

S3600v2系列交换机Super VLAN功能的典型配置

一、组网需求:

在下图所示的组网中:

SWA上创建Super VLAN 10, VLAN接口的IP地址为100.1.1.254/24

创建Sub VLAN: VLAN 2、VLAN 3。

端口Ethernet1/0/1属于VLAN 2, 端口Ethernet1/0/2属于VLAN 3

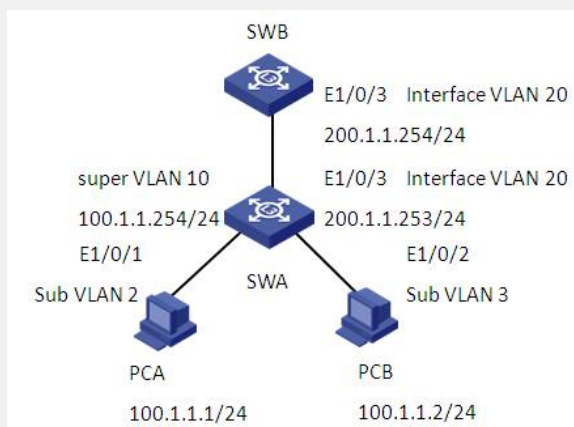
各Sub VLAN的用户之间能够满足二层隔离和三层互通。

创建VLAN 20用于上行互联到SWB, 其VLAN接口IP200.1.1.253/24

SWB上创建VLAN20, VLAN接口的IP地址为200.1.1.254/24

PCA和PCB的网关是SWA上Super VLAN 10的接口地址。

二、组网图:



三、配置步骤:

1、配置SWA

#创建VLAN 2并把E1/0/1加入VLAN 2

```
system-view
```

```
[SWA]vlan 2
```

```
[SWA-vlan2]port e1/0/1
```

#创建VLAN 3并把E1/0/2加入VLAN 3

```
[SWA]vlan 3
```

```
[SWA-vlan3]port e1/0/2
```

#创建VLAN 10, 指定VLAN 10为Super VLAN, VLAN 2、VLAN 3为Sub VLAN

```
system-view
```

```
[SWA]vlan 10
```

```
[SWA-vlan10]supervlan
```

```
[SWA-vlan10]subvlan 2 to 3
```

```
[SWA-vlan10]quit
```

#配置VLAN接口的IP地址为100.1.1.254/24, 为实现Super VLAN特性启用本地ARP代理功能。

```
[SWA]interface Vlan-interface 10
```

```
[SWA-Vlan-interface10]ip address 100.1.1.254 24
```

```
[SWA-Vlan-interface10]local-proxy-arp enable
```

```
# 创建VLAN 20并把E1/0/3加入VLAN 20
```

```
[SWA]vlan 20
```

```
[SWA-vlan2]port e1/0/3
```

```
[SWA-vlan2]quit
```

```
#配置VLAN20的虚接口IP地址。
```

```
[SWA]interface Vlan-interface 20
```

```
[SWA-Vlan-interface20]ip address 200.1.1.253 24
```

2、配置SWB

```
# 创建VLAN20。
```

```
system-view
```

```
[SWB]vlan 20
```

```
[SWB-vlan20]port e1/0/3
```

```
[SWB-vlan20]quit
```

```
# 配置VLAN20的虚接口IP地址。
```

```
[SWB]interface Vlan-interface 20
```

```
[SWB-Vlan-interface20]ip address 200.1.1.254 24
```

```
[SWB-Vlan-interface20]quit
```

```
# 配置缺省路由。
```

```
[SWB]ip route-static 0.0.0.0 0 200.1.1.253
```

3、验证配置结果

```
# SWA上显示Super VLAN 10的信息，可以看到其不包含物理端口，但其虚接口up。
```

```
[SWA]display supervlan
```

```
SuperVLAN ID : 10
```

```
SubVLAN ID : 2-3
```

```
VLAN ID: 10
```

```
VLAN Type: static
```

```
It is a Super VLAN.
```

```
Route Interface: configured
```

```
IPv4 address: 100.1.1.254
```

```
IPv4 subnet mask: 255.255.255.0
```

```
Description: VLAN 0010
```

```
Name: VLAN 0010
```

```
Tagged Ports: none
```

```
Untagged Ports: none
```

```
VLAN ID: 2
```

```
VLAN Type: static
```

```
It is a Sub VLAN.
```

```
Route Interface: configured
```

```
IPv4 address: 100.1.1.254
```

```
IPv4 subnet mask: 255.255.255.0
```

```
Description: VLAN 0002
```

```
Name: VLAN 0002
```

```
Tagged Ports: none
```

```
Untagged Ports:
```

```
    Ethernet1/0/1
```

```
VLAN ID: 3
```

VLAN Type: static

It is a Sub VLAN.

Route Interface: configured

IPv4 address: 100.1.1.254

IPv4 subnet mask: 255.255.255.0

Description: VLAN 0003

Name: VLAN 0003

Tagged Ports: none

Untagged Ports:

Ethernet1/0/2

PCA和PCB可以互相ping 通。

C:\>ping 100.1.1.2

Pinging 100.1.1.2 with 32 bytes of data:

Reply from 100.1.1.2: bytes=32 time=12ms TTL=254

Reply from 100.1.1.2: bytes=32 time=26ms TTL=254

Reply from 100.1.1.2: bytes=32 time=1ms TTL=254

Reply from 100.1.1.2: bytes=32 time=1ms TTL=254

Ping statistics for 100.1.1.2:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 1ms, Maximum = 26ms, Average = 10ms

从PCA tracert PCB发现其经过两跳，说明其经过了网关代理。

C:\>tracert 100.1.1.2

Tracing route to 100.1.1.2 over a maximum of 30 hops

1 22 ms 1 ms 1 ms 100.1.1.254

2 1 ms 1 ms 1 ms 100.1.1.2

Trace complete.

四、配置关键点：

无。