NSD NETWORK DAY02

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1 案例1: 划分VLAN

1.1 问题

在交换机上创建以下VLAN,按照拓扑图-1将端口加入到指定的VLAN并配置服务器IP地址,实现同VLAN主机的通信

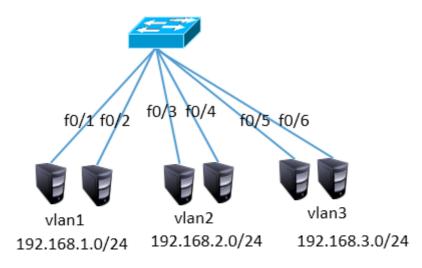


图-1

1.2 步骤

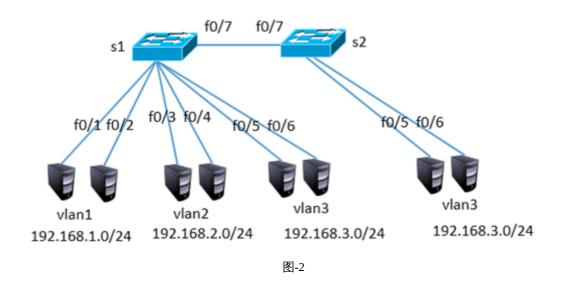
由于默认情况下所有接口都在VLAN1中,且VLAN1默认就存在,所以只需要配置VLAN2和 VLAN3即可。

01. <Huawei>system-view 02. [Huawei]vlan batch 2 3 //创建VLAN2、3 03. [Huawei]port-group 1 04. [Huawei-port-group-1]group-member Ethernet0/0/3 Ethernet0/0/4 05. [Huawei-port-group-1]port link-type access 06. [Huawei-port-group-1]port default vlan 2 07. [Huawei-port-group-1]quit 08. [Huawei]port-group 2 **Top** 09. [Huawei-port-group-2]group-member Ethernet0/0/5 Ethernet0/0/6 10. [Huawei-port-group-2]port link-type access

2案例2:多交换机VLAN的划分

2.1 问题

通过配置交换机实现图-2中的同VLAN主机互通



2.2 步骤

注:以下配置需要在案例1的基础上完成

S1配置

- 01. [Huawei]interface Ethernet0/0/7
- 02. [Huawei-Ethernet0/0/7] port link-type access
- 03. [Huawei-Ethernet0/0/7] port default vlan 3

S2配置

- 01. <Huawei>system-view
- 02. [Huawei]vlan 3 //创建VLAN3
- 03. [Huawei]port-group 1
- 04. [Huawei-port-group-1]group-member Ethernet0/0/5 to Ethernet0/0/7
- 05. [Huawei-port-group-1]port link-type access
- 06. [Huawei-port-group-1]port default vlan 3

3 案例3:配置trunk中继链路

Top

3.1 问题

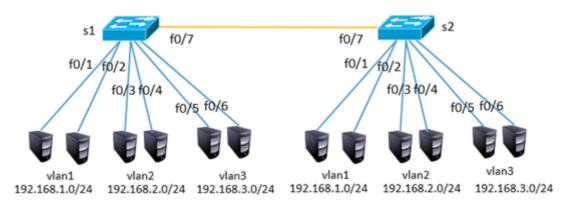


图-3

3.2 步骤

注:以下配置需要在案例2的基础上完成

S1配置

- 01. [Huawei]interface Ethernet0/0/7
- 02. [Huawei-Ethernet0/0/7]port default vlan 1
- 03. [Huawei-Ethernet0/0/7]port link-type trunk
- 04. [Huawei-Ethernet0/0/1]port trunk allow-pass vlan all

S2配置

- 01. <Huawei>system-view
- 02. [Huawei]vlan 2 //创建VLAN2
- 03. [Huawei]port-group 1
- 04. [Huawei-port-group-1]group-member Ethernet0/0/3 Ethernet0/0/4
- 05. [Huawei-port-group-1]port link-type access
- 06. [Huawei-port-group-1]port default vlan 2
- 07. [Huawei]interface Ethernet0/0/7
- 08. [Huawei-Ethernet0/0/7]port default vlan 1
- 09. [Huawei-Ethernet0/0/7]port link-type trunk
- 10. [Huawei-Ethernet0/0/1]port trunk allow-pass vlan all

