

The configuration of Load-balance with VRRP In MSR

Keywords: MSR;VRRP;Load-balance

I Requirement for the diagram

Two routers RTA and RTB join two VRRP group, for redundancy and load-balancing.

Device List: 3, MSR; 2, Switch; 2 PC

CMW Version: Version 5.20, Beta 110

II Network topology

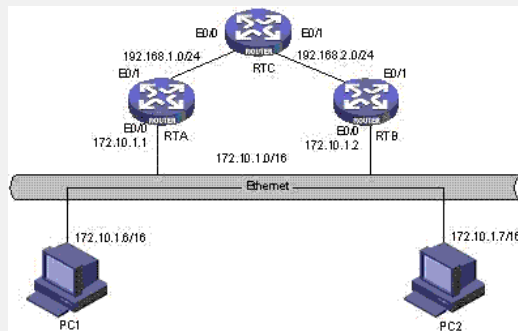


Figure1-1 MSR vrrp

IP address notes:

(As show above: The address between RTA and RTC is 192.168.1.0/24, RTC and RTB is 192.168.2.0/24)

RTA: E0/0: 172.10.1.1/16 E0/1: 192.168.1.1/24

RTB: E0/0: 172.10.1.2/16 E0/1: 192.168.2.1/24

RTC: E0/0: 192.168.1.2/24 E0/1: 192.168.2.2/24

Vrrp interface 1: 172.10.2.1

Vrrp interface 2: 172.10.3.1

III Steps of configuration

RTA

```
#
interface Ethernet0/0
port link-mode route
ip address 172.10.1.1 255.255.0.0
vrrp vrid 1 virtual-ip 172.10.2.1
vrrp vrid 1 priority 150
vrrp vrid 2 virtual-ip 172.10.3.1
#
interface Ethernet0/1
port link-mode route
ip address 192.168.1.1 255.255.255.0
#
rip 1
network 172.10.0.0
network 192.168.1.0
```

RTB

```
#
interface Ethernet0/0
port link-mode route
ip address 172.10.1.2 255.255.0.0
vrrp vrid 1 virtual-ip 172.10.2.1
vrrp vrid 2 virtual-ip 172.10.3.1
vrrp vrid 2 priority 150
#
interface Ethernet0/1
port link-mode route
ip address 192.168.2.1 255.255.255.0
#
rip 1
network 172.10.0.0
network 192.168.2.0
```

RTC

```
#
interface Ethernet 0/0
 ip address 192.168.1.2 255.255.255.0
#
interface Ethernet 0/1
 ip address 192.168.2.2 255.255.255.0
#
interface LoopBack1
 ip address 192.168.8.8 255.255.255.255
#
rip
 network 192.168.1.0
 network 192.168.2.0
 network 192.168.8.0
```

IV Key notes in the configuration

1) After configuration, Tracert Loopback1 of RTC from PC1, data passing RTA and reach RTC. Tracert Loopback1 of RTC from PC2, data passing RTB and reach RTC.

2) After shutdown G0/0 of RTA, checking vrrp info of RTB, has result below:

after shut down RTA gi 0/0:

```
-----
[RTB]dis vrrp
IPv4 Standby Information:
Run Method   : VIRTUAL-MAC
Virtual Ip Ping : Enable
Interface    : Ethernet0/0
VRID         : 1           Adver. Timer : 1
Admin Status : UP          State       : Master
Config Pri   : 100         Run Pri     : 100
Preempt Mode : YES        Delay Time  : 0
Auth Type    : NONE
Virtual IP   : 172.10.2.1
Virtual MAC  : 0000-5e00-0101
Master IP    : 172.10.1.2

Interface    : Ethernet0/0
VRID         : 2           Adver. Timer : 1
Admin Status : UP          State       : Master
Config Pri   : 150         Run Pri     : 150
Preempt Mode : YES        Delay Time  : 0
Auth Type    : NONE
Virtual IP   : 172.10.3.1
Virtual MAC  : 0000-5e00-0102
Master IP    : 172.10.1.2
```

As we can see, two virtual gateway of vrrp all in RTB.