

The configuration of RIPng In MSR Series

Keywords: MSR;RIPng;IPv6

I Requirement for the diagram

Three MSR running RIPng to communicate.

Device List: 3 MSR;

CMW Version: Version 5.20, Beta 1105

II Network topology

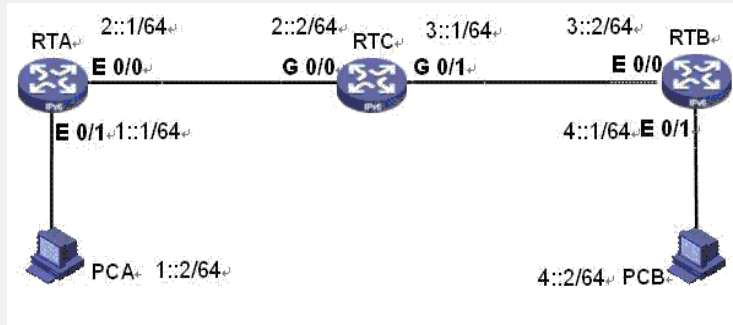


Figure 1 RIPng

IP address:

设备	接口	IPv6地址
RTA	E0/0	2::1/64
	E0/1	1::1/64
RTB	E0/0	3::2/64
	E0/1	4::1/64
RTC	G0/0	2::2/64
	G0/1	3::164
PCA		1::2/64
PCB		4::2/64

III Steps of configuration

- 1) Connect devices as showed above;
- 2) Config IPv6 address, and running IPv6 on each devices;

Example of PCB IPv6 address :

```
C:\>ipv6 install
C:\>ipconfig
Windows IP Configuration
Ethernet adapter 本地连接:
    Connection-specific DNS Suffix . :
    IP Address. . . . . : 4.0.0.2
    Subnet Mask . . . . . : 255.255.255.0
    IP Address. . . . . : fe80::212:3fff:fe17:fdab%6//由此处获得接口索引
为6
    Default Gateway . . . . . : 4.0.0.1
Tunnel adapter Teredo Tunneling Pseudo-Interface:
    Connection-specific DNS Suffix . :
    IP Address. . . . . : fe80::5445:5245:444f%5
    Default Gateway . . . . . :
Tunnel adapter 6to4 Tunneling Pseudo-Interface:
    Connection-specific DNS Suffix . :
    IP Address. . . . . : 2002:400:2::400:2
    Default Gateway . . . . . :
Tunnel adapter Automatic Tunneling Pseudo-Interface:
    Connection-specific DNS Suffix . :
    IP Address. . . . . : fe80::5efe:4.0.0.2%2
    Default Gateway . . . . . :
```

```
C:\>ipv6 adu 6/1::2 //set IPv6 address to 1::2
C:\>ipconfig //check result
Ethernet adapter 本地连接:
    Connection-specific DNS Suffix . :
    IP Address. . . . . : 4.0.0.2
    Subnet Mask . . . . . : 255.255.255.0
    IP Address. . . . . : 1::2
    IP Address. . . . . : fe80::212:3fff:fe17:fdab%6
    Default Gateway . . . . . : 4.0.0.1
```

note: if you want to cancel this IPv6 address on PC:

```
C:\>ipv6 adu 6/1::2 life 0
```

【RTB】配置:

```
<RTB>sys
System View: return to User View with Ctrl+Z.
[RTB]ipv6
[RTB]ripng 1
[RTB-ripng-1]q
[RTB]interface Ethernet 0/1
[RTB-Ethernet0/1]ipv6 address 4::1/64//set E0/1 IPv6 address
[RTB-Ethernet0/1]ripng 1 enable//enable RIPng
[RTB-Ethernet0/1]quit
[RTB]interface Ethernet 0/0
[RTB-Ethernet0/0]ipv6 address 3::2/64
[RTB-Ethernet0/0]ripng 1 enable//enable RIPng
[RTB-Ethernet0/0]quit
```

【RTA】配置:

```
< RTA >sys
System View: return to User View with Ctrl+Z.
[RTA]ipv6 //enable Ipv6
[RTB]ripng 1
[RTB-ripng-1]q
[RTA]interface Ethernet 0/1
[RTA-Ethernet0/1] ipv6 address 1::1/64 //connect PC
[RTA-Ethernet0/1]ripng 1 enable//enable RIPng
[RTA-Ethernet0/1]quit
[RTA]interface Ethernet 0/0
[RTA-Ethernet0/0]ip add 2::1/64 //config E0/0 Ipv6 address
[RTA-Ethernet0/0]ripng 1 enable //enable RIPng
[RTA-Ethernet0/0]quit
```

【RTC】配置:

```
<RTC>sys
[RTA]ipv6 //enable Ipv6
[RTB]ripng 1
[RTB-ripng-1]q
[RTC]interface GigabitEthernet 0/0
[RTC-GigabitEthernet0/0]ipv6 address 2::2/64
[RTA-Ethernet0/0]ripng 1 enable//enalbe RIPng
[RTC-GigabitEthernet0/0]quit
[RTC]interface GigabitEthernet 0/1
[RTC-GigabitEthernet0/1]ipv6 address 3::1/64
[RTA-Ethernet0/1]ripng 1 enable//enalbe RIPng
[RTC-GigabitEthernet0/1]quit
```

PCB上配置默认路由:

```
C:\>ipv6 rtu ::0 6/4::1 //default next hop is 4::1
```

PCA上配置默认路由:

```
C:\>ipv6 rtu ::0 4/1::1 //set default gateway of PC 1::1
```

IV Key notes in the configuration

1) Must running RIPng under according interface. RIPng is not enabled as default.

V Result Check

Routers can communicate eachother through RIPng.

