

OsmoGSMTester - Bug #2421

Bug # 2187 (Closed): ofono: not all modems do what they should

ofono: Gobi modem: Refuses to Power on

08/02/2017 12:54 PM - pespin

Status:	Closed	Start date:	08/02/2017
Priority:	Normal	Due date:	
Assignee:	lynxis	% Done:	100%
Category:			
Target version:			
Spec Reference:			

Description

In osmo-gsm-tester, it fails to SetProperty Powered true:

```
14:45:17.985120 bus /gobi_3: Setting Powered True
14:45:38.327360 tst mo_mt_sms.py:17: ERR: Error: g-io-error-quark: GDBus.Error:org
g.ofono.Error.Timedout: Operation failure due to timeout (36) [trial→sms→mo_mt_sms.py:17]
14:45:38.340286 tst mo_mt_sms.py:17: Test FAILED (51.6 sec)
```

ofonod debug output while this happens:

```
Aug 02 14:45:17 osmo-gsm-tester-rnd ofonod[20630]: plugins/gobi.c:gobi_enable() 0x1fa3850
Aug 02 14:45:17 osmo-gsm-tester-rnd ofonod[20630]: src/modem.c:get_modem_property() modem 0x1fa3850
0 property Device
Aug 02 14:45:38 osmo-gsm-tester-rnd ofonod[20630]: src/modem.c:set_powered_timeout() modem: 0x1fa3850
```

Same with mdbus2 manually, even after powercycling of the modem using quad_modem_power_cycle.sh:

```
# mdbus2 -s org.ofono /gobi_3 org.ofono.Modem.SetProperty Powered true
[ERR]: GDBus.Error:org.ofono.Error.Timedout: Operation failure due to timeout
```

