

Bearerが複数できる件

1. 概要

Debian12環境で誤ったAPN設定でnmcli connection upすると、Bearerが複数できてしまう。(※1)
対してDebian10環境では上記の場合でもBearerが複数できることはなかった。
挙動が変わった原因や、Debian12の挙動が正しいのかが不明。正しい場合、今設定している接続は
どちらのBearerかを確認する方法が知りたい。

- ・ 詳細は次章の動作確認、確認結果を参照
- ・ (※1)をしたときのsyslog
syslog_connection_up_mm_20240527.txt

2. 動作確認

2.1 確認内容

Debian12、10の環境で誤ったAPN設定でnmcli connection upし、mmcliコマンドによりBearerの情
報を確認した

2.2 ソフトバージョン

- Debian12

```
modemmanager : 1.20.4-1atmark2  
kernel:6.1.84-at3  
u-boot:2016.07-at25
```

- Debian10

```
modemmanager : 1.10.0-1atmark3  
u-boot : 2016.07-at25  
kernel : 4.9.133-at25
```

2.2.1 Debian12

```
sudo nmcli connection modify gsm-ttyACM0 gsm.apn BBBB gsm.username xxxx gsm.passwor  
d xxxx  
systemctl stop connection-recover.service  
nmcli connection down gsm-ttyACM0  
nmcli connection up gsm-ttyACM0
```

※BBBB:誤ったAPN

```
mmcli -m 0
```

```
Modes | supported: allowed: 4g; preferred: none
      | current: allowed: 4g; preferred: none
-----
Bands | supported: eutran-1, eutran-18, eutran-19
-----
IP | supported: ipv4, ipv6, ipv4v6
-----
3GPP | registration: idle
      | packet service state: detached
-----
3GPP EPS | ue mode of operation: csps-2
-----
SIM | primary sim path: /org/freedesktop/ModemManager1/SIM/0
-----
Bearer | paths: /org/freedesktop/ModemManager1/Bearer/1
        | /org/freedesktop/ModemManager1/Bearer/0
root@armadillo:~#
```

```
mmcli -b 0
```

```
root@armadillo:~# mmcli -b 0
-----
General | path: /org/freedesktop/ModemManager1/Bearer/0
        | type: default
-----
Status | connected: no
        | connection error name: org.freedesktop.ModemManager1.Error.MobileEquipment.Unknown
        | connection error message: Unknown error
        | suspended: no
        | multiplexed: no
        | ip timeout: 20
-----
Properties | apn:
           | roaming:
           | ip type:
           | user:
           | password:
-----
Statistics | start date: 2024-01-26T21:49:10Z
           | duration: 101
           | attempts: 1
           | total-duration: 101
root@armadillo:~#
```

```
mmcli -b 1
```

```

root@armadillo:~# mmcli -b 1
-----
General | path: /org/freedesktop/ModemManager1/Bearer/1
        | type: default
-----
Status  | connected: no
        | connection error name: org.freedesktop.ModemManager1.Error.MobileEquipment.Unknown
        | connection error message: Unknown error
        | suspended: no
        | multiplexed: no
        | ip timeout: 20
-----
Properties | apn: BBBB
          | roaming:
          | ip type:
          | user:
          | password:
-----
Statistics | attempts: 3
          | attempts: 2
root@armadillo:~#

```

```
nmcli connection show gsm-ttyACM0 | grep gsm.apn
```

```

root@armadillo:~# nmcli connection show gsm-ttyACM0 | grep gsm.apn
gsm.apn: "BBBB"
root@armadillo:~#

