

知 S6520组播表项反复刷新导致视屏中断

组播VLAN

IGMP Snooping

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组网及说明

组播源---S7503E---S6520-----S7604---CE3000---OLT---ONU---机顶盒

S6520作为组播路由网关，上起pim-SM，下起IGMP

S7604做二层组播设备，起IGMP-SNOOPING

CE3000做二层组播代理

问题描述

现场机顶盒使用过程中出现画面不定时中断，切换台后能够恢复

故障时间偶发，没有规律性，且多个组播组下的终端都有该问题随机出现

过程分析

在S6520上查看组播组表项存在超时老化的现象

在设备上debug igmp观察有收到成员报告报文

*Mar 6 20:59:46:086 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)

*Mar 6 20:59:46:086 2013 WD_IPTV_S6520 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE E group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G116916)

*Mar 6 21:03:45:864 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)

*Mar 6 21:03:45:864 2013 WD_IPTV_S6520 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE E group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G116916)

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*Mar 6 20:57:00:012 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set V2 host timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:57:00:012 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:57:45:986 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:57:45:986 2013 WD_IPTV_S6520 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE E group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G116916)
*Mar 6 20:57:45:986 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set V2 host timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:57:45:986 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:58:46:198 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:58:46:198 2013 WD_IPTV_S6520 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE E group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G116916)
*Mar 6 20:58:46:199 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set V2 host timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 20:58:46:199 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
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*Mar 6 20:59:46:086 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 21:03:45:864 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)
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*Mar 6 21:03:45:864 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 21:06:46:130 2013 WD_IPTV_S6520 IGMP/7/REPORT: Received IGMPv2 report for group 232.0.8.21 on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 21:06:46:130 2013 WD_IPTV_S6520 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE E group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G116916)
*Mar 6 21:06:46:130 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set V2 host timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
*Mar 6 21:06:46:130 2013 WD_IPTV_S6520 IGMP/7/TIMER: Set group aging timer for group(232.0.8.21) on interface Vlan-interface502(1.1.1.5) (G161026)
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在实验室实际测试

[5560x-3]*Feb 9 05:13:07:145 2013 5560x-3 IGMP/7/REPORT: Received IGMPv2 report for group 234.0.0.6 on interface Vlan-interface410(41.1.1.254) (G161026)

*Feb 9 05:13:07:145 2013 5560x-3 IGMP/7/REPORT: Process IS_EX packet for EXCLUDE group(234.0.0.6) on interface Vlan-interface410(41.1.1.254) (G116916)

display igmp group

IGMP groups in total: 2

Vlan-interface410(41.1.1.254):

IGMP groups reported in total: 2

Group address Last reporter Uptime Expires

234.0.0.6 41.1.1.1 00:02:53 00:04:19

239.255.255.254 41.1.1.1 1d:02h 00:02:18

只要报文上送CPU就会更新老化时间

在S6520上进一步做流镜像抓包，发现能够抓到IGMP对应的成员报告报文，怀疑是设备收到成员报告报文后未进行更新

解决方法

查看诊断，设备上有iGmp的超限速丢包：

16 IPV4_IGMP 19 35121556 2678290 100 S On SMAC 8 512

通过debug命令调一下IGMP报文上送限速，默认是100pps，调成200后解决