The four modems (including the gobi one) seem to be discovered correctly both by the kernel and ofono, see dmesg output after quad_modem_power_cycle.sh is run:

```
[6553390.182770] usb 1-1.1: USB disconnect, device number 71
[6553390.390803] usb 1-1.1: new full-speed USB device number 78 using ehci-pci
[6553390.518165] usb 1-1.1: New USB device found, idVendor=1d50, idProduct=4004
[6553390.525340] usb 1-1.1: New USB device strings: Mfr=2, Product=1, SerialNumber=0
[6553390.532861] usb 1-1.1: Product: sysmocom - s.f.m.c. GmbH
[6553390.538391] usb 1-1.1: Manufacturer: SIMtrace 2 compatible device
[6553390.559545] usb 1-1.4: USB disconnect, device number 72
[6553390.770791] usb 1-1.4: new full-speed USB device number 79 using ehci-pci
[6553390.894471] usb 1-1.4: New USB device found, idVendor=1d50, idProduct=4004
[6553390.901589] usb 1-1.4: New USB device strings: Mfr=2, Product=1, SerialNumber=0
[6553390.909112] usb 1-1.4: Product: sysmocom - s.f.m.c. GmbH
[6553390.914636] usb 1-1.4: Manufacturer: SIMtrace 2 compatible device
[6553390.935373] usb 1-1.5: USB disconnect, device number 74
[6553390.948742] qmi_wwan 1-1.5:1.0 wwan0: unregister 'qmi_wwan' usb-0000:00:12.2-1.5, WWAN/QMI de
vice
[6553390.970108] qcserial ttyUSB0: Qualcomm USB modem converter now disconnected from ttyUSB0
[6553390.980088] qcserial 1-1.5:1.1: device disconnected
[6553390.986066] qcserial ttyUSB3: Qualcomm USB modem converter now disconnected from ttyUSB3
[6553390.994471] qcserial 1-1.5:1.2: device disconnected
[6553390.999854] qcserial ttyUSB4: Qualcomm USB modem converter now disconnected from ttyUSB4
[6553391.008193] qcserial 1-1.5:1.3: device disconnected
[6553391.214703] usb 1-1.5: new high-speed USB device number 80 using ehci-pci
```

```
[6553391.316503] usb 1-1.5: config 1 has an invalid interface number: 1 but max is 0
[6553391.324066] usb 1-1.5: config 1 has no interface number 0
[6553391.332243] usb 1-1.5: New USB device found, idVendor=05c6, idProduct=9204
[6553391.339331] usb 1-1.5: New USB device strings: Mfr=3, Product=2, SerialNumber=0
[6553391.346838] usb 1-1.5: Product: Qualcomm Gobi 2000
[6553391.351835] usb 1-1.5: Manufacturer: Qualcomm Incorporated
[6553391.364581] qcserial 1-1.5:1.1: Qualcomm USB modem converter detected
[6553391.371627] usb 1-1.5: Qualcomm USB modem converter now attached to ttyUSB0
[6553394.534106] usb 1-1.5: USB disconnect, device number 80
[6553394.541199] qcserial ttyUSB0: Qualcomm USB modem converter now disconnected from ttyUSB0
[6553394.551162] qcserial 1-1.5:1.1: device disconnected
[6553395.501809] usb 1-1.5: new high-speed USB device number 81 using ehci-pci
[6553395.605086] usb 1-1.5: New USB device found, idVendor=05c6, idProduct=9205
[6553395.612217] usb 1-1.5: New USB device strings: Mfr=3, Product=2, SerialNumber=0
[6553395.619778] usb 1-1.5: Product: Qualcomm Gobi 2000
[6553395.624775] usb 1-1.5: Manufacturer: Qualcomm Incorporated
[6553395.638248] qmi_wwan 1-1.5:1.0: cdc-wdm0: USB WDM device
[6553395.645575] qmi_wwan 1-1.5:1.0 wwan0: register 'qmi_wwan' at usb-0000:00:12.2-1.5, WWAN/QMI device, fa:6e:3a:f0:a3:34
[6553395.658826] qcserial 1-1.5:1.1: Qualcomm USB modem converter detected
[6553395.666498] usb 1-1.5: Qualcomm USB modem converter now attached to ttyUSB0
