



Cellular Connection Troubleshooting iSite Router

INTRODUCTION

The SilverNet iSite router supports cellular modules to obtain cellular network access. There are several different module types to suit different countries and markets. Sometimes, customers may encounter issues to set up and connect to the mobile carrier's network. In this document, we will guide you through some check list and common issues for reference.

If everything is configured well, we can check the current link being use, including the status, IP address and the data consumption.

Status	Overview	Cellular	Network	WLAN	VPN	Routing	Host List	GPS
Network	System Information					System Status		
System	Model	SIL ISITE				Local Time	2023-01-24 14:24:33 Tuesday	
	Serial Number	6219B2640770				Uptime	4days, 23:49:33	
Industrial	Firmware Version	35.3.10.5				CPU Load	9%	
	Hardware Version	V2.0				RAM (Available/Capacity)	24MB/128MB(18.75%)	
Maintenance						Flash (Available/Capacity)	89MB/128MB(69.53%)	
APP	Cellular ● Link in use					WAN		
	Status	Ready, FDD LTE, 				Status	Offline	
	Current SIM	SIM1				IPv4	-	
	IPv4	10.83.225.11/29				IPv6	fe80::26e1:24ff:fe2:6cb2/64	
	IPv6	fe80::14af:4eff:feb7:845e/64				MAC	24:e1:24:f2:6c:b4	
	Connection Duration	0 days, 00:04:38				Connection Duration	0 days, 00:00:00	
	Data Usage Monthly	57.7 MiB						
	WLAN					LAN		
	Status	Running				IPv4	192.168.168.16/24	
	Mode	AP				IPv6	fe80::26e1:24ff:fe2:6cb2/64	
SSID	SSID_F26CB3				Connected Devices	18		
Connected Clients	0							

For more details, you can click 'Cellular' tab.

Overview	Cellular	Network	WLAN	VPN	Routing	Host List	GPS
Modem			Network				
Model	EC25		Status		Connected		
Version	EC25EUXGAR08A05M1G		IPv4 Address		10.83.225.11/29		
Current SIM	SIM1		IPv4 Gateway		10.83.225.12		
Signal Level	22asu (-69dBm)		IPv4 DNS		188.31.250.128		
Register Status	Registered (Home network)		IPv6 Address		fe80::14af:4eff:feb7:845e/64		
IMEI	862506043717449		IPv6 Gateway		::		
IMSI	234202504418110		IPv6 DNS		::		
ICCID	8944200122342009843F		Connection Duration		0 days, 00:05:09		
ISP	3		Data Usage Monthly				
Network Type	FDD LTE		SIM-1		RX: 50.6 MiB TX: 7.1 MiB ALL: 57.7 MiB		
PLMN ID	23420		SIM-2		RX: 0.0 MiB TX: 0.0 MiB ALL: 0.0 MiB		
LAC	530						
Cell ID	2c9501						

CONFIGURATION

SilverNet devices offer a simple and friendly web GUI for configuration, for the cellular part, we can configure the basic info in **Network->Interface->Cellular** page

The screenshot shows the 'Cellular' configuration page in the SilverNet web GUI. The page is divided into two main sections: 'Cellular Settings' and 'Connection Setting'. The 'Cellular Settings' section is further divided into two columns for SIM1 and SIM2. Each column contains the following fields:

- Protocol Type: Dropdown menu (IPv4)
- APN: Text input field
- Username: Text input field
- Password: Text input field
- PIN Code: Text input field
- Access Number: Text input field
- Authentication Type: Dropdown menu (Auto)
- Network Type: Dropdown menu (Auto)
- PPP Preferred: Checkbox (unchecked)
- SMS Center: Text input field
- Enable NAT: Checkbox (checked)
- Roaming: Checkbox (checked)
- Data Limit: Text input field (0) followed by MB
- Billing Day: Text input field (Day 1) followed by of The Month

The 'Connection Setting' section at the bottom contains:

- Connection Mode: Dropdown menu (Always Online)
- Re-dial Interval(s): Text input field (5)

A 'Save' button is located at the bottom left of the page.

