

Telit Modem Commands

Important: Run commands as root. Telit AT commands must remain uppercase. ModemManager must be running.

1. Modem information

COMMAND `mmcli -m a`

PURPOSE Displays the Telit modem model, firmware, IMEI, signal quality, registration, operator, active SIM slot, bearer APN, ports, bands, and connection state.

EXAMPLE OUTPUT

```
root@kona-enterprise-02F890:/etc/NetworkManager# mmcli -m a
```

```
-----
General |           path: /org/freedesktop/ModemManager1/Modem/3
         |           device id: 38af490b9a69c92252d06f5dc57155ebcc4c37ad
         |-----
Hardware |           manufacturer: Telit
         |           model: LE910C1-WWXD
         |           firmware revision: 25.30.446 1 [Jun 07 2021 06:00:00]
         |           carrier config: default
         |           h/w revision: 1.20
         |           supported: gsm-umts, lte
         |           current: gsm-umts, lte
         |           equipment id: 357273221078126
         |-----
System   |           device: /sys/devices/platform/ocp/47400000.target-module/47401c00.usb/musb-hdrc.1/usb2/2-1
         |           drivers: option, qmi_wwan
         |           plugin: telit
         |           primary port: cdc-wdm0
         |           ports: cdc-wdm0 (qmi), ttyUSB0 (ignored), ttyUSB1 (at),
         |                  ttyUSB2 (at), wwan0 (net)
         |-----
Numbers  |           own: 14038271679
         |-----
Status   |           lock: sim-puk2
         |           unlock retries: sim-pin (3), sim-puk (10), sim-pin2 (0), sim-puk2 (10)
         |           state: connected
         |           power state: on
         |           signal quality: 36% (cached)
         |-----
Modes    |           supported: allowed: 2g; preferred: none
         |                   allowed: 3g; preferred: none
         |                   allowed: 4g; preferred: none
         |                   allowed: 2g, 3g; preferred: 3g
         |                   allowed: 2g, 3g; preferred: 2g
         |                   allowed: 2g, 4g; preferred: 4g
         |                   allowed: 2g, 4g; preferred: 2g
         |                   allowed: 3g, 4g; preferred: 4g
         |                   allowed: 3g, 4g; preferred: 3g
         |                   allowed: 2g, 3g, 4g; preferred: 4g
         |                   allowed: 2g, 3g, 4g; preferred: 3g
         |                   allowed: 2g, 3g, 4g; preferred: 2g
         |           current: allowed: 2g, 3g, 4g; preferred: 4g
         |-----
Bands    |           supported: egsm, dcs, pcs, g850, utran-1, utran-4, utran-6, utran-5,
         |                   utran-8, utran-2, eutran-1, eutran-2, eutran-3, eutran-4, eutran-5,
         |                   eutran-7, eutran-8, eutran-9, eutran-12, eutran-13, eutran-14,
         |                   eutran-18, eutran-19, eutran-20, eutran-25, eutran-26, eutran-28,
         |                   utran-19
         |           current: utran-4, utran-5, utran-2, eutran-1, eutran-2, eutran-3,
         |                   eutran-4, eutran-5, eutran-7, eutran-8, eutran-9, eutran-12,
         |                   eutran-13, eutran-14, eutran-18, eutran-19, eutran-20, eutran-25,
         |                   eutran-26, eutran-28
         |-----
IP        |           supported: ipv4, ipv6, ipv4v6
         |-----
3GPP     |           imei: 357273221078126
         |           enabled locks: fixed-dialing
         |           operator id: 302610
         |           operator name: Bell
         |           registration: home
```

```

-----
3GPP EPS | ue mode of operation: csps-2
          |   initial bearer path: /org/freedesktop/ModemManager1/Bearer/0
          |   initial bearer apn: inet.bell.ca
          |   initial bearer ip type: ipv4v6
-----
SIM       |   primary sim path: /org/freedesktop/ModemManager1/SIM/1
          |   sim slot paths: slot 1: /org/freedesktop/ModemManager1/SIM/1 (active)
          |                   slot 2: none
-----
Bearer    |   paths: /org/freedesktop/ModemManager1/Bearer/1
root@kona-enterprise-02F890:/etc/NetworkManager#

```

2. SIM card status

COMMAND `mmcli -m a --command='AT+CPIN?'`

PURPOSE Checks whether the SIM is ready or requires a PIN or PUK. Telit AT commands must remain uppercase.

EXAMPLE OUTPUT

response: '+CPIN: READY'

3. Read SIM ICCID

COMMAND `mmcli -m a --command='AT+ICCID'`

PURPOSE Reads the ICCID (Integrated Circuit Card Identifier) of the installed SIM card.

EXAMPLE OUTPUT

response: '+ICCID: 8914800000XXXXXXXXXX'

4. Read APN profiles

COMMAND `mmcli -m a --command='AT+CGDCONT?'`

PURPOSE Displays the PDP context profiles stored by the Telit modem. Verizon may return several carrier APN profiles.

EXAMPLE OUTPUT

```

response: '+CGDCONT: 1,"IPV4V6","ims","",0,0,0,0
+CGDCONT: 2,"IPV4V6","vzwadmin","",0,0,0,0
+CGDCONT: 3,"IPV4V6","vzwinternet","",0,0,0,0
+CGDCONT: 4,"IPV4V6","vzwapp","",0,0,0,0
+CGDCONT: 5,"IPV4V6","",0,0,0,1
+CGDCONT: 6,"IPV4V6","vzwclass6","",0,0,0,0
+CGDCONT: 7,"IPV4V6","vzwclass7","",0,0,0,0'

```

5. Enable carrier APN auto populate

COMMAND `mmcli -m a --command='AT#FWAUTOSIM=1'`

PURPOSE Enables Telit automatic carrier APN population so a supported carrier APN can be retrieved from the network.