[6553395.676696] qcserial 1-1.5:1.2: Qualcomm USB modem converter detected
[6553395.684724] usb 1-1.5: Qualcomm USB modem converter now attached to ttyUSB3
[6553395.694202] qcserial 1-1.5:1.3: Qualcomm USB modem converter detected
[6553395.702396] usb 1-1.5: Qualcomm USB modem converter now attached to ttyUSB4
[6553400.165383] usb 1-1.6: USB disconnect, device number 75
[6553400.173011] qcserial ttyUSB5: Qualcomm USB modem converter now disconnected from ttyUSB5
[6553400.181524] qcserial 1-1.6:1.0: device disconnected
[6553400.187066] qcserial ttyUSB6: Qualcomm USB modem converter now disconnected from ttyUSB6
[6553400.195474] qcserial 1-1.6:1.1: device disconnected
[6553400.209937] qcserial ttyUSB7: Qualcomm USB modem converter now disconnected from ttyUSB7
[6553400.209330] qcserial 1-1.6:1.2: device disconnected
[6553400.214796] qcserial ttyUSB8: Qualcomm USB modem converter now disconnected from ttyUSB8
[6553400.223201] qcserial 1-1.6:1.3: device disconnected
[6553400.228545] qmi_wwan 1-1.6:1.4 wwan1: unregister 'qmi_wwan' usb-0000:00:12.2-1.6, WWAN/QMI device
[6553400.445377] usb 1-1.6: new high-speed USB device number 82 using ehci-pci
[6553400.559460] usb 1-1.6: New USB device found, idVendor=05c6, idProduct=9215
[6553400.566626] usb 1-1.6: New USB device strings: Mfr=1, Product=2, SerialNumber=0
[6553400.574150] usb 1-1.6: Product: Quectel LTE Module
[6553400.579158] usb 1-1.6: Manufacturer: Quectel
[6553400.606977] qcserial 1-1.6:1.0: Qualcomm USB modem converter detected
[6553400.614599] usb 1-1.6: Qualcomm USB modem converter now attached to ttyUSB5
[6553400.625361] qcserial 1-1.6:1.1: Qualcomm USB modem converter detected
[6553400.632668] usb 1-1.6: Qualcomm USB modem converter now attached to ttyUSB6
[6553400.642700] qcserial 1-1.6:1.2: Qualcomm USB modem converter detected
[6553400.650083] usb 1-1.6: Qualcomm USB modem converter now attached to ttyUSB7
[6553400.659843] qcserial 1-1.6:1.3: Qualcomm USB modem converter detected
[6553400.667747] usb 1-1.6: Qualcomm USB modem converter now attached to ttyUSB8
[6553400.677969] qmi_wwan 1-1.6:1.4: cdc-wdm1: USB WDM device
[6553400.684977] qmi_wwan 1-1.6:1.4 wwan1: register 'qmi_wwan' at usb-0000:00:12.2-1.6, WWAN/QMI device, fa:6e:3a:f0:a3:34
[6553401.445595] usb 1-1.2: USB disconnect, device number 77
[6553401.452613] option1 ttyUSB12: GSM modem (1-port) converter now disconnected from ttyUSB12
[6553401.461455] option 1-1.2:1.0: device disconnected
[6553401.466995] option1 ttyUSB13: GSM modem (1-port) converter now disconnected from ttyUSB13
[6553401.475594] option 1-1.2:1.2: device disconnected
[6553401.481047] option1 ttyUSB14: GSM modem (1-port) converter now disconnected from ttyUSB14
[6553401.489607] option 1-1.2:1.3: device disconnected
[6553401.494898] qmi_wwan 1-1.2:1.8 wwan4: unregister 'qmi_wwan' usb-0000:00:12.2-1.2, WWAN/QMI device
[6553401.514504] qmi_wwan 1-1.2:1.10 wwan5: unregister 'qmi_wwan' usb-0000:00:12.2-1.2, WWAN/QMI device
[6553401.733359] usb 1-1.2: new high-speed USB device number 83 using ehci-pci
[6553401.846888] usb 1-1.2: config 1 has an invalid interface number: 8 but max is 5
[6553401.854459] usb 1-1.2: config 1 has an invalid interface number: 10 but max is 5
[6553401.862090] usb 1-1.2: config 1 has an invalid interface number: 11 but max is 5
```

