

知 某局点MSRG2路由器4G物联卡拨号失败问题排查案例

3G/4G拨号 吴川云 2022-01-30 发表

组网及说明

MSR G2路由器，插入4G物联卡拨号，Release 0809P33版本，拓扑略

问题描述

插入物联网卡后，配置拨号失败，无法获取到IP地址

提示日志：

%H3C CELLULAR/5/CELLULAR:

Controller Cellular1/0: Service status changed from No Service to Service Available.

%H3C CELLULAR/5/CELLULAR:

Controller Cellular1/0: The network connection switched to 3G.

% H3C CELLULAR/5/CELLULAR:

Controller Cellular1/0: IPv4 dialing failed. Reason: Data call failed

%H3C CELLULAR/5/CELLULAR:

Controller Cellular1/0: IPv4 dialing failed. Reason: Data call failed

过程分析

检查配置，和客户核对确认无误：

```
#
apn-profile lt
apn static xxxx
authentication-mode pap-chap user xxxx@xxxx password cipher $c$3$v51cQ5bGlv1+9T0KrVWzuQ
AgqNbtApEwpA=
#
controller Cellular0/0
#
controller Cellular1/0
eth-channel 0
#
controller Cellular1/1
eth-channel 0
#
interface Eth-channel1/0:0
dialer circular enable
dialer-group 1
dialer timer idle 0
dialer timer autodial 60
dialer number *99# autodial //TD-SCDMA, WCDMA的拨号串是*99#, CDMA的拨号串是#777
ip address cellular-alloc
tcp mss 1280
nat outbound
apn-profile apply lt
#
ip route-static 0.0.0.0 0 Eth-channel1/0:0
```

检查modem状态，MSR G2查看modem均为display cellular X/0，查看服务状态、SIM卡状态、APN。

信号强度足够且已注册网络成功，提示报错拨号失败：

Network Information:

Current Service Status: **Service Available**

Registration Status: **Registered**

Current Service: Circuit-switched

Mobile Network Name: CHN-UNICOM

Mobile Country Code (MCC): 460

Mobile Network Code (MNC): 01

Location Area Code (LAC): xxxx

Cell ID: xxxx

WCDMA related info:

Current RSSI: -89 dBm

Current ECIO: -7 dBm

SIM Status: OK

Error Information:

IPv4 dialing failed: 0x0e: **Data call failed**

IPv6 dialing failed: N/A

解决方法

通过查看信息，卡和设备接触良好，且注册网络正常，进一步分析测试，使用其他SIM卡测试可以拨号成功，排除设备侧的问题；

与运营商确认此物联卡之前和物联网平台绑定关联，导致拨号失败。后台协调解绑后可以拨号。

此排查总结：

- 1、配置是否正确
- 2、modem是否能注册网络成功
- 3、替换SIM卡测试