Protocol Type: You can choose IPv4, IPv6 or IPv4/IPv6 according to the mobile carrier's network, the default value IPv4/IPv6 is recommended.

APN: The Access Point Name used to dial-up according to mobile carrier's requirement.

Username and password: Field should follow mobile carrier's request, but it's not commonly used.

PIN Code: The 4-8 Character PIN code to unlock the SIM, just follow the settings of the SIM card.

Access Number: The access number used to dial-up the connection offered by ISP

Authentication type: Select Auto/PAP/CHAP/MS-CHAP/MS-CHAPv2, Auto is recommended.

Network Type: Select Auto/5G-SA/5G-NSA/4G-Only/3G-Only. Auto is recommended.

PPP Preferred: A new dial-up method for some carrier's comparability cases.

SMS Centre: Used to input the carrier's message centre manually to solve the SMS sending issue.

Enable NAT: Enable NAT, it's used to IP translate between sub-net and cellular network.

Roaming: Enable Roaming for this SIM card, it depends on SIM card and carrier's service.

Data Limit: The cellular data limit during a month. If it's unlimited, set it to 0.

We can also configure the link fail-over settings, including the Ping detection, which is used to detect whether the current link is able to visit the internet.

Priority	Enable Rule	Link in use	Interface	Connection Type	IP	Operation
1	☒	●	Cellular-SIM1	DHCP	10.0.87.91	✎ ↑ ↓
2	☒	●	WAN	Static	192.168.23.169	✎ ↑ ↓
3	☐	●	Cellular-SIM2	DHCP	-	✎ ↑ ↓
4	☐	●	WLAN-2.4G	DHCP	-	✎ ↑ ↓

Settings

Revert Interval: s

Emergency Reboot: ☐

Save

The default server address used to ping are 8.8.8.8 and 114.114.114.114. You can modify it to the ones supported by your ISP. The ping result will affect whether this link is usable.

CHECK-LIST

Generally, if you encounter a cellular network issue, you can check the following items:

1. Check the SIM card itself by installing it into a mobile phone and make sure it works.
2. Check whether the SIM card is installed correctly.
3. Check Antenna's connection and put it into a proper place to receive a good signal.
4. Check the configuration, especially the APN & Pin code field.
5. Enable the 'debug' option in **Maintenance->Log->Log settings**

System Log Log Download Log Settings

Remote Log Server

Enable ☐

Syslog Server Address

Port

Local Log File

Storage

Size KB

Log Severity

Save

After running for a few minutes, download the full log for a deeper check, especially the **cellular.log** and **system.log**

System Log Log Download Log Settings

Download

Download All

File Name	File Size/KB	Creation Time	Operation
vpn.log	83	2021/08/26 14:34:03	Download
system.log	1696	2021/08/26 14:34:04	Download
httpd.log	241	2021/08/26 14:33:26	Download
hostapd.log	160	2021/08/26 09:19:42	Download
firewall.log	0	2021/06/09 18:14:00	Download
cellular.log	1608	2021/08/26 14:32:46	Download

6. If you need to test something by the AT command, try in the **Maintenance->Debugger** page, you will get the output there as well.

Status

Network

Interface

DHCP

Firewall

QoS

VPN

IP Passthrough

Routing

VRRP

DHNS

System

Industrial

Maintenance

Security

ACL

Port Mapping

DMZ

MAC Binding

Custom Rules

SPI

Prevent Attack

DoS/DDoS Protection

Access Service Control

Service	Port	Local	Remote
HTTP	80	☒	☒
HTTPS	443	☒	☒
TELNET	23	☒	☒
SSH	22	☒	☒
FTP	21	☐	☐

Website Blocking

URL Blocking

http://

✕

+

Keyword Blocking

✕

+

Save

Cellular Connection Troubleshooting

```
[D:\~]$ ssh admin@192.168.23.169
Connecting to 192.168.23.169:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+J'.

*** TERMINFO:/etc/terminfo TERM:xterm *****
-- model:SIL iSite,sn:6223A5052528,hwver:0110
-----
Product Model      : SIL iSite
Firmware Version   : 76.2.0.2
-----

ROUTER> enable
ROUTER# configure terminal
ROUTER(config)# cellular send at at+cops]
ROUTER(config)#
```

TROUBLE SHOOTING EXAMPLES:

Here are some common examples and the possible reasons for your reference.