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[6553401.869695] usb 1-1.2: config 1 has no interface number 1
[6553401.875312] usb 1-1.2: config 1 has no interface number 4
[6553401.880914] usb 1-1.2: config 1 has no interface number 5
[6553401.887528] usb 1-1.2: New USB device found, idVendor=1199, idProduct=68c0
[6553401.894605] usb 1-1.2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[6553401.902126] usb 1-1.2: Product: MC7304
[6553401.906189] usb 1-1.2: Manufacturer: Sierra Wireless, Incorporated
[6553401.914371] option 1-1.2:1.0: GSM modem (1-port) converter detected
[6553401.921402] usb 1-1.2: GSM modem (1-port) converter now attached to ttyUSB12
[6553401.929120] option 1-1.2:1.2: GSM modem (1-port) converter detected
[6553401.936035] usb 1-1.2: GSM modem (1-port) converter now attached to ttyUSB13
[6553401.943791] option 1-1.2:1.3: GSM modem (1-port) converter detected
[6553401.950646] usb 1-1.2: GSM modem (1-port) converter now attached to ttyUSB14
[6553401.959407] qmi_wwan 1-1.2:1.8: cdc-wdm4: USB WDM device
[6553401.965811] qmi_wwan 1-1.2:1.8 wwan4: register 'qmi_wwan' at usb-0000:00:12.2-1.2, WWAN/QMI device, fa:6e:3a:f0:a3:34
[6553401.979327] qmi_wwan 1-1.2:1.10: cdc-wdm5: USB WDM device
[6553401.985923] qmi_wwan 1-1.2:1.10 wwan5: register 'qmi_wwan' at usb-0000:00:12.2-1.2, WWAN/QMI device, fa:6e:3a:f0:a3:34
[6553401.998602] usb 1-1.3: USB disconnect, device number 76
[6553402.018253] option1 ttyUSB9: GSM modem (1-port) converter now disconnected from ttyUSB9
[6553402.029365] option 1-1.3:1.0: device disconnected
[6553402.041257] option1 ttyUSB10: GSM modem (1-port) converter now disconnected from ttyUSB10
[6553402.060586] option 1-1.3:1.2: device disconnected
[6553402.078174] option1 ttyUSB11: GSM modem (1-port) converter now disconnected from ttyUSB11
[6553402.087727] option 1-1.3:1.3: device disconnected
[6553402.093896] qmi_wwan 1-1.3:1.8 wwan2: unregister 'qmi_wwan' usb-0000:00:12.2-1.3, WWAN/QMI device
[6553402.112093] qmi_wwan 1-1.3:1.10 wwan3: unregister 'qmi_wwan' usb-0000:00:12.2-1.3, WWAN/QMI device
[6553402.337285] usb 1-1.3: new high-speed USB device number 84 using ehci-pci
[6553402.438338] usb 1-1.3: config 1 has an invalid interface number: 8 but max is 5
[6553402.445906] usb 1-1.3: config 1 has an invalid interface number: 10 but max is 5
[6553402.453500] usb 1-1.3: config 1 has an invalid interface number: 11 but max is 5
[6553402.461099] usb 1-1.3: config 1 has no interface number 1
[6553402.466702] usb 1-1.3: config 1 has no interface number 4
[6553402.472300] usb 1-1.3: config 1 has no interface number 5
[6553402.479462] usb 1-1.3: New USB device found, idVendor=1199, idProduct=68c0
[6553402.486574] usb 1-1.3: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[6553402.494138] usb 1-1.3: Product: MC7304
[6553402.498097] usb 1-1.3: Manufacturer: Sierra Wireless, Incorporated
[6553402.506461] option 1-1.3:1.0: GSM modem (1-port) converter detected
[6553402.513365] usb 1-1.3: GSM modem (1-port) converter now attached to ttyUSB9
[6553402.520883] option 1-1.3:1.2: GSM modem (1-port) converter detected
[6553402.527698] usb 1-1.3: GSM modem (1-port) converter now attached to ttyUSB10
[6553402.535317] option 1-1.3:1.3: GSM modem (1-port) converter detected
[6553402.542166] usb 1-1.3: GSM modem (1-port) converter now attached to ttyUSB11
[6553402.551043] qmi_wwan 1-1.3:1.8: cdc-wdm2: USB WDM device
[6553402.557592] qmi_wwan 1-1.3:1.8 wwan2: register 'qmi_wwan' at usb-0000:00:12.2-1.3, WWAN/QMI device, fa:6e:3a:f0:a3:34
[6553402.570848] qmi_wwan 1-1.3:1.10: cdc-wdm3: USB WDM device
[6553402.577125] qmi_wwan 1-1.3:1.10 wwan3: register 'qmi_wwan' at usb-0000:00:12.2-1.3, WWAN/QMI device, fa:6e:3a:f0:a3:34

```

Related issues:

Blocks OsmoGSMTester - Bug #2237: ofono: Gobi modem: successful SMS delivery ...

[Feedback](#)

05/05/2017

History

#1 - 08/08/2017 03:53 PM - lynxis

I've tested a gobi2000 on a breakout board with my lapto (archlinux) and everything works. Connecting the same board+modem with the apu, it doesn't work.

I guess the problem lies within the gobi_loader. It might be a timing issue.
Working firmware sha256

18d161dc5e9db5e795b1f1026e47d0590b6cc0ed9bef824ac0c4b771b529c364 amss.mbn
cd7d9adaccf59f02b3bc8261334ed83c7644fbd9f697055189533467d6c882b2 apps.mbn
37dfc789f899d0ec4c8ba2c403a1a4bc266c9017c94f2b90912e1b7e978c42e7 UQCN.mbn

I'll postpone this ticket for now.

#2 - 08/10/2017 04:35 PM - pespin

- *Blocks Bug #2237: ofono: Gobi modem: successful SMS delivery is evaluated as not successful added*

#3 - 08/21/2017 04:04 AM - lynxis

This is fixed in the lynxis/master branch. The problem was the "Sync" command. I've reworked the Sync command to depend on the control version.

#4 - 08/29/2017 09:27 AM - pespin

I confirm that this works. With osmo-gsm-tester branch I cannot power on a gobi modem. Once I switch to lynxis/master, the gobi modem can be powered on.

Please push this upstream and merge it with osmo-gsm-tester when you have time.

#5 - 08/31/2017 12:00 PM - lynxis

- *Status changed from New to Feedback*

#6 - 09/07/2017 06:05 PM - lynxis

- *Status changed from Feedback to Resolved*

- *% Done changed from 0 to 100*

#7 - 10/11/2017 02:51 AM - laforge

- *Status changed from Resolved to Closed*