

知 vrrp切换丢包时间久

VRRP

OSPF

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问题描述

做了两台核心交换机的切换演练，在关掉核心1后重新开启核心1时出现业务ping包丢11个包，经分析核心1的日志，发现VLAN235的vrrp状态恢复为master之后，55秒后业务路由的ospf邻居才建立起来，正好符合11个丢包时间

重新切换为主后的日志

```
2023-09-15 20:32:27    Local7.Info    10.232.15.1    Sep 15 20:32:28 2023 S10506X-BJHQAF
15-CS01 %%10VRRP4/6/VRRP_STATUS_CHANGE: -DevIP=10.232.15.1; The status of IPv4 virtual
router 1 (configured on Vlan-interface235) changed from Backup to Master: Preempt.<000>
```

```
2023-09-15 20:33:22    Local7.Notice    10.232.15.1    Sep 15 20:33:22 2023 S10506X-BJHQ
AF15-CS01 %%10OSPF/5/OSPF_NBR_CHG: -DevIP=10.232.15.1; OSPF 100 Neighbor
172.16.173.10(Vlan-interface231) changed from LOADING to FULL.<000>
```

过程分析

默认生成树协议为mstp

连接上联设备的vlan，ospf的hello time时间已经改为1s

看配置，两台vrrp设备间没有建立ospf邻居；部分上行后口和vrrp心跳线不在一块单板上；这样确实会出现两块单板启动时间不一致，出现vrrp切换了，但部分ospf邻居还未建立导致流量短时间不通的情况；

=====display ospf peer=====

OSPF Process 100 with Router ID 10.232.15.1

Neighbor Brief Information

Area: 0.0.3.234

Router ID	Address	Pri	Dead-Time	State	Interface
10.232.15.5	172.16.173.58	1	4	Full/-	Vlan221
10.232.15.5	172.16.173.66	1	4	Full/-	Vlan223
10.232.15.6	172.16.173.42	1	4	Full/-	Vlan211
10.232.15.6	172.16.173.50	1	4	Full/-	Vlan213
10.232.15.7	172.16.173.26	1	3	Full/-	Vlan201
10.232.15.7	172.16.173.34	1	3	Full/-	Vlan203
10.232.15.129	172.16.173.2	1	3	Full/-	Vlan131
10.232.15.3	172.16.173.10	1	3	Full/-	Vlan231
10.232.15.4	172.16.173.18	1	3	Full/-	Vlan233
10.232.15.8	172.16.173.86	1	3	Full/-	Vlan237

=====display arp all=====

Type: S-Static D-Dynamic O-Openflow R-Rule M-Multiport I-Invalid

IP address	MAC address	VLAN/VSI name	Interface	Aging Type
10.232.1.60	0c73-eb92-103d	236	XGE1/0/4	1198 D
172.16.173.10	30b0-374a-9fcf	231	XGE1/0/1	323 D
172.16.173.18	30b0-374a-9fe2	233	XGE1/0/2	308 D
172.16.173.86	2c5a-0f04-7000	237	XGE1/0/3	936 D

解决方法

1. 上行链路（建立ospf邻居关系）挪到2槽位单板上（和vrrp心跳线在一块单板上），或做跨板聚合；
避免单板启动时间不一致，vrrp恢复了，ospf邻居还未建立
2. 两台vrrp设备间也建立ospf邻居；这样即使上行ospf邻居还未建立，也能通过路由走横穿出去；
3. 做Track联动

