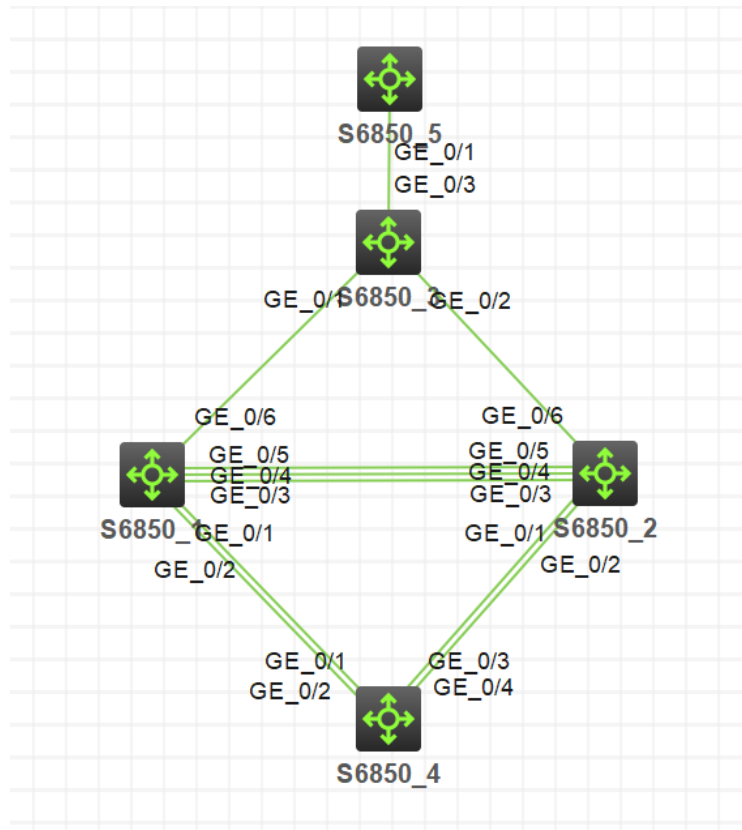


组网及说明



- SW1和SW2组成DR系统，SW4通过DR接口接入DR系统。
  - SW1和SW2通过等价路由接入到上行设备SW3。
  - 如果SW1或SW2与上行设备SW3的链路故障，报文可以通过路由绕行到对端DR设备处理，不影响服务器与外部网络的通信。
- 使用最新的HCL支持DRNI特性

## 配置步骤

- SW1和SW2配置VLAN接口100作为双活网关。SW1和SW2在VLAN接口100配置相同的IPv4地址和MAC地址，以使用户通过该网关访问外部网络。
- 配置SW1和SW2通过VLAN接口101实现三层互通。如果SW1或SW2与上行设备SW3的链路故障，报文可以通过路由绕行到对端DR设备处理。

