

知

某局点 S7503X 对接第三方NMS未发送trap信息

SNMP

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组网及说明

SW(vlan1001 172.17.4.254)-----NMS(10.x.x.14)

问题描述

测试NMS snmp walk读取设备oid正常，但是设备侧没有上送trap信息给服务器

过程分析

查看配置信息

```
#
snmp-agent
snmp-agent local-engineid 800063A2805CA72131780100000001
snmp-agent community write QDTeld20211101 acl 2000
snmp-agent sys-info version v2c v3
snmp-agent target-host trap address udp-domain 10.x.x.1 params securityname QDTeld20211116
snmp-agent target-host trap address udp-domain 10.x.x.14 params securityname hGdZMvEb8V43
snmp-agent trap enable arp
snmp-agent trap enable stp
snmp-agent trap enable syslog
snmp-agent trap source Vlan-interface1001
```

#

暂时未发现有配置错误

查看snmp进程为S表示正常

```
display process name snmpd
      Job ID: 153899
      PID: 153899
      Parent JID: 1
      Parent PID: 1
      Executable path: /sbin/snmpd
      Instance: 0
      Respawn: ON
      Respawn count: 1
      Max. spawns per minute: 12
      Last started: Tue Nov 2 21:20:56 2021
      Process state: sleeping
      Max. core: 1
      ARGS: --periodicaltrap=1
  TID LAST_CPU  Stack  PRI  State  HH:MM:SS:MSEC  Name
153899   0    84K   120   S    0:0:30:860   snmpd
153900   0    84K   120   S    0:0:0:0     snmpd
153938   2    84K   120   S    0:7:36:960   snmpd
153939   1    84K   120   S    20:1:46:860  snmpd
```

Debug udp packet 看只有input信息且是161端口，没有output 162端口发送的trap

*Dec 27 11:41:00:178 2021 Core01 SOCKET/7/UDP: -MDC=1;

UDP Input:

UDP Packet: vrf = 0, src = 10.x.x.14/37760, dst = 172.17.4.254/161
len = 364, checksum = 0x9e3b

*Dec 27 11:41:00:699 2021 Core01 SOCKET/7/UDP: -MDC=1-Chassis=1-Slot=3;

UDP Input:

UDP Packet: vrf = 0, src = 10.x.x.14/42981, dst = 172.17.4.254/161
len = 1282, checksum = 0xa235

UDP Packet: vrf = 0, src = 10.2.102.14/37760, dst = 172.17.4.254/161
len = 364, checksum = 0x9e3b

debug snmp trap packet 看 发现没有任何输出

再次收集看

debugging snmp trap process

debugging snmp trap packet

*Dec 27 18:31:01:729 2021 Core01 SNMP/7/TRAP_INFO: -MDC=1;
Encode SNMPv2c trap

*Dec 27 18:31:01:729 2021 Core01 SNMP/7/TRAP_INFO: -MDC=1;
Encode SNMPv1 trap

*Dec 27 18:31:01:729 2021 Core01 SNMP/7/TRAP_WARNING: -MDC=1;

No valid entries in snmpTargetAddrTable for sending trap

*Dec 27 18:31:01:730 2021 Core01 SNMP/7/TRAP_INFO: -MDC=1;

解决方法
Search entries in snmpTargetParamsTable to match snmpTargetAddrParams

修改配置添加SNMP版本参数0.2.102.1

snmp-agent target-host trap address udp-domain 10.x.x.14 params securityname hGdZMvEb8V43 v

2Search entries in snmpTargetParamsTable to match snmpTargetAddrParams

trap host hGdZMvEb8V43.10.2.102.14

*Dec 27 18:31:01:730 2021 Core01 SNMP/7/TRAP_WARNING: -MDC=1;

Wrong message processing model (0) or unsupported SNMP version (0)

*Dec 27 18:31:01:730 2021 Core01 SNMP/7/TRAP_WARNING: -MDC=1;

Wrong message processing model (0) or unsupported SNMP version (0)

可以看到有SNMP版本错误的提示

此时查看命令手册发现

1.1.31 snmp-agent target-host

snmp-agent target-host命令用来配置接收SNMP告警信息的目的主机（能够解析Trap和Inform报文的设备，通常为NMS）的属性。

undo snmp-agent target-host命令用来取消目的主机配置。

不指定v1、v2c、v3版本参数时，使用的版本是v1。设备配置的SNMP版本必须和NMS上运行的SNMP版本一致，否则，NMS将收不到告警信息。

而客户配置为

snmp-agent target-host trap address udp-domain 10.x.x.14 params securityname hGdZMvEb8V43

未指定版本，了解到客户的NMS是V2C

调整添加版本参数

