan2]network 192.168.2.0 mask 255.255.255.0
[H3C-dhcp-pool-vlan2]gateway-list 192.168.2.1
[H3C-dhcp-pool-vlan2]quit
#设置PCVLAN10的DHCP地址池
[H3C]dhcp server ip-pool vlan10
[H3C-dhcp-pool-vlan10]network 192.168.10.0 mask 255.255.255.0
[H3C-dhcp-pool-vlan10]gateway-list 192.168.10.1
[H3C-dhcp-pool-vlan10]dns-list 114.114.114.114
[H3C-dhcp-pool-vlan10]quit
#保存配置
[H3C]save force
**4 实验结果验证**
#交换机上查验证结果，查看话机是否加入到VLAN2
dis mac-address
MAC ADDR VLAN ID STATE PORT INDEX AGING TIME(s)
3897-d630-676b 10 Learned GigabitEthernet1/0/17 AGING
3897-d630-676b 2 Learned GigabitEthernet1/0/17 AGING
6ca8-4986-6d59 2 Learned GigabitEthernet1/0/1 AGING
0068-eb95-3683 10 Learned GigabitEthernet1/0/1 AGING

#查看voice vlan 配置是否生效
dis voice vlan oui
Oui Address Mask Description
0003-6b00-0000 ffff-ff00-0000 Cisco phone
00e0-7500-0000 ffff-ff00-0000 Polycom phone
6ca8-4900-0000 ffff-ff00-0000 avaya

#默认voice vlan默认为auto(自动模式)
dis voice vlan state
Maximum of Voice VLANs: 1
Current Voice VLANs: 1
Voice VLAN security mode: Security
Voice VLAN aging time: 1440 minutes
Voice VLAN enabled port and its mode:
PORT VLAN MODE COS DSCP
---
GigabitEthernet1/0/1 2 AUTO 6 46

#DHCP服务器上查看话机和PC获取的动作
%Jan 1 06:49:59:662 2013 DHCP DHCPS/5/DHCPS_ALLOCATE_IP: DHCP server information: Ser
ver IP = 192.168.2.1, DHCP client IP = 192.168.2.2, DHCP client hardware address = 6ca8-4986-6d5
9, DHCP client lease = 86400.

```
dis dhcp server ip-in-use all
Pool utilization: 0.59%
 IP address       Client-identifier/    Lease expiration          Type
                  Hardware address
 192.168.2.2      6ca8-4986-6d59        Jan  2 2013 06:49:59      Auto:COMMITTED
 192.168.10.4     0068-eb95-3683        Jan  2 2013 06:49:42      Auto:COMMITTED
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