

组网及说明

RBM结合VRRP的典型组网

关键配置:

主:

```
remote-backup group
data-channel interface Route-Aggregation64
configuration sync-check interval 12
delay-time 1
adjust-cost ospf enable absolute 1000
track 1
local-ip 1.1.1.1
remote-ip 1.1.1.2
device-role primary
```

#

```
interface Route-Aggregation1.520
description NPMSC
ip address 132.177.67.97 255.255.255.240
vrrp vrid 23 virtual-ip 132.177.67.99 active
vrrp vrid 23 priority 120
vrrp vrid 23 preempt-mode delay 20
vlan-type dot1q vid 520
```

备:

```
remote-backup group
data-channel interface Route-Aggregation64
configuration sync-check interval 12
delay-time 1
adjust-cost ospf enable absolute 1000
track 1
local-ip 1.1.1.2
remote-ip 1.1.1.1
device-role secondary
```

#

```
interface Route-Aggregation1.520
description NPMSC
ip address 132.177.67.98 255.255.255.240
vrrp vrid 23 virtual-ip 132.177.67.99 standby
vlan-type dot1q vid 520
```

问题描述

现场新增子接口的VRRP相关配置,发现配置过程中RBM状态不断发生切换, VRRP也有翻转.

过程分析

查看日志,发现现场的操作顺序如下:

RBM主设备上创建子接口后,先配置的IP以及VRRP等信息。

此时VRRP状态显示为Master符合预期。

```
%Mar 18 00:27:25:892 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 120 (configured on Route-Aggregation1.120) changed from Initialize to Master: Interface event received.
%Mar 18 00:27:25:884 2022 TJLT-HLD-JiFeiFW-F5000A-1 SHELL/6/SHELL_CMD: -Line=vty0-IPAd
dr=172.16.255.2-User=admin; Command is vrrp vrid 120 virtual-ip 132.177.64.49 active
%Mar 18 00:27:25:868 2022 TJLT-HLD-JiFeiFW-F5000A-1 SHELL/6/SHELL_CMD: -Line=vty0-IPAd
dr=172.16.255.2-User=admin; Command is ip address 132.177.64.50 255.255.255.248
%Mar 18 00:27:25:683 2022 TJLT-HLD-JiFeiFW-F5000A-1 SHELL/6/SHELL_CMD: -Line=vty0-IPAd
dr=172.16.255.2-User=admin; Command is description to_CG46-1
%Mar 18 00:27:25:667 2022 TJLT-HLD-JiFeiFW-F5000A-1 IFNET/5/LINK_UPDOWN: Line protocol s
tate on the interface Route-Aggregation1.120 changed to up.
%Mar 18 00:27:25:667 2022 TJLT-HLD-JiFeiFW-F5000A-1 IFNET/3/PHY_UPDOWN: Physical state
on the interface Route-Aggregation1.120 changed to up.
%Mar 18 00:27:25:639 2022 TJLT-HLD-JiFeiFW-F5000A-1 SHELL/6/SHELL_CMD: -Line=vty0-IPAd
dr=172.16.255.2-User=admin; Command is interface Route-Aggregation1.120
```

然后配置了子接口的vlan终结功能,此操作会导致接口down一下。

```
%Mar 18 00:27:26:435 2022 TJLT-HLD-JiFeiFW-F5000A-1 IFNET/5/LINK_UPDOWN: Line protocol s
tate on the interface Route-Aggregation1.120 changed to down.
%Mar 18 00:27:26:435 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 120 (configured on Route-Aggregation1.120) changed from Master to
Initialize: Interface event received.
%Mar 18 00:27:26:433 2022 TJLT-HLD-JiFeiFW-F5000A-1 IFNET/3/PHY_UPDOWN: Physical state
on the interface Route-Aggregation1.120 changed to down.
%Mar 18 00:27:26:419 2022 TJLT-HLD-JiFeiFW-F5000A-1 SHELL/6/SHELL_CMD: -Line=vty0-IPAd
dr=172.16.255.2-User=admin; Command is vlan-type dot1q vid 120
```

接口down---vrrp状态发生切换 (Initialize) ---RBM切换为Standby状态 (VRRP由RBM接管,会导致所有的vrrp均变为Backup状态)

```
The status of IPv4 virtual router 120 (configured on Route-Aggregation1.120) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:439 2022 TJLT-HLD-JiFeiFW-F5000A-1 OSPF/6/RBM_ADJUST_COST: RBM
notified cost adjust to 1000.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 13 (configured on Route-Aggregation1.513) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 23 (configured on Route-Aggregation1.520) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 22 (configured on Route-Aggregation1.519) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 14 (configured on Route-Aggregation1.514) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 20 (configured on Route-Aggregation1.517) changed from Master to
Backup: Controlled by RBM.
%Mar 18 00:27:26:438 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 20 (configured on Route-Aggregation1.517) changed from Master to
Backup: Controlled by RBM.
...
%Mar 18 00:27:26:435 2022 TJLT-HLD-JiFeiFW-F5000A-1 VRRP4/6/VRRP_STATUS_CHANGE:
The status of IPv4 virtual router 120 (configured on Route-Aggregation1.120) changed from Master to
Initialize: Interface event received.
```

解决方法

建议现场把子接口的配置完善好,再进行VRRP的配置.以免接口震荡导致RBM状态发生切换.

注:此场景下,VRRP状态由RBM接管,没有OSPF的话不需要配置Track检测接口状态.