1. SIM card is owed

If the SIM card is owed, we cannot get more info about the exact owed message there, so we should test this SIM card in cell phone first, including whether there is still data capacity.

2. Cellular Modem mismatch the Mobile carrier.

If the modem inside the router does not match the mobile carrier(SIM card), you will not get any signal during the registering process. You can double check it with our sales or technical support to confirm the exact module model. We will offer a list of the supported bands for comparison.

3. SIM card is not installed correctly

If the SIM card is not installed correctly, we can get the below error through the log. You will need to check the card, including wiping the contacts clean if needed

```
2021-06-09 11:16:30: [SEQ40,ID63]>>> AT+QMBNCFG="Autosel",1
2021-06-09 11:16:30: [SEQ40,ID63]<<< OK
2021-06-09 11:16:30: [SEQ42,ID13]>>> AT+CPIN?
2021-06-09 11:16:30: [SEQ42,ID13]<<< +CME ERROR: SIM not inserted
```

4. PIN code error

If a wrong pin code is input here, we can find the error log in the system.log and cellular.log

The screenshot shows the 'Cellular Settings' page with tabs for Link Failover, Cellular, Port, WAN, Bridge, WLAN, Switch, and Loopback. The 'Cellular' tab is active. Below the tabs, there are two columns for SIM1 and SIM2. Each column has several input fields: Protocol Type (IPv4), APN (highlighted with a red rectangle), Username, Password, PIN Code, Access Number, Authentication Type (Auto), Network Type (Auto), PPP Preferred (checkbox), and SMS Center. The APN field for SIM1 is currently empty.

If the card needs PIN, you will see the log like this:

```
Wed Apr 28 04:42:27 2021 daemon.debug vtysh_ubus[1651]: obj_system.c:1505 call command 'no ntp'
Wed Apr 28 04:42:27 2021 daemon.debug vtysh_ubus[1651]: obj_system.c:1509 call command 'clock set 2021.06.03-1
Thu Jun 3 10:37:03 2021 daemon.debug zebra[1441]: link_backup_thread:2272 check kernel route!
Thu Jun 3 10:37:04 2021 daemon.warn zebra[1441]: GSM Event: pin required!
Thu Jun 3 10:37:05 2021 daemon.info eventdetect[2915]: eventadd system time update
Thu Jun 3 10:37:05 2021 daemon.debug eventcore[2910]: email no,sms no, snmp no
Thu Jun 3 10:37:06 2021 user.debug httpd[3081]: ==call yruo status.get
```

If a wrong code is input, you will see the log like this:

```
2021-06-09 11:26:30: [SEQ40,ID63]>>> AT+QMBNCFG="Autosel",1
2021-06-09 11:26:30: [SEQ40,ID63]<<< OK
2021-06-09 11:26:30: [SEQ42,ID13]>>> AT+CPIN?
2021-06-09 11:16:30: [SEQ42,ID13]<<<+CPIN: SIM PIN
2021-06-09 11:16:30: [SEQ42,ID13]>>>AT+CPIN="0000"
2021-06-09 11:16:30: [SEQ42,ID13]<<<Error
```

5. Antenna is not installed correctly

If the Antenna is not installed well, you will get very weak signal, or even no signal, here is an example log:

Good signal:

```
2021-07-27 11:17:26: [SEQ93,ID29]>>> AT+COPS=3,0
2021-07-27 11:17:26: [SEQ93,ID29]<<< OK
2021-07-27 11:17:26: [SEQ94,ID31]>>> AT+COPS?
2021-07-27 11:17:26: [SEQ94,ID31]<<< +COPS: 0,0,"CHINA MOBILE",7
2021-07-27 11:17:26: [SEQ94,ID31]<<< OK
2021-07-27 11:17:27: [SEQ95,ID26]>>> AT+CSQ
2021-07-27 11:17:27: [SEQ95,ID26]<<< +CSQ: 30,99
2021-07-27 11:17:27: [SEQ95,ID26]<<< OK
```

