## **NSD NETWORK DAY03**

1. 案例1: 动态路由

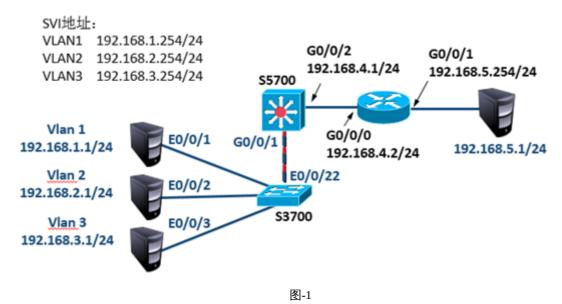
2. <u>案例2:基本ACL的配置(1)</u> 3. 案例3:基本ACL的配置(2)

4. 案例4: 高级ACL

## 1案例1: 动态路由

## 1.1 问题

通过配置静态路由协议ospf实现全网互通,按照图-1拓扑图所示



## 1.2 步骤

实现此案例需要按照如下步骤进行。

步骤一:配置交换机

1) S3700交换机配置

01.	[Huawei]vlan batch 2 3	//创建VLAN2、3
02.	[Huawei]interface Ethernet0/0/2	
03.	[Huawei-Ethernet0/0/2]port default vlan 2	
04.	[Huawei]interface Ethernet0/0/3	
05.	[Huawei-Ethernet0/0/3]port default vlan 3	
06.	[Huawei]interface Ethernet0/0/22	
07.	[Huawei-Ethernet0/0/22]port link-type trunk	

[Huawei-Ethernet0/0/22]port trunk allow-pass vlan all

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#### 2) S5700交换机配置

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01. [Huawei]vlan batch 2 3 4 //创建VLAN2、3、4 02. [Huawei]interface Vlanif 1 03. [Huawei-Vlanif4]ip address 192.168.1.254 24 04. [Huawei]interface Vlanif 2 05. [Huawei-Vlanif4]ip address 192.168.2.254 24 06. [Huawei]interface Vlanif 3 07. [Huawei-Vlanif4]ip address 192.168.3.254 24 08. [Huawei]interface Vlanif 4 09. [Huawei-Vlanif4]ip address 192.168.4.1 24 10. 11. [Huawei]interface GigabitEthernet 0/0/1 12. [Huawei-GigabitEthernet0/0/1] port link-type trunk 13. [Huawei-GigabitEthernet0/0/1] port trunk allow-pass vlan all 14. [Huawei]interface GigabitEthernet 0/0/2 15. [Huawei-GigabitEthernet0/0/2] port link-type access 16. [Huawei-GigabitEthernet0/0/2] port default vlan 4 17. [Huawei]ospf 1 18. [Huawei-ospf-1]area 0 19. [Huawei-ospf-1-area-0.0.0.0]network 192.168.1.0 0.0.0.255 20. [Huawei-ospf-1-area-0.0.0.0]network 192.168.2.0 0.0.0.255 21. [Huawei-ospf-1-area-0.0.0.0]network 192.168.3.0 0.0.0.255 22. [Huawei-ospf-1-area-0.0.0.0]network 192.168.4.0 0.0.0.255 23. [Huawei]ip route-static 0.0.0.0 0.0.0.0 192.168.4.2

#### 步骤二:配置路由器

#### AR2220路由器配置如下

O1. [Huawei]interface GigabitEthernet 0/0/0
O2. [Huawei-GigabitEthernet0/0/0] ip address 192.168.4.2 24
O3. [Huawei]interface GigabitEthernet 0/0/1
O4. [Huawei-GigabitEthernet0/0/0] ip address 192.168.5.254 24
O5. [Huawei]ospf 1
O6. [Huawei-ospf-1]area 0
O7. [Huawei-ospf-1-area-0.0.0.0]network 192.168.4.0 0.0.0.255

