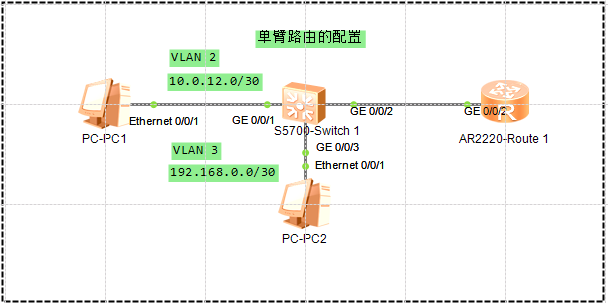
VLAN实现了在二层环境实现广播隔离。但是不同的VLAN间的通信仍然依靠三层设备来实现。

## 单臂路由

交换机和路由器之间的链路配置为Trunk链路，路由器上创建子接口支持VLAN路由



### 交换机Switch 1的配置

交换机与与主机端口配置为Access，与路由器之间端口为Trunk

[Switch 1]interface GigabitEthernet 0/0/1

[Switch 1-GigabitEthernet0/0/1]port link-type access

[Switch 1-GigabitEthernet0/0/1]port default vlan 2

[Switch 1]interface GigabitEthernet 0/0/3

[Switch 1-GigabitEthernet0/0/3]port link-type access

[Switch 1-GigabitEthernet0/0/3]port default vlan 3

[Switch 1-GigabitEthernet0/0/2]port link-type trunk

[Switch 1-GigabitEthernet0/0/2]port trunk allow-pass vlan 2 to 3

### 路由器配置

路由子接口上设置通信的VLAN的网关，另外要注意开启ARP广播

[Route A]interface GigabitEthernet 0/0/2.2

[Route A-GigabitEthernet0/0/2.2]dot1q termination vid 2

[Route A-GigabitEthernet0/0/2.2]ip address 10.0.12.1 30

[Route A-GigabitEthernet0/0/2.2]arp broadcast enable

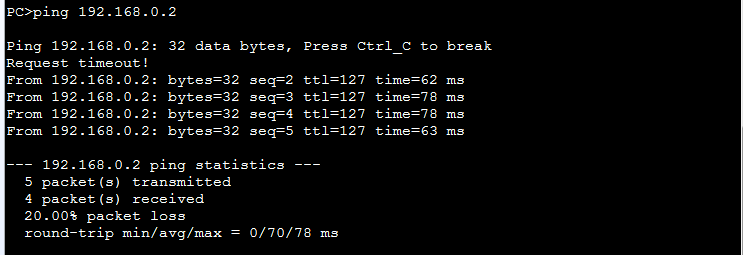
[Route A]interface GigabitEthernet 0/0/2.3

[Route A-GigabitEthernet0/0/2.3]dot1q termination vid 3

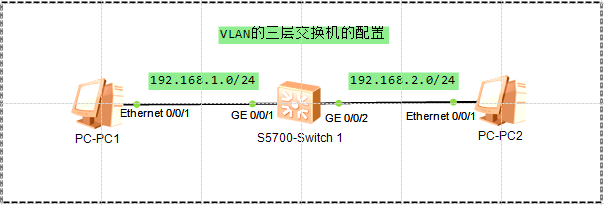
[Route A-GigabitEthernet0/0/2.3]ip address 192.168.0.1 30

[Route A-GigabitEthernet0/0/2.3]arp broadcast enable

验证



## 三层交换机



[Switch 1]interface GigabitEthernet 0/0/1

[Switch 1-GigabitEthernet0/0/1]port link-type access

[Switch 1-GigabitEthernet0/0/1]port default vlan 2

[Switch 1]interface GigabitEthernet 0/0/2

[Switch 1-GigabitEthernet0/0/2]port link-type access

[Switch 1-GigabitEthernet0/0/2]port default vlan 3

VLANif三层接口的配置

[Switch 1]interface Vlanif 2

[Switch 1-Vlanif2]ip address 192.168.1.1 255.255.255.0

[Switch 1]interface Vlanif 3

[Switch 1-Vlanif3]ip address 192.168.2.1 255.255.255.0

验证