```

補足

Bearerの情報(mmcli -b 0, mmcli -b 1)で表示される内容が逆になるケースもあった

```

state: enabled
power state: on
access tech: lte
signal quality: 0% (cached)
-----
Modes | supported: allowed: 4g; preferred: none
      | current: allowed: 4g; preferred: none
-----
Bands | supported: eutran-1, eutran-18, eutran-19
-----
IP | supported: ipv4, ipv6, ipv4v6
-----
3GPP | registration: idle
      | packet service state: detached
-----
3GPP EPS | ue mode of operation: csps-2
-----
SIM | primary sim path: /org/freedesktop/ModemManager1/SIM/0
-----
Bearer | paths: /org/freedesktop/ModemManager1/Bearer/1
        | /org/freedesktop/ModemManager1/Bearer/0
root@armadillo:~#

```

```
root@armadillo:~# mmcli -b 0
-----
General | path: /org/freedesktop/ModemManager1/Bearer/0
        | type: default
-----
Status  | connected: no
        | connection error name: org.freedesktop.ModemManager1.Error.MobileEquipment.Unknown
        | connection error message: Unknown error
        | suspended: no
        | multiplexed: no
        | ip timeout: 20
-----
Properties | apn: BBBB
          | roaming:
          | ip type:
          | user:
          | password:
-----
Statistics | attempts: 8
          | attempts: 6
          | total-duration: 44
root@armadillo:~#
```

```
root@armadillo:~# mmcli -b 1
-----
General | path: /org/freedesktop/ModemManager1/Bearer/1
        | type: default
-----
Status  | connected: no
        | connection error name: org.freedesktop.ModemManager1.Error.MobileEquipment.Unknown
        | connection error message: Unknown error
        | suspended: no
        | multiplexed: no
        | ip timeout: 20
-----
Properties | apn:
          | roaming:
          | ip type:
          | user:
          | password:
-----
Statistics | start date: 2024-01-26T21:55:11Z
          | duration: 45
          | attempts: 1
          | total-duration: 45
root@armadillo:~#
```

```
root@armadillo:~# nmcli connection show gsm-ttyACMO | grep gsm.apn
gsm.apn: "BBBB"
root@armadillo:~#
```

2.2.2 Debian10

```
nmcli connection modify gsm-ttyACM0 gsm.apn BBBB gsm.username xxxx gsm.password xxx
x
systemctl stop connection-recover.service
nmcli connection down gsm-ttyACM0
nmcli connection up gsm-ttyACM0
```

※BBBB:誤ったAPN設定

```
mmcli -m 0
```

```
Status | state: connecting
        | power state: on
        | access tech: lte
        | signal quality: 100% (recent)
-----|-----
Modes   | supported: allowed: 2g; preferred: none
        | current: allowed: 2g; preferred: none
-----|-----
IP       | supported: ipv4, ipv6, ipv4v6
-----|-----
3GPP     | imei: [REDACTED]
        | registration: home
-----|-----
3GPP EPS | ue mode of operation: csps-2
-----|-----
SIM      | dbus path: /org/freedesktop/ModemManager1/SIM/0
-----|-----
Bearer   | dbus path: /org/freedesktop/ModemManager1/Bearer/5
root@armadillo:~#
```

```
mmcli -b 5
nmcli connection show gsm-ttyACM0 | grep gsm.apn
```

```
root@armadillo:~# mmcli -b 5
-----|-----
General | dbus path: /org/freedesktop/ModemManager1/Bearer/5
        | type: default
-----|-----
Status   | connected: no
        | suspended: no
        | ip timeout: 20
-----|-----
Properties | apn: BBBB
          | roaming: [REDACTED]
          | ip type: [REDACTED]
          | user: [REDACTED]
          | password: [REDACTED]
root@armadillo:~# nmcli connection show gsm-ttyACM0 | grep gsm.apn
gsm.apn: BBBB
root@armadillo:~#
```

2.3 確認結果

Debian12環境では、誤ったAPN設定をすると、Bearerが複数できてしまう。またmmcli -mで出力されるBearerにおいて、どちらが現在のAPN設定のBearerかわからない（逆になることがある）。それに対しDebian10環境では、誤ったAPN設定をしても、Bearerは1つしかできない