S5800_5820X交换机IGMP SNOOPING的配置

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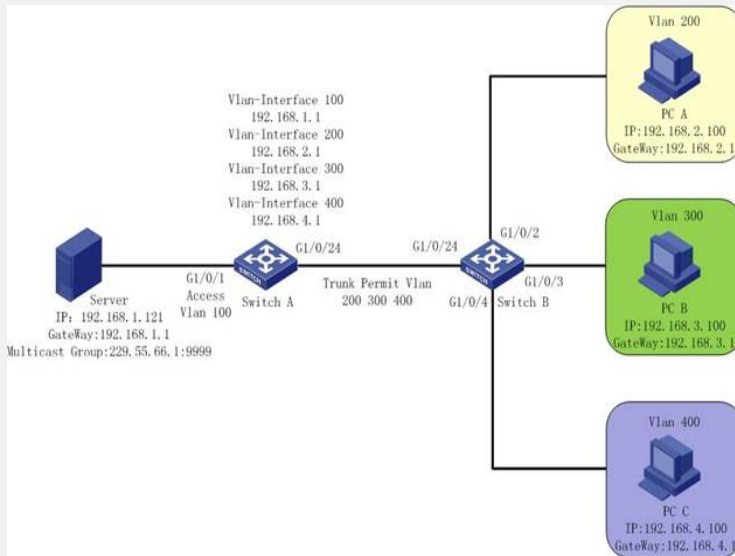S5800/5820X交换机IGMP SNOOPING的配置

一、 组网需求：

Switch A做组播源的网关，同时做Vlan 200、300和400用户的网关，Switch B做纯二层转发组播数据。

二、 组网图：

Switch A端口1连接组播源，端口24连接下行二层设备。

Switch B上行端口24连接Switch A，下行端口2、3、4分别连接Vlan 200、300、400的组播接受用户。

组播源上组播组地址为229.55.66.1，端口为9999。

三、 配置步骤：

1. 配置Switch A

#配置Vlan和虚接口IP地址

[H3C]vlan 100

[H3C-vlan100]port GigabitEthernet 1/0/1

[H3C-vlan100]quit

[H3C]interface Vlan-interface 100

[H3C-Vlan-interface100]ip address 192.168.1.1 24

[H3C-Vlan-interface100]quit

[H3C]vlan 200

[H3C-vlan200]quit

[H3C]interface Vlan-interface 200

[H3C-Vlan-interface200]ip address 192.168.2.1 24

[H3C-Vlan-interface200]quit

[H3C]vlan 300

[H3C-vlan300]quit

[H3C]interface Vlan-interface 300

[H3C-Vlan-interface300]ip address 192.168.3.1 24

[H3C-Vlan-interface300]quit

[H3C]vlan 400

[H3C-vlan400]quit

[H3C]interface Vlan-interface 400

[H3C-Vlan-interface400]ip address 192.168.4.1 24

[H3C-Vlan-interface400]quit

#配置下行接口为Trunk类型，并允许Vlan 200、300和400的报文通过

[H3C]interface GigabitEthernet 1/0/24

[H3C-GigabitEthernet1/0/24]port link-type trunk

[H3C-GigabitEthernet1/0/24]undo port trunk permit vlan 1

　Please wait... Done.

[H3C-GigabitEthernet1/0/24]port trunk permit vlan 200 300 400

Please wait... Done.
#使能组播路由，在各虚接口使能PIM-DM，并在用户侧虚接口使能IGMP
[H3C]multicast routing-enable
[H3C]interface Vlan-interface 100
[H3C-Vlan-interface100]pim dm
[H3C-Vlan-interface100]quit
[H3C]interface Vlan-interface 200
[H3C-Vlan-interface200]igmp enable
[H3C-Vlan-interface200]pim dm
[H3C-Vlan-interface200]quit
[H3C]interface Vlan-interface 300
[H3C-Vlan-interface300]igmp enable
[H3C-Vlan-interface300]pim dm
[H3C-Vlan-interface300]quit
[H3C]interface Vlan-interface 400
[H3C-Vlan-interface400]igmp enable
[H3C-Vlan-interface400]pim dm
[H3C-Vlan-interface400]quit
2. 配置Switch B
#配置Vlan和各接口属性
[H3C]vlan 200
[H3C-vlan200]port GigabitEthernet 1/0/2
[H3C-vlan200]quit
[H3C]vlan 300
[H3C-vlan300]port GigabitEthernet 1/0/3
[H3C-vlan300]quit
[H3C]vlan 400
[H3C-vlan400]port GigabitEthernet 1/0/4
[H3C-vlan400]quit
[H3C]interface GigabitEthernet 1/0/24
[H3C-GigabitEthernet1/0/24]port link-type trunk
[H3C-GigabitEthernet1/0/24]undo port trunk permit vlan 1
 Please wait... Done.
[H3C-GigabitEthernet1/0/24]port trunk permit vlan 200 300 400
 Please wait... Done.
#全局使能IGMP-SNOOPING
[H3C]igmp-snooping
[H3C-igmp-snooping]quit
#在Vlan 200、300、400上使能IGMP-SNOOPING
[H3C]vlan 200
[H3C-vlan200]igmp-snooping enable
[H3C-vlan200]quit
[H3C]vlan 300
[H3C-vlan300]igmp-snooping enable
[H3C-vlan300]quit
[H3C]vlan 400
[H3C-vlan400]igmp-snooping enable
[H3C-vlan400]quit

四、 配置关键点：
1. 在配置PIM和IGMP前必须使全网路由可达，如果Switch A和Switch B之间还有三层
设备，则需要在Switch A和中间三层设备之间使能单播路由协议，如OSPF。
2. 在Switch A上用户侧虚接口上使能PIM DM之前必须先使能IGMP。如果先使能PIM
DM，则无法使能IGMP。