

The configuration of IPv6 PIM-DM In MSR Series

Keywords:MSR;IPv6 PIM-DM;MLD;Multicast

I Requirement for the diagram

The interface E0/0 connect multicase source, interface S0/1 connect RTB, interface E0/1 connect host Receiver1, running IPv6 PIM-DM under every interface. Running MLD protocol under the interface E0/1; S0/2 of RTB connect RTA, interface S0/2 connect RTC, interface E0/1 connect host Receiver2, running IPv6 PIM-DM under every interface, running MLD protocol under interface E0/1; The interface S0/2 connect RT B, interface E0/1 connect host Receiver3, running IPv6 PIM-DM under every interface, running MLD under E0/1.

Device List: 3, MSR

CMW Version: version 5.20, Beta 1106

II Network topology

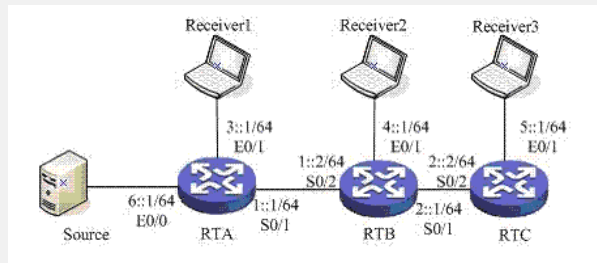


Figure 1 IPv6 PIM-DM

III Steps of configuration

```

RTA
#
//Enable IPv6 under global view
ipv6
#
//Enable IPv6 Multicast under global view
multicast ipv6 routing-enable
#
//Enable Ripng of IPv6 under global view
ripng 1
#
//Connect the multicast source of IPv6
interface Ethernet0/0
ipv6 address 6::1/64
undo ipv6 nd ra halt
//Enable Ripng
ripng 1 enable
//Enable pim ipv6 dm
pim ipv6 dm
#
//Connect IPv6 multicast receiver Receiver1
interface Ethernet0/1
ipv6 address 3::1/64
undo ipv6 nd ra halt
//Eable Ripng
ripng 1 enable
//Enable mldv2
mld enable
mld version 2
#
//Connect RTB
interface Serial0/1
link-protocol ppp
ipv6 address 1::1/64
//Enable Ripng
ripng 1 enable
//Enable pim ipv6 dm
pim ipv6 dm
#
    
```

RTB关键配置脚本

```

#
//Enable IPv6 under global view
ipv6
#
//Running IPv6 multicast under global view
multicast ipv6 routing-enable
#
//Enable IPv6 Ripng under global view
ripng 1
#
//Connect IPv6 multicast receiver Receiver 2
interface Ethernet0/1
ipv6 address 4::1/64
undo ipv6 nd ra halt
//Enable ripng
ripng 1 enable
//Enable mldv2
mld enable
mld version 2
#
//Connect RTC
interface Serial0/1
link-protocol ppp
ipv6 address 2::1/64
//Enable ripng
ripng 1 enable
//Enable pim ipv6 dm
pim ipv6 dm
#
//Connect RTA
interface Serial0/2
link-protocol ppp
ipv6 address 1::2/64
//Enable ripng
ripng 1 enable
//Enable pim ipv6 dm
pim ipv6 dm
#

```

RTC

```

#
//Enable IPv6 under global view
ipv6
#
//Running IPv6 multicast under global view
multicast ipv6 routing-enable
#
//Enable IPv6 Ripng under global view
ripng 1
#
//Connect IPv6 multicast receiver Receiver3
interface Ethernet0/1
ipv6 address 5::1/64
undo ipv6 nd ra halt
//Enable ripng
ripng 1 enable
//Enable mldv2
mld enable
mld version 2
#
//Connect RTB
interface Serial0/2
link-protocol ppp
ipv6 address 2::2/64
//Enable ripng
ripng 1 enable
//Enable pim ipv6 dm
pim ipv6 dm
#

```

IV Key notes in the configuration

- 1) Make sure they could communicate with each other of RTA,RTB,RTC base on Ripng;
- 2) Enable IPv6 under global view;
- 3) Enable IPv6 Multicast under global view;
- 4) Make sure enable IPv6 Multicast under every router, and every interface that connect with other router enable IPv6 PIM-DM;
- 5) Enable MLD under every edge interface;
- 6) Server sending out multicast package, Receiver sending mld report package;
- 7) Using command below to check the result:
display pim ipv6 routing-table
display multicast ipv6 forwarding-table

