

### H3C万兆核心路由器SR8800 BFD for 静态路由 (echo方式)典型配置

#### 1 组网需求

Router A与Router B之间通过二层交换机连接，并存在2条物理路径。配置2条静态路由，要求：

- | 稳定情况下，Router A到Router B的路径选择其中1条静态路由转发；
- | 当生效的路径故障时，能快速切换到另一静态路由所在路径。

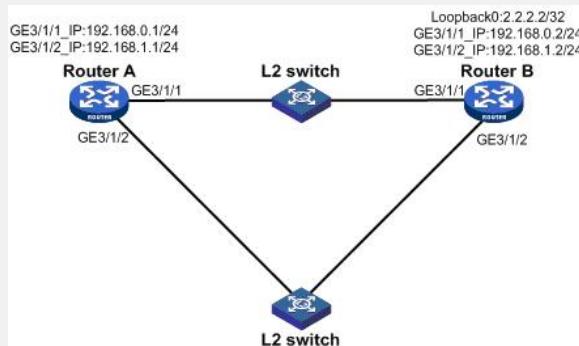


图1 BFD for静态路由组网图 (单跳检测)

#### 2 配置思路

- | 配置各接口IP地址
- | 配置静态路由，并把优选的静态路由绑定BFD echo报文方式。

#### 3 配置步骤

##### 3.1 路由器A的配置

###### 1. 配置步骤

# 配置各接口IP

```
<RouterA> system-view
[RouterA] interface gigabitEthernet 3/1/1
[RouterA-GigabitEthernet3/1/1] ip address 192.168.0.1 24
[RouterA-GigabitEthernet3/1/1] interface gigabitEthernet 3/1/2
[RouterA-GigabitEthernet3/1/1] ip address 192.168.1.1 24
# 配置2条静态路由,目的IP相同, preference不同, 优选的静态路由绑定BFD echo报文方式。其中echo-source-ip需要手动指定任意值, 不需要与实际接口对应。
<RouterA> system-view
[RouterA] bfd echo-source-ip 10.10.10.10
[RouterA] ip route-static 2.2.2.2 32 192.168.0.2 bfd echo-packet preference 40
[RouterA] ip route-static 2.2.2.2 32 192.168.1.2 preference 50
[RouterA] interface gigabitEthernet 3/1/1
[RouterA-GigabitEthernet3/1/1] bfd min-echo-receive-interval 10
[RouterA-GigabitEthernet3/1/1] bfd detect-multiplier 3
```

###### 2. 配置文件

```
#
bfd echo-source-ip 10.10.10.10
#
interface GigabitEthernet3/1/1
port link-mode route
ip address 192.168.0.1 255.255.255.0
bfd min-echo-receive-interval 10
bfd detect-multiplier 3
#
interface GigabitEthernet3/1/2
port link-mode route
ip address 192.168.1.1 255.255.255.0
#
ip route-static 2.2.2.2 255.255.255.255 192.168.0.2 bfd echo-packet preference 40
ip route-static 2.2.2.2 255.255.255.255 192.168.1.2 preference 50
#
```

### 3.2 路由器B的配置

#### 1. 配置步骤

```
# 配置各接口IP
<RouterB> system-view
[RouterB] interface LoopBack 0
[RouterB--LoopBack0] ip address 2.2.2.2 32
[RouterB--LoopBack0] interface GigabitEthernet 3/1/1
[RouterB-GigabitEthernet3/1/1] ip address 192.168.0.2 24
[RouterB-GigabitEthernet3/1/1] interface GigabitEthernet 3/1/2
[RouterB-GigabitEthernet3/1/1] ip address 192.168.1.2 24
```

#### 2. 配置文件

```
#
interface LoopBack0
ip address 2.2.2.2 255.255.255.255
#
interface GigabitEthernet3/1/1
port link-mode route
ip address 192.168.0.2 255.255.255.0
#
interface GigabitEthernet3/1/2
port link-mode route
ip address 192.168.1.2 255.255.255.0
#
```

#### 3.3 验证结果

可通过以下方式验证上述配置：

```
# 查看静态路由，可看到preference值低的被优选。
[RouterA] display ip routing-table protocol static
Public Routing Table : Static
Summary Count : 2
```

Static Routing table Status : < Active>

Summary Count : 1

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
2.2.2.2/32	Static	40	0	192.168.0.2	GE3/1/1

Static Routing table Status : < Inactive>

Summary Count : 1

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
2.2.2.2/32	Static	50	0	192.168.1.2	GE3/1/2

#查看BFD会话信息，可以看到设备省已经建立起来了相应的session：

```
[RouterA] display bfd session verbose
```

Total Session Num: 1      Init Mode: Active

Session Working Under Echo Mode:

Local Discr: 1	Source IP:192.168.0.1	Destination IP: 192.168.0.2
Session State: Up	Interface: GE3/1/1	
Min Recv Inter: 10ms	Act Trans Inter: 10ms	
Act Detect Inter: 30ms	Establish Time: 17:54:41	
Last Down Time: 17:54:41	Last Up Time: 17:54:42	
Connect Type: Direct	Board Num: 3	
Protocol: STATIC		
Diag Info: No Diagnostic		