Bad signal:

```
2021-01-14 19:26:50: [SEQ94,ID31]>>> AT+COPS?
2021-01-14 19:26:50: [SEQ94,ID31]<<< +COPS: 0
2021-01-14 19:26:50: [SEQ94,ID31]<<< OK
2021-01-14 19:26:50: [SEQ95,ID26]>>> AT+CSQ
2021-01-14 19:26:50: [SEQ95,ID26]<<< +CSQ: 99,99 #### no signal currently ####
```

6. A wrong APN is configured.

If the carrier needs the right APN to connect to the carrier's service, we need to check it, if a wrong APN is configured, the registration may fail. You can find the 'No service' and no carrier's info through the **cellular log**.

```
2021-05-06 22:20:02: [SEQ48,ID15]<<< +CFUN: 1
2021-05-06 22:20:04: [SEQ50,ID24]>>> AT+QCFG="band"
2021-05-06 22:20:04: [SEQ50,ID24]<<< AT+QCFG="band"
2021-05-06 22:20:05: [SEQ50,ID24]<<< +QCFG: "band",0xff,0x80080000df,0x0
2021-05-06 22:20:05: [SEQ50,ID24]<<< OK
2021-05-06 22:20:07: [SEQ54,ID49]>>> AT+QICSGP=1,3,"web.colombiamovil.com.co","", "",0
2021-05-06 22:20:07: [SEQ54,ID49]<<< AT+QICSGP=1,3,"web.colombiamovil.com.co","", "",0
2021-05-06 22:20:07: [SEQ54,ID49]<<< OK
2021-05-06 22:20:07: [SEQ55,ID52]>>> AT+QIACT=1
2021-05-06 22:20:07: [SEQ55,ID52]<<< AT+QIACT=1
2021-05-06 22:20:08: [SEQ55,ID52]<<< ERROR
2021-05-06 22:20:08: [SEQ57,ID14]>>> AT+QCFG="nwscanmode"
2021-05-06 22:20:08: [SEQ57,ID14]<<< AT+QCFG="nwscanmode"
2021-05-06 22:20:08: [SEQ57,ID14]<<< +QCFG: "nwscanmode",0
2021-05-06 22:20:08: [SEQ57,ID14]<<< OK
2021-05-06 22:20:09: [SEQ63,ID16]>>> AT+CLIP=1
2021-05-06 22:20:09: [SEQ63,ID16]<<< AT+CLIP=1
```

