

知 MSR930-LM 3G拨号不成功经验案例

3G/4G拨号 高贵贤 2015-10-16 发表

某高速公路收费站配置3G的VPDN应用，发现20多个站点都能正常拨号成功，只有一个站点拨号始终失败，客户反馈所有站点均使用我司的MSR930设备

电信3G网络



客户现场配置:

```
version 5.20, Release 2513P31
```

```
interface Cellular-Ethernet1/0
```

```
ip address cellular-allocated
```

```
dialer enable-circular
```

```
dialer-group 1
```

```
dialer number #777
```

```
nat outbound
```

```
#
```

```
ip route-static 0.0.0.0 0.0.0.0 Cellular-Ethernet1/0
```

```
profile create 1 static jxgsbf.vpdn.jx authentication-mode xxx //此配置不显示
```

查看相关的配置，发现在配置上没什么问题，查看display cell结果为：

```
===== _display cellular all=====
```

```
=====
```

```
Error: Modem not present.
```

```
Modem State:
```

```
Hardware Information
```

```
=====
```

```
Model = DM11-2
```

```
Manufacturer = Wistron NeWeb Corp.
```

```
Modem Firmware Version = DM11-2-M9615ACETWMLZD45343175 1 [Feb 2 2015 16:46:58]
```

```
International Mobile Equipment Identity (IMEI) = 354083060318167
```

```
International Mobile Subscriber Identity (IMSI) = 204043641115814
```

```
Hardware Version = 20004
```

```
Modem Status = Online
```

```
Profile Information
```

```
=====
```

```
Profile index = 1
```

```
PDP Type = IPv4v6, Header Compression = OFF
```

```
Data Compression = OFF
```

```
Access Point Name (APN) = jxgsbf.vpdn.jx
```

Authentication = CHAP
Username = jxgsbflu@jxgsbf.vpdn.jx
* - Default profile

Network Information

=====
Current Service Status = Limited Regional Service
Registration Status = Searching
Current Roaming Status = Roaming
Current Data Bearer Technology = Unknown
Network Selection Mode = Automatic
Mobile Country Code (MCC) = 460
Mobile Network Code (MNC) = 20

Radio Information

=====
Technology Preference = No preference specified (AUTO)
Technology Selected = GSM

GSM related info

Current RSSI = -70 dBm

Modem Security Information

=====
PIN Verification = Disabled
PIN Status = PIN Requirement Disabled
Number of PIN Retries Remaining = 3
Number of PUK Retries Remaining = 10
SIM Status = OK

然后对比其他拨号成功站点的配置，发现其他站点使用的拨号接口均为cellular1/0，而非CE接口，于是修改本设备的接口模式：

[H3C]Card-mode slot 1 ppp 配置完成后，再次对接口cellular1/0进行操作，但是又会报如下错误：

```
profile create 1 static jxgsbf.vpdn.jx authentication-mode none
```

Error: Running a different mode with the modem.

此报错类型说明，此设备的modem并不支持修改为PPP模式，只能在CE接口下进行配置，至此，怀疑是Modem类型差异，经过对比

拨号失败的设备：

```
=====_display cellular all=====
```

Error: Modem not present.

Modem State:

Hardware Information

=====
Model = DM11-2

拨号成功的设备：

```
=====_display cellular all=====
```

Error: Modem not present.

Modem State:

Hardware Information

=====
Model = EM660

经查询：

EM660	华为	CDMA/EVDO 800/1900 MHz
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DM11-2	TDD-LTE: Band34 2010~2025M Band38 2570~2620M Band39 1880~1920M Band40 2300~2400M Band41 2496~2690M FDD-LTE: Band7:UL:2500-2570M, DL: 2620-2690M Band5:UL:824-849M, DL:869-894MHz Band3:UL:1710-1785M, DL:1805-1880M Band2:UL: 1850-1910M, DL:1930-1990M Band1:UL: 1920-1980M, DL: 2110-2170M HSPA+/HSUPA/HSDPA/UMTS: 2100/900MHZ TD-LTE/HSPA+/TD-SCDMA/GPRS/WCDMA/GPS EDGE/GPRS/GSM: 1900/1800/850/900MHZ TD-SCDMA B34/B39
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现场MSR930-LM的自带DM11-2 modem不支持电信3G, 可以支持电信4G, 建议现场更换为4G卡, 或者更坏支持电信3G的MSR930设备