MSR路由器IS-IS下的基本路由互通功能的配置

张瑞 2006-09-07 发表

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

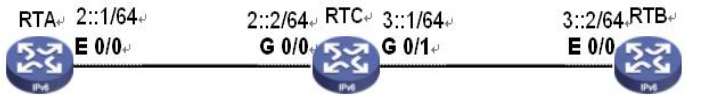

图1 IS-IS路由协议组网图

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
```