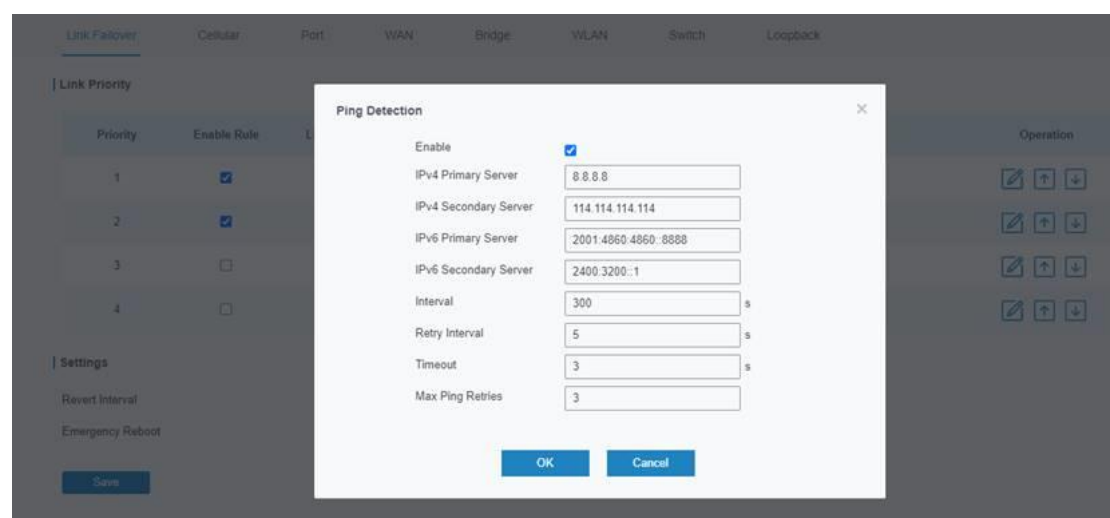
```

2021-05-06 22:16:19: [SEQ72,ID19]<<< OK
2021-05-06 22:16:19: [SEQ75,ID20]>>> AT+CNUM
2021-05-06 22:16:19: [SEQ75,ID20]<<< AT+CNUM
2021-05-06 22:16:19: [SEQ75,ID20]<<< ERROR
2021-05-06 22:16:20: [SEQ78,ID21]>>> AT+CSCS="GSM"
2021-05-06 22:16:20: [SEQ78,ID21]<<< AT+CSCS="GSM"
2021-05-06 22:16:20: [SEQ78,ID21]<<< ERROR
2021-05-06 22:16:27: [SEQ86,ID70]>>> AT+QCFG="ims",0
2021-05-06 22:16:27: [SEQ86,ID70]<<< AT+QCFG="ims",0
2021-05-06 22:16:27: [SEQ86,ID70]<<< OK
2021-05-06 22:16:27: [SEQ90,ID27]>>> AT+QINDCFG="csq",1,1
2021-05-06 22:16:27: [SEQ90,ID27]<<< AT+QINDCFG="csq",1,1
2021-05-06 22:16:28: [SEQ90,ID27]<<< OK
2021-05-06 22:16:28: [SEQ91,ID23]>>> AT+QNWINFO
2021-05-06 22:16:28: [SEQ91,ID23]<<< AT+QNWINFO
2021-05-06 22:16:28: [SEQ91,ID23]<<< +QNWINFO: No Service
2021-05-06 22:16:28: [SEQ91,ID23]<<< OK
2021-05-06 22:16:28: [SEQ92,ID28]>>> AT+CGREG?
2021-05-06 22:16:28: [SEQ92,ID28]<<< AT+CGREG?
2021-05-06 22:16:29: [SEQ92,ID28]<<< +CGREG: 2,4
2021-05-06 22:16:29: [SEQ92,ID28]<<< OK
2021-05-06 22:16:30: [SEQ92,ID28]<<< +CGREG: 2
2021-05-06 22:16:30: [SEQ92,ID28]<<< +QIND: "csq",16,99
2021-05-06 22:16:59: [SEQ92,ID28]>>> AT+CGREG?
2021-05-06 22:16:59: [SEQ92,ID28]<<< AT+CGREG?
2021-05-06 22:17:00: [SEQ92,ID28]<<< +CGREG: 2,2
2021-05-06 22:17:00: [SEQ92,ID28]<<< OK

```

7. ICMP server is not able to ping via mobile carrier.

The default ICMP server used to ping to detect whether the link is reachable, which value is 8.8.8.8 and 114.114.114.114, it works mostly, but some mobile carriers need a special icmp address, if you find the link is up and down continuously, please check this option here:



```
daemon.debug zebra[1537]: span 2:<< \r\n+CGREG: 1,"D91F","58E2C93",2\r\n
daemon.debug zebra[1537]: Span 02 Get message (+CGREG: 1,"D91F","58E2C93",2) , buf get
count 1 , paramter (1,1,"d91f","58e2c93",2)
daemon.debug zebra[1537]: Span 02 Network Name CHN-UNICOM , Mode Automatic act: 2
daemon.debug zebra[1537]: span 2:<< \r\nOK\r\n
daemon.debug zebra[1537]: span 2:>> AT+CSQ
daemon.warn zebra[1537]: [1582883937.644940] GSM Event: SIM 1 dchan is up!
daemon.debug zebra[1537]: sql sqldb.c 1788:update smscache set sending='0'
daemon.debug zebra[1537]: span 2:<< \r\n+CSQ: 30,99\r\n
daemon.debug zebra[1537]: span 2:<< \r\nOK\r\n
daemon.debug zebra[1537]: ping -c 1 -s 56 -W 5 114.114.114.114
daemon.debug zebra[1537]: --- 114.114.114.114 ping statistics ---
daemon.debug zebra[1537]: 1 packets transmitted, 0 received, 100% packet loss
daemon.debug zebra[1537]: --- Link is Down ---
```

