



某局点配置组播ssm-mapping无法形成组播表项问题

组播VLAN

IGMP

PIM

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组网及说明

S6520X-E和服务器直连，三层组播。

问题描述

现场反馈S6520X-E上配置pim-sm，上行路由聚合1，下行vlan100；由于现场部分组播接收者只支持IGMPV2，不支持V3，因此在交换机上配置了SSM-mapping，现场反馈配置后没有正常形成组播表项，业务不通：

```
[XINMEIZI]dis igmp ssm-mapping 232.58.1.34
```

```
Group: 232.58.1.34
```

```
Source list:
```

```
172.30.151.2
```

```
172.30.151.4
```

```
[XINMEIZI]
```

```
[XINMEIZI]dis igmp-snooping group 232.58.1.34
```

```
Total 1 entries.
```

```
VLAN 100: Total 1 entries.
```

```
(0.0.0.0, 232.58.1.34)
```

```
Host ports (1 in total):
```

```
BAGG1 (00:04:16)
```

```
[XINMEIZI]dis igmp grou
```

```
[XINMEIZI]dis igmp group 232.58.1.34
```

```
[XINMEIZI]
```

过程分析

(1) 检查设备上的配置，没有什么问题：

```
#
```

```
pim
```

```
static-rp 10.138.0.30
```

```
ssm-policy 2001
```

```
#
```

```
igmp
```

```
ssm-mapping 172.30.150.2 2008
```

```
ssm-mapping 172.30.150.3 2009
```

```
ssm-mapping 172.30.151.2 2011
```

```
ssm-mapping 172.30.151.3 2012
```

```
ssm-mapping 172.30.151.4 2011
```

```
ssm-mapping 172.30.151.5 2012
```

```
#
```

```
acl basic 2001
```

```
description pim-ssm
```

```
rule 10 permit source 232.0.0.0 0.255.255.255
```

```
#
```

```
interface Route-Aggregation1
```

```
description TO-C2-HeXin105
```

```
ip address 172.31.249.166 255.255.255.252
```

```
pim sm
```

```
#
```

```
vlan 100
```

```
igmp-snooping enable
```

```
igmp-snooping version 3
```

```
#
```

(2) 查看mapping表项正常：

```
[XINMEIZI]dis igmp ssm-mapping 232.58.1.34
```

```
Group: 232.58.1.34
```

```
Source list:
```

```
172.30.151.2
```

```
172.30.151.4
```

(3) 在设备上开debugging igmp all，有如下回显：

*Jan 4 20:31:19:487 2013 XINMEIZI IGMP/7/REPORT: Received IGMPv3 report on interface Vlan-interface100(172.30.233.1) from 172.30.233.3 (G161360)

*Jan 4 20:31:19:487 2013 XINMEIZI IGMP/7/REPORT: Ignore group record(TO_EX) in IGMPv3 report for group 232.10.0.98 on interface Vlan-interface100(172.30.233.1), group address is in SSM range (G161307)

*Jan 4 20:31:19:487 2013 XINMEIZI IGMP/7/REPORT: Ignore group record(TO_EX) in IGMPv3 report for group 232.10.0.103 on interface Vlan-interface100(172.30.233.1), group address is in SSM range (G161307)

*Jan 4 20:31:19:622 2013 XINMEIZI IGMP/7/REPORT: Received IGMPv3 report on interface Vlan-interface100(172.30.233.1) from 172.30.233.2 (G161360)

*Jan 4 20:31:19:622 2013 XINMEIZI IGMP/7/REPORT: Ignore group record(TO_EX) in IGMPv3 report for group 232.58.2.116 on interface Vlan-interface100(172.30.233.1), group address is in SSM range (G161307)

*Jan 4 20:31:19:622 2013 XINMEIZI IGMP/7/REPORT: Ignore group record(TO_EX) in IGMPv3 report for group 232.58.2.100 on interface Vlan-interface100(172.30.233.1), group address is in SSM range (G161307)

(4) 根据debug的信息，设备收到的是IGMPV3的report，收到就把它ignore了，忽略的原因是组播地址在ssm-mapping的范围内；经确认，IGMPV3的report报文是会指定组播源加入的，如果设备收到IGMPV3的report，而报文中没有指定组播源，就会出现这样的信息。

解决方法

在服务器侧设置发送正常的指定组播源IGMPV3 report后恢复正常。