

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。

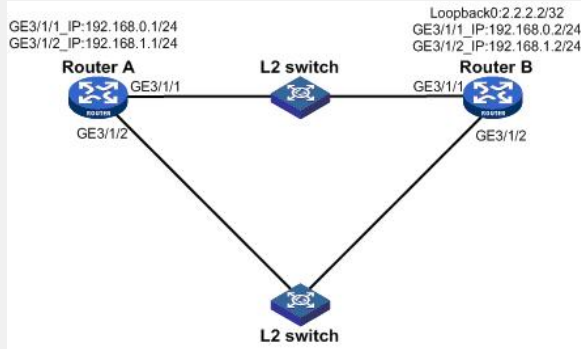


图1 BFD for静态路由组网图（单跳检测）

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
```