# 2 案例2:基本ACL的配置 (1)

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#### 2.1 问题

按照图-2所示拓扑结构,禁止主机pc2与pc1通信,而允许所有其他流量

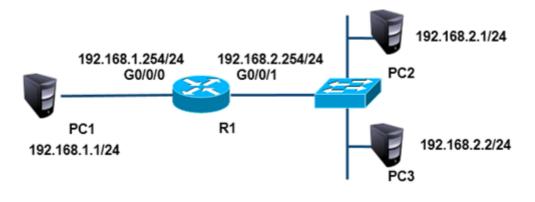


图-2

## 2.2 步骤

实现此案例需要按照如下步骤进行。

#### 步骤一:配置IP

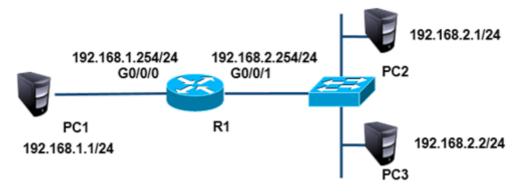
为路由器g0/0/0接口配置ip 192.168.1.254,为路由器g0/0/1接口配置ip 192.168.2.254

- 01. [Huawei]interface GigabitEthernet 0/0/0
- 02. [Huawei-GigabitEthernet0/0/0] ip address 192.168.1.254 24
- 03. [Huawei]acl 2000
- 04. [Huawei-acl-basic-2000]rule deny source 192.168.2.1 0
- 05. [Huawei]interface GigabitEthernet 0/0/1
- 06. [Huawei-GigabitEthernet0/0/1]ip address 192.168.2.254 24
- 07. [Huawei-GigabitEthernet0/0/1]traffic-filter inbound acl 2000

# 3 案例3:基本ACL的配置 (2)

## 3.1 问题

按照图-3所示拓扑结构,允许主机pc2与pc1互通,而禁止其他设备访问pc1



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#### 3.2 步骤

实现此案例需要按照如下步骤进行。

步骤一: 放行192.168.2.1, 拒绝其他设备

此步骤需要在上一实验基础上进行

- 01. [Huawei]acl 2001
- 02. [Huawei-acl-basic-2001]rule permit source 192.168.2.1 0
- 03. [Huawei-acl-basic-2001]rule deny source any
- 04. [Huawei]interface GigabitEthernet 0/0/1
- 05. [Huawei-GigabitEthernet0/0/1]undo traffic-filter inbound acl 2000
- 06. [Huawei-GigabitEthernet0/0/1] traffic-filter inbound acl 2001

## 4 案例4: 高级ACL

### 4.1 问题

按照图-4所示拓扑结构,禁止pc2访问pc1的ftp服务,禁止pc3访问pc1的www服务,所有主机的 其他服务不受限制

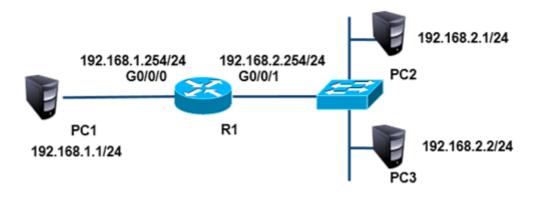


图-4

## 4.2 步骤

实现此案例需要按照如下步骤进行。

步骤一:根据协议所用端口进行封堵

此步骤需要在上一实验基础上进行

- 01. [Huawei]acl 3000
- 02. [Huawei-acl-adv-3000]rule deny tcp source 192.168.2.1 0 destination 192.168.1.1
- 03. 0 destination-port eq 21
- 04. [Huawei-acl-adv-3000]rule deny tcp source 192.168.2.2 0 destination 192.168.1.1
- 05. 0 destination-port eq 80

- 06. [Huawei]interface g0/0/1
- 07. [Huawei-GigabitEthernet0/0/1]traffic-filter inbound acl 3000 //在接口中应用acl

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