EXAMPLE OUTPUT

response: ''

6. Check APN auto populate

COMMAND `mmcli -m a --command='AT#FWAUTOSIM?'`

PURPOSE Reads the current Telit automatic SIM and APN population setting. A value of 1 means it is enabled.

EXAMPLE OUTPUT

response: '#FWAUTOSIM: 1'

7. NetworkManager APN connection files

COMMAND `cat /etc/NetworkManager/system-connections/sim1.nmconnection && cat /etc/NetworkManager/system-connections/sim2.nmconnection`

PURPOSE Displays the NetworkManager connection files where the configured APN values for SIM 1 and SIM 2 are stored. The APN appears under the [gsm] section.

EXAMPLE OUTPUT

```
root@kona-photon-01FB2C:/etc/NetworkManager/system-connections# cat sim1.nmconnection
[connection]
id=sim1
uuid=b4e220a1-ab90-4a58-ad47-4651c7014903
type=gsm
autoconnect=false
interface-name=cdc-wdm0
timestamp=1743797742
[gsm]
apn=vzwinternet
[ipv4]
method=auto
route-metric=20
[ipv6]
addr-gen-mode=stable-privacy
method=auto
[proxy]
root@kona-photon-01FB2C:/etc/NetworkManager/system-connections#
root@kona-photon-01FB2C:/etc/NetworkManager/system-connections# cat sim2.nmconnection
[connection]
id=sim2
uuid=4c0566eb-343a-416d-aac9-74ae5ad33e1e
type=gsm
autoconnect=false
interface-name=cdc-wdm0
[gsm]
apn=vzwinternet
[ipv4]
method=auto
route-metric=20
[ipv6]
addr-gen-mode=stable-privacy
method=auto
[proxy]
root@kona-photon-01FB2C:/etc/NetworkManager/system-connections#
```

8. Apply a manually configured APN

COMMAND `nmcli con reload`

PURPOSE After manually setting or changing the APN in /etc/NetworkManager/system-connections, run this command to reload the NetworkManager connection profiles and apply the change.

EXAMPLE OUTPUT

```
root@kona-photon-01FB2C:~# nmcli con reload
```

9. Connection Manager details

COMMAND cat /tmp/ConnectionManager.txt

PURPOSE Displays the Connection Manager report containing modem, SIM slot, home network, RF, active APN profile, IP address, DNS, and call statistics information.

EXAMPLE OUTPUT

```
root@kona-micro-0328F0:~# cat /tmp/ConnectionManager.txt
```

DEVICE INFORMATION

```
Manufacturer      : Telit
Model Id          : LE910C1-WWxD
Firmware Revisions : 25.30.408 1 [Nov 14 2023 07:00:00]
Boot Revisions    :
PRI Revisions     :
PRL Version       :
PRL Preference    :
IMSI              : 234502110542201
ESN Number        :
IMEI Number       : 357273224272353
MEID Number       :
Hardware Revision : 1.20
Device State      : DEVICE CONNECTED
```

SIM SLOT PRESENCE STATUS

```
SIM Slot 0        : READY
SIM Slot 1        : ABSENT
```

HOME NETWORK

```
Home Network      : teal
Roaming Status    : allowed
Data Capabilities : gsm-umts, lte
Session State     : home
Data Bearer       : lte
Dormancy Status   :
LU Reject Cause   :
```

RF INFORMATION

```
Radio Interface   : lte
Active Band Class : 102
Active Channel    : 900
Cell ID           : 03409F28
Signal Strength   : -68.00 dBm
ECIO              : 7dB
IO               :
SINR              : -0.40 dB
RSRQ              : -17.00 dB
```

ACTIVE PROFILE PARAMETERS

```
PDP Type          : 3
Authentication    :
Profile Name      : sim1
APN Name          : teal
User Name         :
IP Address        : 10.27.155.215
Primary DNS       : 8.8.8.8
Secondary DNS     : 8.8.4.4
```

CALL STATISTICS

```
Call Status       : CONNECTED
Bytes Transferred : 2435
```

Bytes Received	: 84
Current TX Rate	: 81.16
Current RX Rate	: 2.80
MAX TX Rate	:
MAX RX Rate	:

10. Check CM logs

COMMAND `tail -f /var/log/debug | grep -w CM`

PURPOSE Displays Connection Manager (CM) log entries from /var/log/debug in real time.

EXAMPLE OUTPUT

```
root@kona-photon-01FB2C:~# tail -f /var/log/debug | grep -w CM
Apr  4 19:26:01 kona-photon-01FB2C [CM]: Connection info version '1.1.1'
Apr  4 19:26:07 kona-photon-01FB2C [CM]: 'connection-info' exiting...
Apr  4 19:26:07 kona-photon-01FB2C [CM]: pid_file is /var/run/connection-info.pid
Apr  4 19:26:07 kona-photon-01FB2C [CM]: Removing PID file '/var/run/connection-info.pid' and releasing lock
Apr  4 19:27:01 kona-photon-01FB2C [CM]: Connection info version '1.1.1'
Apr  4 19:27:07 kona-photon-01FB2C [CM]: 'connection-info' exiting...
```