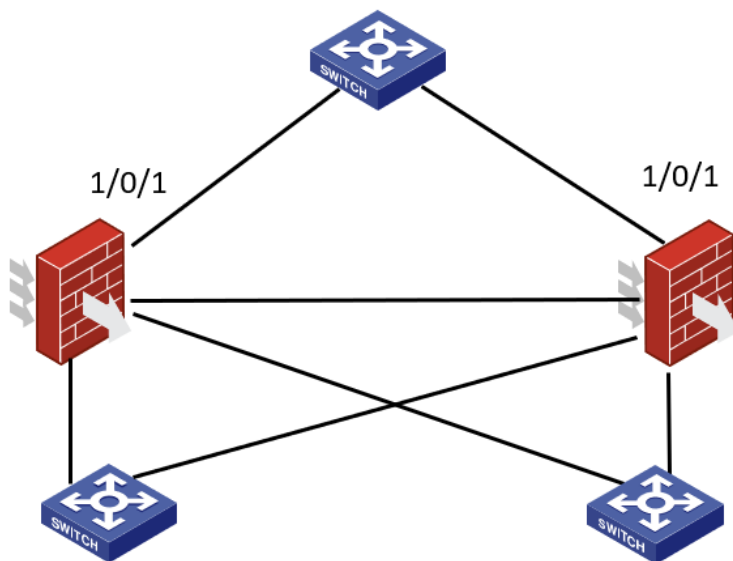


组网及说明

组网:



问题描述

RBM切换测试中主设备DOWN掉上行接口后, 主设备vrrp状态切换为Initialize状态, 备设备仍然保持Backup状态不进行切换。

过程分析

- 1、组网: 标准组网, 主备设备上行接口均为1/0/1
- 2、主设备DOWN掉1/0/1接口后vrrp变化:

=====display vrrp verbose=====

```
IPv4 Virtual Router Information:
Running mode      : Standard
RBM control channel is established
VRRP active group status : Master
VRRP standby group status: Master
Total number of virtual routers : 9
Interface GigabitEthernet1/0/1
VRID (group)   : 14 (Active)   Adver Timer : 100
Admin Status   : Up           State       : Initialize
Config Pri     : 100          Running Pri  : 100
Preempt Mode   : Yes         Delay Time  : 0
Auth Type      : Not supported
Version        : 3
Virtual IP     : 111.2.177.40/32
Master IP      : 0.0.0.0
```

此时备设备vrrp状态:

=====display vrrp verbose=====

```
IPv4 Virtual Router Information:
Running mode      : Standard
RBM control channel is established
VRRP active group status : Backup
VRRP standby group status: Backup
Total number of virtual routers : 9
Interface GigabitEthernet1/0/1
VRID (group)   : 14 (Standby)   Adver Timer : 100
Admin Status   : Up           State       : Backup
Config Pri     : 100          Running Pri  : 100
Preempt Mode   : Yes         Delay Time  : 0
```

Become Master : --
Auth Type : Not supported
Version : 3
Virtual IP : 111.2.177.40/32
Master IP : 111.2.177.41