8. SIM card is on roaming

If the SIM card is registered to carrier on roaming, but you didn't enable the **roaming** on cellular page, the module will fail to register.

```
daemon.info zebra[1370]: span 2:>> AT+CSQ
daemon.info zebra[1370]: span 2:<< \r\n+CSQ: 30,99\r\n
daemon.info zebra[1370]: span 2:<< \r\nOK\r\n
daemon.info zebra[1370]: span 2:>> AT+QINDCFG="csq",1,1
daemon.info zebra[1370]: span 2:<< \r\nOK\r\n
daemon.info zebra[1370]: span 2:>> AT+CGREG?
daemon.info zebra[1370]: span 2:<< \r\n+CGREG: 2,5,"5F0A","5FB0734",7\r\n
daemon.info zebra[1370]: Span 02 Get message (+CGREG: 2,5,"5F0A","5FB0734",7) , buf
get count 2 , paramter (2,5,"5f0a","5fb0734",7)
```

Parameter

<n>	0	Disable network registration unsolicited result code
	1	Enable network registration unsolicited result code: +CREG: <stat>
	2	Enable network registration unsolicited result code with location information: +CREG: <stat>[,<lac>,<ci>[,<Act>]]
<stat>	0	Not registered. ME is not currently searching a new operator to register to
	1	Registered, home network
	2	Not registered, but ME is currently searching a new operator to register to
	3	Registration denied
	4	Unknown
	5	Registered, roaming
<lac>	String type. Two bytes location area code in hexadecimal format	
<ci>	String type. 16-bit (GSM) or 28-bit (UMTS/LTE) cell ID in hexadecimal format	
<Act>	Access technology selected	
	0	GSM
	2	UTRAN
	3	GSM W/EGPRS
	4	UTRAN W/HSDPA
	5	UTRAN W/HSUPA
	6	UTRAN W/HSDPA and HSUPA
	7	E-UTRAN

9. Failed to get the IP from carrier

If the module is registered to carrier successfully, but you cannot access the internet, there is no IP in the **cellular status** page, then you can check the system log and find the log like this, maybe the reason is no data balance, or the SIM card is out of balance. You can check it using mobile phone or check it with carrier as well.

```
daemon.debug zebra[1537]: cellular.c:635 quec_dialer: 'quectel-CM -d!'
daemon.debug zebra[1537]: span 2:<< \r\n+CGREG: 2\r\n
daemon.debug zebra[1537]: Span 02 Get message (+CGREG: 2) , buf get count 1 , paramter (2,2,"ffff","ffff",-1)
daemon.debug zebra[1537]: gsm_module.c:757 =====
daemon.debug zebra[1537]: span 2:<< \r\n+CGREG: 1,"D91F","58E2C93",2\r\n
daemon.debug zebra[1537]: Span 02 Get message (+CGREG: 1,"D91F","58E2C93",2) , buf get count 1 , paramter (1,1,"d91f","58e2c93",2)
daemon.debug zebra[1537]: sql sqldb.c 1788:update smscache set sending='0'
cron.info crond[3112]: USER root pid 21227 cmd hwclock -u -w
daemon.debug zebra[1537]: span 2:<< \r\n+QIND: SMS DONE\r\n
daemon.debug zebra[1537]: span 2:<< \r\n+QIND: "csq",99,99\r\n
daemon.err zebra[1537]: cellular.c:967 cellular_dialer_prog: failed to bring up 'cellular0'!
```

10. Register as LTE even the SIM card supports 5G SA/NSA

We can check the **status page** to see if it's 5G NR, if it shows LTE mode there, we can check the **cellular.log** to see what's the signal status feedback by the carrier.

