某局点 S10512 CPU进程占用高经验案例

CPU 其他硬件相关 **刺梨** 2018-11-12 发表

组网及说明

无

问题描述

某局点Slot 5 CPU利用率异常高，查看框1和框2 Slot5的CPU利用率

==========display cpu==========

Chassis 1 Slot 5 CPU 0 CPU usage:

45% in last 5 seconds

5% in last 1 minute

19% in last 5 minutes

Chassis 2 Slot 5 CPU 0 CPU usage:

50% in last 5 seconds

5% in last 1 minute

17% in last 5 minutes

==========display device verbose==========

Slot	Type	State	Subslot	Soft Ver	Patch Ver
1/0	LSUM1TGS48SG0	Normal	0	S10500-7186P01	None
1/1	LSUM2GP44TSSE0	Normal	0	S10500-7186P01	None
……					
1/5	**LSQ1FWBSC0**	**Normal**	**0**	**S10500-7186P01**	**None**

//两个框都是防火墙板卡

寻找占用CPU高的进程，发现两个框都是KMAC进程异常高。

==========display process cpu slot 1==========

CPU utilization in 5 secs: 13.9%; 1 min: 14.1%; 5 mins: 14.5%

JID	5Sec	1Min	5Min	Name
107	**37.8%**	8.1%	6.8%	[kmac/1]

==========display process cpu slot 2==========

CPU utilization in 5 secs: 13.9%; 1 min: 14.1%; 5 mins: 14.5%

JID	5Sec	1Min	5Min	Name
107	**42.7%**	12.2%	8.4%	[kmac/1]

过程分析

查看logbuffer日志，大量打印

%Nov 8 12:22:52:202 2018 SLH-Server-S10512-IRF STP/6/STP_NOTIFIED_TC: Instance 0's port Bridge-Aggregation10 was notified a topology change.

%Nov 8 12:22:54:715 2018 SLH-Server-S10512-IRF STP/6/STP_NOTIFIED_TC: Instance 0's port Bridge-Aggregation10 was notified a topology change.

%Nov 8 12:22:57:076 2018 SLH-Server-S10512-IRF STP/6/STP_NOTIFIED_TC: Instance 0's port Bridge-Aggregation10 was notified a topology change.

%Nov 8 12:22:58:656 2018 SLH-Server-S10512-IRF STP/6/STP_NOTIFIED_TC: Instance 0's port Bridge-Aggregation10 was notified a topology change.

kmac也是mac地址学习的进程，每个槽位的mac地址学习能力不一样，因此体现在cpu的利用率上。

查看日志聚合10接口下一直在收发tc

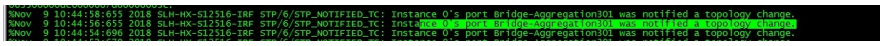
---------- STP chassis 1 slot 6 TC or TCN count ----------

MST ID	Port	Receive	Send
0	Bridge-Aggregation10	**1723002**	7593

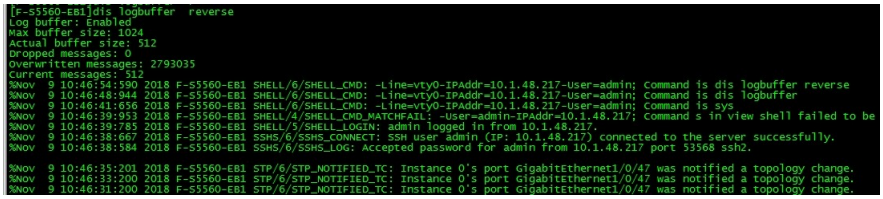
每次收到tc，会刷新mac表项，进行mac重新学习，因此KMAC进程利用率高，建议排查聚合10互联设备产生tc的原因。

解决方法

1、根据核心12516日志查询发现有台接入设备一直在发TC报文

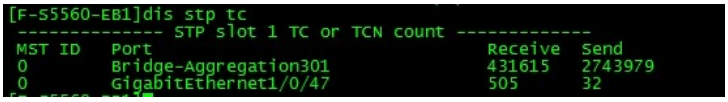


2：进入楼层接入设备查看：



发现这个端口一直在拓扑改变:

3：通过命令查询发现TC 每隔多少秒就会增长，随着接口TC报文增长，核心日志会增加和楼层聚合301 STP拓扑造成震动，汇聚日志会增加与核心相连的聚合口10 STP拓扑造成震动 .



4：做了测试，在楼层设备全局增加stp bpdu-protection 保护 和接口g1/0/47 增加成STP边缘端口，发现由于全局开启了BPDU保护，使g1/0/47 直接DOWN，再次查看10512汇聚交换机CPU占用率发现正常。

5：接入设备g1/0/47下联连接的一台down-link 设备，建议相关人员去排查。