4 案例4:链路聚合配置

4.1 问题

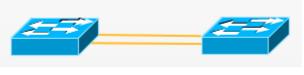


图-4

4.2 步骤

S1配置

- 01. [Huawei]interface Eth-trunk 1
- 02. [Huawei- Eth-trunk1]trunkport ethernet 0/0/1 0/0/2

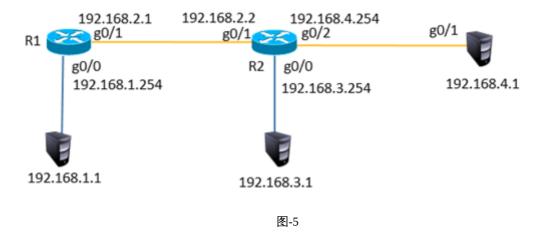
S2配置

- 01. [Huawei]interface Eth-trunk 1
- 02. [Huawei- Eth-trunk1]trunkport ethernet 0/0/1 0/0/2

5 案例5:配置静态路由

5.1 问题

按照图-5拓扑结构配置接口ip地址并通过静态路由实现全网互通



5.2 步骤

R1配置

- 05. [Huawei]interface GigabitEthernet 0/0/1
- 06. [Huawei-GigabitEthernet0/0/1]ip address 192.168.2.1 24
- 07. [Huawei]ip route-static 192.168.3.0 24 192.168.2.2
- 08. [Huawei]ip route-static 192.168.4.0 24 192.168.2.2

R2配置

- 01. <Huawei>system-view
- 02. [Huawei]interface GigabitEthernet 0/0/0
- 03. [Huawei-GigabitEthernet0/0/1]ip address 192.168.3.254 24
- 04. [Huawei-GigabitEthernet0/0/1]quit
- 05. [Huawei]interface GigabitEthernet 0/0/1
- 06. [Huawei-GigabitEthernet0/0/1]ip address 192.168.2.2 24
- 07. [Huawei-GigabitEthernet0/0/1]quit
- 08. [Huawei]interface GigabitEthernet 0/0/2
- 09. [Huawei-GigabitEthernet0/0/1]ip address 192.168.4.254 24
- 10. [Huawei]ip route-static 192.168.1.0 24 192.168.2.1

6 案例6:三层交换机基本配置

6.1 问题

按照图-6的拓扑结构配置ip地址并通过三层交换实现VLAN间通信

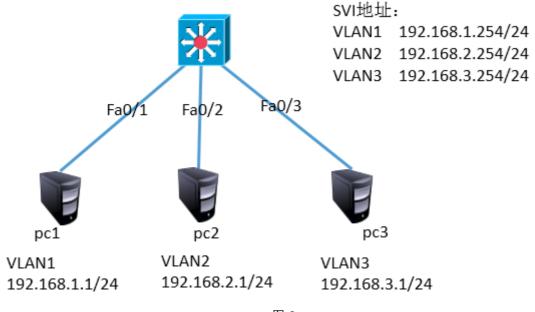


图-6

三层交换机配置

01. [Huawei]vlan batch 2 3 02. [Huawei]interface Vlanif 1 03. [Huawei-Vlanif1]ip address 192.168.1.254 24 04. [Huawei]interface Vlanif 2 05. [Huawei-Vlanif1]ip address 192.168.2.254 24 [Huawei]interface Vlanif 3 06. 07. [Huawei-Vlanif1]ip address 192.168.3.254 24 08. [Huawei]interface Ethernet0/0/2 [Huawei-Ethernet0/0/7] port link-type access 09. 10. [Huawei-Ethernet0/0/7] port default vlan 2 11. [Huawei]interface Ethernet0/0/3 12. [Huawei-Ethernet0/0/7] port link-type access [Huawei-Ethernet0/0/7] port default vlan 3 13.