Overview

Cellular

Network

WLAN

VPN

Routing

Host List

GPS

Modem

Status

Ready

Model

RM500Q-GL

Version

RM500QGLABR11A03M4G

Current SIM

SIM1

Signal Level

29asu (-55dBm)

Register Status

Registered (Home network)

IMEI

IMSI

ICCID

ISP

Network Type

5G NR

PLMN ID

LAC

Cell ID

More

Network

Status

Connected

IPv4 Address

IPv4 Gateway

IPv4 DNS

IPv6 Address

IPv6 Gateway

IPv6 DNS

Connection Duration

0 days, 00:02:28

Data Usage Monthly

SIM-1

RX: 0.7 MB TX: 2.0 MB ALL: 2.8 MB

SIM-2

RX: 0.0 MB TX: 0.0 MB ALL: 0.0 MB

In this example, we can find the NR5G-NSA here, if you cannot find this info, we need to check it with Mobile carrier for help.

```

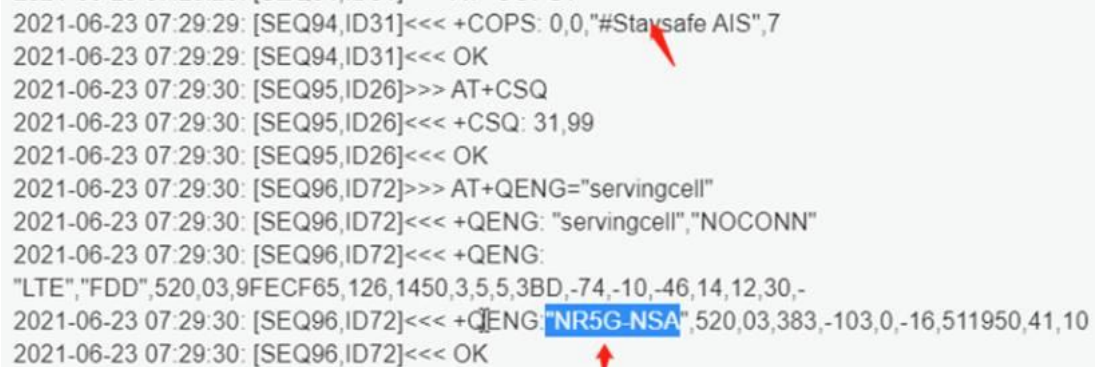
2021-07-27 10:48:33: [SEQ0,ID0]<<< +CREG: 1,"592F","271F846", 7
2021-07-27 10:48:34: [SEQ96,ID72]>>> AT+QENG="servingcell"
2021-07-27 10:48:34: [SEQ0,ID0]<<< +QENG: "servingcell","NOCONN"
2021-07-27 10:48:34: [SEQ0,ID0]<<< +QENG:
"LTE","FDD",460,00,271F846,52,1300,3,5,5,592F,-93,-12,-60,9,0,-32768,31
2021-07-27 10:48:34: [SEQ0,ID0]<<< +QENG:"NR5G-NSA",460,00,288,-32768,-32768,-32768
2021-07-27 10:48:34: [SEQ0,ID0]<<< OK

```

11. 5G SA connection failed

Sometimes, the carrier mentioned that 5G-SA is supported, but it shows NSA in the router's status page. We can check the **Cellular.log** to double check it. We can find it's NSA instead.

```
2021-06-23 07:29:29: [SEQ94,ID31]<<< +COPS: 0,0,"#Stay safe AIS",7
2021-06-23 07:29:29: [SEQ94,ID31]<<< OK
2021-06-23 07:29:30: [SEQ95,ID26]>>> AT+CSQ
2021-06-23 07:29:30: [SEQ95,ID26]<<< +CSQ: 31,99
2021-06-23 07:29:30: [SEQ95,ID26]<<< OK
2021-06-23 07:29:30: [SEQ96,ID72]>>> AT+QENG="servingcell"
2021-06-23 07:29:30: [SEQ96,ID72]<<< +QENG: "servingcell","NOCONN"
2021-06-23 07:29:30: [SEQ96,ID72]<<< +QENG:
"LTE","FDD",520,03,9FECF65,126,1450,3,5,5,3BD,-74,-10,-46,14,12,30,-
2021-06-23 07:29:30: [SEQ96,ID72]<<< +QENG: "NR5G-NSA",520,03,383,-103,0,-16,511950,41,10
2021-06-23 07:29:30: [SEQ96,ID72]<<< OK
```



