

MSR路由器

ISIS路由协议基本功能的配置

关键字: MSR;IPv6;ISIS;路由

一、组网需求

通过运行IS-IS协议实现中间系统到中间系统的域内路由信息交换

试验设备: RTA (MSR20-21) , RTB (MSR20-20) ,RTC (MSR30-20)

适用版本: Version 5.20, Beta 1105

二、组网图

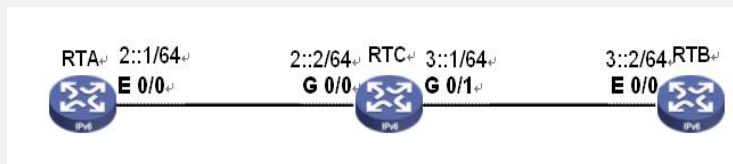


图1 IS-IS路由协议组网图

三、配置步骤

RTA配置	
[RTA]ipv6 //全局视图下使能ipv6	
[RTA]isis 1	
[RTA-isis-1]network-entity 86.0001.0000.0000.0006.00	
[RTA-isis-1]ipv6 enable	
[RTA-isis-1]quit	
[RTA]interface Ethernet 0/0	
[RTA-Ethernet0/0]ipv6 address 2::1/64	
[RTA-Ethernet0/0]isis ipv6 enable 1	
[RTA-Ethernet0/0]quit	
RTB配置	
[RTB]ipv6 //全局视图下使能ipv6	
[RTB] isis 1 //创建进程号为1的isis实例	
[RTB-isis-1]ipv6 enable //使能isis的ipv6功能	
[RTB-isis-1]network-entity 86.0001.0000.0000.0005.00 //设置该实例的网络实体字	
[RTB-isis-1]quit	
[RTB]interface Ethernet 0/0	
[RTB-Ethernet0/0]ipv6 address 3::2/64	
[RTB-Ethernet0/0]isis ipv6 enable 1 //接口下使能isis 的ipv6功能	
[RTB-Ethernet0/0]quit	
RTC配置	
[RTC]ipv6	
[RTC]isis 1	
[RTC-isis-1]ipv6 enable	
[RTC-isis-1]network-entity 86.0001.0000.0000.0007.00	
[RTC-isis-1]quit	
[RTC]interface GigabitEthernet 0/0	
[RTC-GigabitEthernet0/0]ipv6 address 2::2/64	
[RTC-GigabitEthernet0/0]isis ipv6 enable 100	
[RTC-GigabitEthernet0/0]quit	
[RTC]interface GigabitEthernet 0/1	
[RTC-GigabitEthernet0/1]ipv6 address 3::1/64	
[RTC-GigabitEthernet0/1]isis ipv6 enable 100	
[RTC-GigabitEthernet0/1]quit	

四、配置关键点

1. network-entity 值不要重复
2. 在每个接口下都使能ISIS IPv6 enable

五、试验分析

配置完成后通过RTA ping RTB能够ping通,结果显示如下:

<RTA>ping ipv6 3::2

```
PING 3::2 : 56 data bytes, press CTRL_C to break
Reply from 3::2
bytes=56 Sequence=1 hop limit=63 time = 3 ms
Reply from 3::2
bytes=56 Sequence=2 hop limit=63 time = 3 ms
Reply from 3::2
bytes=56 Sequence=3 hop limit=63 time = 3 ms
Reply from 3::2
bytes=56 Sequence=4 hop limit=63 time = 3 ms
Reply from 3::2
bytes=56 Sequence=5 hop limit=63 time = 3 ms
```

```
--- 3::2 ping statistics ---
```

```
5 packet(s) transmitted
```

```
5 packet(s) received
```

```
0.00% packet loss
```

```
round-trip min/avg/max = 3/3/3 ms
```

查看RTB的IPv6路由表，显示有到RTA的ISIS路由，显示如下：

```
[RTB]dis ipv routing-table
```

```
Routing Table :
```

```
Destinations : 5      Routes : 5
Destination: ::1/128      Protocol : Direct
NextHop                  Preference: 0
Interface : InLoop0      Cost : 0
Destination: 2::/64      Protocol : ISISv6
NextHop : FE80::20F:E2FF:FE30:C235 Preference: 15
Interface : Eth0/0       Cost : 20
Destination: 3::/64      Protocol : Direct
NextHop : 3::2           Preference: 0
Interface : Eth0/0       Cost : 0
Destination: 3::2/128    Protocol : Direct
NextHop : ::1           Preference: 0
Interface : InLoop0     Cost : 0
Destination: FE80::/10   Protocol : Direct
NextHop : ::            Preference: 0
Interface : NULL0       Cost : 0
```