

The configuration of ISATAP In MSR Series

Keywords: MSR;IPv6;ISATAP

I Requirement for the diagram

Connect IPv6 host in IPv4 area through ISATAP tunnel.

Device List: 3 MSR;

CMW Version: Version 5.20, Beta 1105

II Network topology

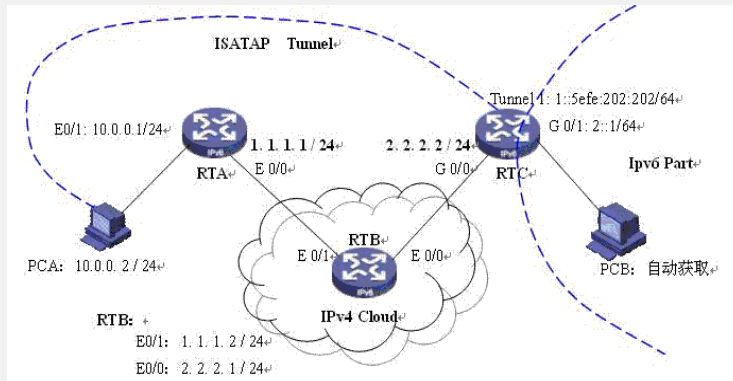


Figure 1 ISATAP of IPv6

IP address list:

Device	Interface	Ipv4 address	IPv6 address
RTA	E0/0	2.2.2.2/24	
	E0/1	10.0.0.1/24	
RTB	E0/0	2.2.2.1/24	
	E0/1	1.1.1.2/24	
RTC	G0/0	2.2.2.2/24	
	G0/1		2::1/64
	Tunnel1		1::5EFE:202:202/64
PCA		10.0.0.2/24	
PCB			Auto config

III Steps of configuration

```

RTA
#
router id 1.1.1.1
#
ipv6
#
interface Ethernet0/0
port link-mode route
ip address 1.1.1.1 255.255.255.0
#
interface Ethernet0/1
port link-mode route
ip address 10.0.0.1 255.255.255.0
#
ospf 1
area 0.0.0.0
network 1.1.1.0 0.0.0.255
network 10.0.0.0 0.0.0.255
    
```

```

#
router id 2.2.2.2
#
ipv6
#
interface Ethernet0/0
port link-mode route
ip address 2.2.2.1 255.255.255.0
#
interface Ethernet0/1
port link-mode route
ip address 1.1.1.2 255.255.255.0
#
ospf 1
area 0.0.0.0
network 1.1.1.0 0.0.0.255
network 2.2.2.0 0.0.0.255

```

```

RTC
#
router id 3.3.3.3
#
ipv6
#
interface GigabitEthernet0/0
port link-mode route
ip address 2.2.2.2 255.255.255.0
#
interface GigabitEthernet0/1
port link-mode route
ipv6 address 2::1/64
undo ipv6 nd ra halt
//ISATAP part
#
interface Tunnel1
ipv6 address 1::5EFE:202:202/64
ipv6 nd ra router-lifetime 9000
undo ipv6 nd ra halt
tunnel-protocol ipv6-ipv4 isatap
source 2.2.2.2
#
ospf 1
area 0.0.0.0
network 2.2.2.0 0.0.0.255
network 4.4.4.0 0.0.0.255

```

IV Key notes in the configuration

- 1) Care about the address format of ISATAP interface;
- 2) Make sure IPv4 network is reachable.

V Result Check

From RTC ping the address of PCA auto get:

```

[RTC-2921]ping ipv 1::5efe:10.0.0.2
PING 1::5efe:10.0.0.2 : 56 data bytes, press CTRL_C to break
  Reply from 1::5EFE:A00:2
    bytes=56 Sequence=1 hop limit=64 time = 2 ms
  Reply from 1::5EFE:A00:2
    bytes=56 Sequence=2 hop limit=64 time = 2 ms
  Reply from 1::5EFE:A00:2
    bytes=56 Sequence=3 hop limit=64 time = 2 ms
  Reply from 1::5EFE:A00:2
    bytes=56 Sequence=4 hop limit=64 time = 1 ms
  Reply from 1::5EFE:A00:2
    bytes=56 Sequence=5 hop limit=64 time = 1 ms

--- 1::5efe:10.0.0.2 ping statistics ---
  5 packet(s) transmitted
  5 packet(s) received
  0.00% packet loss
  round-trip min/avg/max = 1/1/2 ms

```