12. Compatibility issue with very few carriers

In this example, the log shows good, there is carrier's info feedback from the F-Bouygues Telecom Bouygues Telecom, but the status is 0, which means unknown. Then we check and upgrade the firmware of the modem inside the router to fix it.

```
2021-06-03 13:50:11: [SEQ0,ID0]<<< +CGREG: 1,"75A8","81AF202",7
2021-06-03 13:50:13: [SEQ0,ID0]<<< +QIND: "csq",22,99
2021-06-03 13:50:15: [SEQ86,ID70]>>> AT+QCFG="ims",2
2021-06-03 13:50:15: [SEQ86,ID70]<<< OK
2021-06-03 13:50:15: [SEQ90,ID27]>>> AT+QINDCFG="csq",1,1
2021-06-03 13:50:15: [SEQ90,ID27]<<< OK
2021-06-03 13:50:15: [SEQ91,ID23]>>> AT+QNWINFO
2021-06-03 13:50:15: [SEQ91,ID23]<<< +QNWINFO: "FDD LTE","20820","LTE BAND 20",1850
2021-06-03 13:50:15: [SEQ91,ID23]<<< OK
2021-06-03 13:50:16: [SEQ92,ID28]>>> AT+CGREG?
2021-06-03 13:50:16: [SEQ92,ID28]<<< +CGREG: 2,1,"75A8","81AF202",7
2021-06-03 13:50:16: [SEQ92,ID28]<<< OK
2021-06-03 13:50:16: [SEQ93,ID29]>>> AT+COPS=3,0
2021-06-03 13:50:16: [SEQ93,ID29]<<< OK
2021-06-03 13:50:16: [SEQ94,ID31]>>> AT+COPS?
2021-06-03 13:50:16: [SEQ94,ID31]<<< +COPS: 0,0,"F-Bouygues Telecom Bouygues
Telecom",7
```

Status

Network

System

Industrial

Maintenance

Tools

Debugger

Log

Upgrade

Backup and Restore

Reboot

API

Cellular Debugger

Firewall Debugger

Cellular Debugger

Command

Eg: AT+CGREG?

Send

View Recent Logs (lines)

1000

Result

2021-07-27 10:23:44 [SEQ78.ID21]>>> AT+CSCS="GSM"

2021-07-27 10:23:44 [SEQ78.ID21]>>> OK

2021-07-27 10:23:45 [SEQ90.ID27]>>> AT+QINDCFG="M",1,1

2021-07-27 10:23:45 [SEQ90.ID27]>>> OK

2021-07-27 10:23:46 [SEQ91.ID23]>>> AT+QMINFQ

2021-07-27 10:23:46 [SEQ91.ID23]>>> +QMINFQ: No Service

2021-07-27 10:23:46 [SEQ91.ID23]>>> OK

2021-07-27 10:23:46 [SEQ92.ID45]>>> AT+CREG?

2021-07-27 10:23:46 [SEQ92.ID45]>>> +CREG: 2,3

2021-07-27 10:23:46 [SEQ92.ID45]>>> OK

2021-07-27 10:23:46 [SEQ93.ID29]>>> AT+COPS=3,0

2021-07-27 10:23:46 [SEQ93.ID29]>>> OK

2021-07-27 10:23:46 [SEQ94.ID31]>>> AT+COPS?

2021-07-27 10:23:46 [SEQ94.ID31]>>> +COPS: 0

2021-07-27 10:23:46 [SEQ94.ID31]>>> OK

2021-07-27 10:23:47 [SEQ95.ID26]>>> AT+CSQ

2021-07-27 10:23:47 [SEQ95.ID26]>>> +CSQ: 31,99

2021-07-27 10:23:47 [SEQ95.ID26]>>> OK

Clear Log

Download

Cellular Connection Troubleshooting

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