

## 组网及说明

## 1 配置需求或说明

## 1.1 适用产品系列

本案例适用于如S5500-20TP-SI、S5500-52C-EI、S5500-52C-PWR-EI、S5500-34C-HI、S5800-32C-EI、S5800-32F、S5800-60C-PWR、S5830-106S等S5500、S5800、S5830系列的交换机。

## 1.2 配置需求及实现的效果

由于网络规模迅速扩大，当前中心交换机（Device A）转发能力已经不能满足需求，需要另外增加一台设备Device B。现需要将两台设备配置IRF2堆叠，将网络转发能力提高一倍，并实现网络易管理、易维护。Device A和Device B分别使用自带的两个万兆口做堆叠口。也可以只用一个接口堆叠，根据实际情况而定。

## 2 组网图



## 配置步骤

## 3 配置步骤

## 3.1 配置IRF2

## 3.1.1 配置设备编号

# Device A保留缺省编号为1，不需要进行配置。同时，在Device B上将设备的成员编号修改为2。

```
system-view
```

```
[DeviceB] irf member 1 renumber 2
```

```
Warning: Renumbering the switch number may result in configuration change or loss. Continue? [Y/N]:y
```

```
[DeviceB]
```

## 3.1.2 配置堆叠口

#将两台设备断电后，按组网图所示连接IRF链路，然后将两台设备上电。在Device A上创建设备的IRF端口2，与物理端口Ten-GigabitEthernet1/0/25、Ten-GigabitEthernet1/0/26绑定，并保存配置。

```
system-view
```

```
[DeviceA] interface ten-gigabitethernet 1/0/25
```

```
[DeviceA-Ten-GigabitEthernet1/0/25] shutdown
```

```
[DeviceA-Ten-GigabitEthernet1/0/25] quit
```

```
[DeviceA] interface ten-gigabitethernet 1/0/26
```

```
[DeviceA-Ten-GigabitEthernet1/0/26] shutdown
```

```
[DeviceA-Ten-GigabitEthernet1/0/26] quit
```

```
[DeviceA] irf-port 1/2
```

```
[DeviceA-irf-port1/2] port group interface ten-gigabitethernet1/0/25
```

```
[DeviceA-irf-port1/2] port group interface ten-gigabitethernet1/0/26
```

```
[DeviceA-irf-port1/2] quit
```

```
[DeviceA] interface ten-gigabitethernet 1/0/25
```

```
[DeviceA-Ten-GigabitEthernet1/0/25] undo shutdown
```

```
[DeviceA-Ten-GigabitEthernet1/0/25] quit
```

```
[DeviceA] interface ten-gigabitethernet 1/0/26
```

```
[DeviceA-Ten-GigabitEthernet1/0/26] undo shutdown
```

```
[DeviceA-Ten-GigabitEthernet1/0/26] quit
```

```
[DeviceA] save force
```

# 在Device B上创建设备的IRF端口1，与物理端口Ten-GigabitEthernet2/0/25、Ten-GigabitEthernet2/0/26绑定，并保存配置。

```
system-view
```

```
[DeviceB] interface ten-gigabitethernet 2/0/25
```

```
[DeviceB-Ten-GigabitEthernet2/0/25] shutdown
```

```

[DeviceB-Ten-GigabitEthernet2/0/25] quit
[DeviceB] interface ten-gigabitethernet 2/0/26
[DeviceB-Ten-GigabitEthernet2/0/26] shutdown
[DeviceB-Ten-GigabitEthernet2/0/26] quit
[DeviceB] irf-port 2/1
[DeviceB-irf-port2/1] port group interface ten-gigabitethernet2/0/25
[DeviceB-irf-port2/1] port group interface ten-gigabitethernet2/0/26
[DeviceB-irf-port2/1] quit
[DeviceB] interface ten-gigabitethernet 2/0/25
[DeviceB-Ten-GigabitEthernet2/0/25] undo shutdown
[DeviceB-Ten-GigabitEthernet2/0/25] quit
[DeviceB] interface ten-gigabitethernet 2/0/26
[DeviceB-Ten-GigabitEthernet2/0/26] undo shutdown
[DeviceB-Ten-GigabitEthernet2/0/26] quit
[DeviceB] save force
# 激活DeviceA的IRF端口配置。
[DeviceA] irf-port-configuration active
# 激活DeviceB的IRF端口配置。
[DeviceB] irf-port-configuration active
# 两台设备间将会进行Master竞选，竞选失败的一方将自动重启，重启完成后，IRF形成，系统名称统一为DeviceA

```

### 3.2 BFD分裂检测（选配）

IRF设备一旦分裂，会变成两台配置完全相同的设备，导致业务转发有问题。为了避免此类问题出现，可以配置分裂检测。设备一旦检测到IRF2分裂，则自动关闭设备的所有非保留端口。在此介绍BFD MAD分裂检测配置方法。使用网线Device A上的端口GigabitEthernet1/0/1和Device B上的端口Gigabit Ethernet2/0/1连接起来。

# 创建VLAN 3，并将Device A上的端口GigabitEthernet1/0/1和Device B上的端口GigabitEthernet2/0/1加入VLAN中。

```

system-view
[DeviceA] vlan 3
[DeviceA-vlan3] port gigabitethernet 1/0/1 gigabitethernet 2/0/1
[DeviceA-vlan3] quit
# 创建VLAN接口3，并配置MAD IP地址。
[DeviceA] interface vlan-interface 3
[DeviceA-Vlan-interface3] mad bfd enable
[DeviceA-Vlan-interface3] mad ip address 192.168.2.1 24 member 1
[DeviceA-Vlan-interface3] mad ip address 192.168.2.2 24 member 2
[DeviceA-Vlan-interface3] quit

```

# 按组网图所示连接BFD MAD链路。

# 因为BFD MAD和生成树功能互斥，所以在GigabitEthernet1/0/1和GigabitEthernet2/0/1上关闭生成树协议。

```

[DeviceA] interface gigabitethernet 1/0/1
[DeviceA-Gigabitethernet1/0/1] undo stp enable
[DeviceA-Gigabitethernet1/0/1] quit
[DeviceA] interface gigabitethernet 2/0/1
[DeviceA-Gigabitethernet2/0/1] undo stp enable

```

配置关键点