### (1) 配置Device A

```
# 配置DRNI系统参数。
system-view
[SW1] drni system-mac 0002-0002-0002
[SW1] drni system-number 1
[SW1] drni system-priority 123
# 配置Keepalive报文的的目的IP地址和源IP地址。
[SW1] drni keepalive ip destination 21.1.1.2 source 21.1.1.1
# 配置端口GigabitEthernet1/0/5工作在三层模式，并配置IP地址为Keepalive报文的源IP地址。
[SW1] interface GigabitEthernet 1/0/5
[SW1-GigabitEthernet1/0/5] port link-mode route
[SW1-GigabitEthernet1/0/5] ip address 21.1.1.1 255.255.255.0
[SW1-GigabitEthernet1/0/5] ipv6 address 21::1 64
[SW1-GigabitEthernet1/0/5] quit
# 配置Keepalive链路接口为DRNI保留接口。
[SW1] drni mad exclude interface GigabitEthernet 1/0/5
# 创建动态二层聚合接口1。
[SW1] interface bridge-aggregation 1
[SW1-Bridge-Aggregation1] link-aggregation mode dynamic
[SW1-Bridge-Aggregation1] quit
# 分别将端口GigabitEthernet1/0/3和GigabitEthernet1/0/4加入到聚合组1中。
[SW1] interface GigabitEthernet 1/0/3
[SW1-GigabitEthernet1/0/3] port link-aggregation group 1
[SW1-GigabitEthernet1/0/3] quit
[SW1] interface GigabitEthernet 1/0/4
[SW1-GigabitEthernet1/0/4] port link-aggregation group 1
[SW1-GigabitEthernet1/0/4] quit
# 将二层聚合接口1配置为IPP口。
[SW1] interface bridge-aggregation 1
[SW1-Bridge-Aggregation1] port drni intra-portal-port 1
[SW1-Bridge-Aggregation1] undo port trunk permit vlan 1
[SW1-Bridge-Aggregation1] quit
# 创建动态二层聚合接口3，并配置该接口为DR口1。
[SW1] interface bridge-aggregation 3
[SW1-Bridge-Aggregation3] link-aggregation mode dynamic
[SW1-Bridge-Aggregation3] port drni group 1
[SW1-Bridge-Aggregation3] quit
# 将端口GigabitEthernet1/0/1和GigabitEthernet1/0/2加入到聚合组3中。
[SW1] interface GigabitEthernet 1/0/1
[SW1-GigabitEthernet1/0/1] port link-aggregation group 3
[SW1-GigabitEthernet1/0/1] quit
[SW1] interface GigabitEthernet 1/0/2
[SW1-GigabitEthernet1/0/2] port link-aggregation group 3
[SW1-GigabitEthernet1/0/2] quit
# 创建VLAN 100、VLAN 101。
[SW1] vlan 100
[SW1-vlan100] quit
[SW1] vlan 101
[SW1-vlan101] quit
# 配置二层聚合接口3为Trunk端口，并允许VLAN 100的报文通过。
[SW1] interface bridge-aggregation 3
[SW1-Bridge-Aggregation3] port link-type trunk
[SW1-Bridge-Aggregation3] port trunk permit vlan 100
[SW1-Bridge-Aggregation3] undo port trunk permit vlan 1
[SW1-Bridge-Aggregation3] quit
# 配置接口Vlan-interface100的IPv4地址和MAC地址，使其作为IPv4双活网关，IPv4地址为10
0.1.1.100，MAC地址为0000-0010-0010。
[SW1] interface vlan-interface 100
[SW1-Vlan-interface100] ip address 100.1.1.100 255.255.255.0
[SW1-Vlan-interface100] mac-address 0000-0010-0010
# 配置Vlan-interface100接口为DRNI保留接口。
[SW1] drni mad exclude interface vlan-interface100
# 创建接口Vlan-interface101，并配置地址，用于DR设备间三层互通。
[SW1] interface vlan-interface 101
[SW1-Vlan-interface101] ip address 101.1.1.1 255.255.255.0
[SW1-Vlan-interface101] quit
# 配置Vlan-interface101接口为DRNI保留接口。
[SW1] drni mad exclude interface vlan-interface101
# 配置Router ID为3.3.3.3。
[SW1] router id 3.3.3.3
```

# 配置OSPF，配置VLAN 100、VLAN 101接口使能OSPF，VLAN 100接口在OSPF中静默，实现DR设备间IPv4网络互通。

```
[SW1] ospf 1
[SW1-ospf-1] silent-interface vlan-interface 100
[SW1-ospf-1] import-route direct
[SW1-ospf-1] area 0
[SW1-ospf-1-area-0.0.0.0] quit
[SW1-ospf-1] quit
```

配置关键点 [SW1] interface vlan-interface 100  
双活网关注意 [SW1-Vlan-interface100] ospf 1 area 0.0.0.0  
配置相同 [SW1-Vlan-interface100] quit  
配置相同 [SW1] interface vlan-interface 101  
配置相同 [SW1-Vlan-interface101] ospf 1 area 0.0.0.0  
配置相同 [SW1-Vlan-interface101] quit