3. 故障时主设备隧道情况查看如下，且测试两端HA通道互通：

```
RBM_P<F5030-6GW>dis rem st
Remote backup group information:
Backup mode: Active/standby
Device management role: Primary
Device running status: Active
Data channel interface: GigabitEthernet1/7/4
Local IP: 192.168.x.1
Remote IP: 192.168.x.2 Destination port: 60064
Control channel status: Connected
Keepalive interval: 1s
Keepalive count: 10
Configuration consistency check interval: 12 hour
Configuration consistency check result: Consistent(2024-08-11 16:21:41)
Configuration backup status: Auto sync enabled
Session backup status: Hot backup enabled
Delay-time: 1 min
Uptime since last switchover: 0 days, 0 hours, 40 minutes
Switchover records:
Time          Status change  Cause
2024-08-11 15:48:44 Standby to Active Switchover request
2024-08-11 15:13:18 Active to Standby Switchover request
2024-08-11 15:07:29 Active to Active  Keepalive link established
2024-08-11 14:49:33 Standby to Active Interface status changed
2024-08-11 14:49:33 Active to Standby The local device quits the remote backup group
2024-08-11 14:47:05 Initial to Active The local device quits the remote backup group
2024-08-11 14:43:54 Active to Standby The local device quits the remote backup group
2024-08-11 13:24:11 Active to Active  Keepalive link established
2024-08-11 13:23:50 Standby to Active Keepalive link established
2024-08-11 13:06:56 Active to Standby Interface status changed
<F5030-6GW>ping 192.168.x.2
Ping 192.168.x.2 (192.168.x.2): 56 data bytes, press CTRL+C to break
56 bytes from 192.168.X.2: icmp_seq=0 ttl=255 time=1.085 ms
56 bytes from 192.168.X.2: icmp_seq=1 ttl=255 time=0.351 ms
56 bytes from 192.168.X.2: icmp_seq=2 ttl=255 time=1.151 ms
56 bytes from 192.168.X.2: icmp_seq=3 ttl=255 time=1.138 ms
56 bytes from 192.168.X.2: icmp_seq=4 ttl=255 time=0.368 ms

--- Ping statistics for 192.168.X.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
```

故障时备设备HA状态查看，且测试两端HA通道互通：

```
RBM_S<H3C>dis rem st
Remote backup group information:
Backup mode: Active/standby
Device management role: Secondary
Device running status: Standby
Data channel interface: GigabitEthernet1/7/4
Local IP: 192.168.X.2
Remote IP: 192.168.X.1 Destination port: 60064
Control channel status: Connected
Keepalive interval: 1s
Keepalive count: 10
Configuration consistency check interval: 12 hour
Configuration consistency check result: Not Performed
Configuration backup status: Auto sync enabled
Session backup status: Hot backup enabled
Uptime since last switchover: 0 days, 0 hours, 39 minutes
```

Switchover records:

Time	Status change	Cause
2024-08-11 15:46:07	Active to Standby	Switchover request
2024-08-11 15:10:41	Standby to Active	Switchover request
2024-08-11 15:04:53	Standby to Standby	Keepalive link established
2024-08-11 14:46:56	Active to Standby	Interface status changed
2024-08-11 14:46:56	Active to Active	The peer device quits the remote backup group
2024-08-11 14:41:35	Active to Active	Keepalive link disconnected
2024-08-11 14:41:18	Standby to Active	The peer device quits the remote backup group
2024-08-11 13:21:35	Standby to Standby	Keepalive link established
2024-08-11 13:21:14	Active to Standby	Keepalive link established
2024-08-11 13:04:20	Standby to Active	Interface status changed

RBM_S<H3C>ping 192.168.X.1

Ping 192.168.X.1 (192.168.254.1): 56 data bytes, press CTRL+C to break

56 bytes from 192.168.X.1: icmp_seq=0 ttl=255 time=0.454 ms

56 bytes from 192.168.X.1: icmp_seq=1 ttl=255 time=1.154 ms

56 bytes from 192.168.X.1: icmp_seq=2 ttl=255 time=1.101 ms

56 bytes from 192.168.X.1: icmp_seq=3 ttl=255 time=0.402 ms

56 bytes from 192.168.X.1: icmp_seq=4 ttl=255 time=0.267 ms

--- Ping statistics for 192.168.X.1 ---

5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss

4、此时注意到现场组网，现场配置了多组RBM+VRRP，检查备机其他组VRRP状态是异常的，其他组备机VRRP状态异常相当于备机的状态是异常的。

```
Interface Ten-GigabitEthernet1/1/3
  VRID (group) : 18 (Standby) Adver Timer : 100
  Admin Status : Up State : Initialize
  Config Pri : 100 Running Pri : 100
  Preempt Mode : Yes Delay Time : 0
  Auth Type : Not supported
  Version : 3
  Virtual IP : 10.255. .254/32
  Master IP : 0.0.0.0
```

解决方法

现场配置了多组VRRP+RBM，一组VRRP状态异常的话会影响整个设备的RBM状态，检查时需要检查所有VRRP组状态。现场这组VRRP状态异常的原因是因为未接网线，接好网线后切换测试恢复正常。