

OsmoGSMTester - Bug #2238

ofono: Gobi modem: cannot receive SMS

05/05/2017 01:07 PM - neels

Status:	In Progress	Start date:	05/05/2017
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:			
Target version:			
Spec Reference:			
Description			
The Gobi happily responds to paging and receives an SMS, but that doesn't result in a Dbus IncomingMessage signal as it should.			
Related issues:			
Related to OsmoGSMTester - Bug #2188: ofono: Gobi modem refuses to set Online...		Closed	04/25/2017

History

#1 - 05/05/2017 01:08 PM - neels

```
root@osmo-gsm-tester-rnd:~# mdbus2 -s org.ofono /sierra_1 org.ofono.MessageManager.SendMessage 1009 "test sms to gobi 3"
('/sierra_1/message_CCD3AC8CFBDC9135B1E631BCCA872AAB3B476A',)

[SIGNAL] org.ofono.MessageManager.MessageAdded /sierra_1 :1.873
('/sierra_1/message_CCD3AC8CFBDC9135B1E631BCCA872AAB3B476A', {'State': <'pending'>})
[SIGNAL] org.ofono.Message.PropertyChanged /sierra_1/message_CCD3AC8CFBDC9135B1E631BCCA872AAB3B476A :1.873
('State', <'sent'>)
[SIGNAL] org.ofono.MessageManager.MessageRemoved /sierra_1 :1.873
('/sierra_1/message_CCD3AC8CFBDC9135B1E631BCCA872AAB3B476A',)

20170505150616847 DRSL <0004> abis_rsl.c:1867 (bts=0,trx=0,ts=0,ss=1) Activating ARFCN(868) SS(1) lctype SDCCH
r=OTHER ra=0x1f ta=0
20170505150616847 DRSL <0004> abis_rsl.c:586 (bts=0,trx=0,ts=0,pchan=CCCH+SDCCH4) Tx RSL Channel Activate with
act_type=INITIAL
20170505150616847 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state NONE -> ACTIVATION REQUESTED

20170505150616855 DRSL <0004> abis_rsl.c:1590 (bts=0,trx=0,ts=0,ss=1) CHANNEL ACTIVATE ACK
20170505150616855 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state ACTIVATION REQUESTED -> ACTIVE
20170505150617203 DMM <0002> gsm_04_08.c:1016 <- CM SERVICE REQUEST serv_type=0x04 MI(TMSI)=3660505949
20170505150617226 DMM <0002> gsm_04_08_utils.c:662 -> CM SERVICE ACK
20170505150618380 DLSMS <0022> gsm_04_11.c:805 receiving data (trans_id=d)
20170505150618380 DLSMS <0022> gsm_04_11.c:820 -> (new transaction)
20170505150618380 DLSMS <0022> gsm0411_smc.c:87 SMC(0) instance created for network
20170505150618380 DLSMS <0022> gsm0411_smr.c:85 SMR(0) instance created for network.
20170505150618381 DLSMS <0022> gsm0411_smc.c:567 SMC(0) message MMSMS-EST-IND (CP DATA) received in state IDLE
20170505150618381 DLSMS <0022> gsm0411_smc.c:284 SMC(0) received CP-DATA
20170505150618381 DLSMS <0022> gsm0411_smc.c:133 SMC(0) new CP state IDLE -> MM_ESTABLISHED
20170505150618381 DLSMS <0022> gsm_04_11.c:143 sending CP message (trans=d)
20170505150618381 DLSMS <0022> gsm_04_11.c:127 GSM4.11 TX d9 04
20170505150618381 DLSMS <0022> gsm_04_11.c:769 MMSMS-DATA/EST-IND
20170505150618381 DLSMS <0022> gsm0411_smr.c:483 SMR(0) message MMSMS-EST-IND received in state IDLE
20170505150618381 DLSMS <0022> gsm0411_smr.c:257 SMR(0) RX SMS RP-DATA
20170505150618381 DLSMS <0022> gsm0411_smr.c:139 SMR(0) new RP state IDLE -> WAIT_TO_TX_RP_ACK
20170505150618381 DLSMS <0022> gsm_04_11.c:686 RX SMS RP-DATA (MO)
20170505150618381 DLSMS <0022> gsm_04_11.c:586 RX_RP-DATA: src_len=0, dst_len=2 ud_len=26
20170505150618381 DLSMS <0022> gsm_04_11.c:554 DST(2,91 f7 )
20170505150618381 DLSMS <0022> gsm_04_11.c:478 RX SMS: Sender: 901700000009031, MTI: 0x01, VPF: 0x02, MR: 0x39
PID: 0x00, DCS: 0x00, DA: 1009, UserDataLength: 0x12, UserData: "test sms to gobi 3"
20170505150618381 DLSMS <0022> sms_queue.c:333 Triggering SMS queue

20170505150618406 DLSMS <0022> sms_queue.c:333 Triggering SMS queue
20170505150618406 DLSMS <0022> gsm_04_11.c:513 TX: SMS RP ACK
20170505150618406 DLSMS <0022> gsm0411_smr.c:416 SMR(0) message SM-RL-REPORT_REQ received in state WAIT_TO_TX_
RP_ACK
20170505150618406 DLSMS <0022> gsm0411_smr.c:226 SMR(0) TX SMS REPORT
```

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20170505150618406 DLSMS <0022> gsm0411_smr.c:139 SMR(0) new RP state WAIT_TO_TX_RP_ACK -> IDLE
20170505150618407 DLSMS <0022> gsm0411_smc.c:467 SMC(0) message MNSMS-DATA-REQ received in state MM_ESTABLISHED
D
20170505150618407 DLSMS <0022> gsm0411_smc.c:180 SMC(0) send CP data

20170505150618407 DLSMS <0022> gsm0411_smc.c:133 SMC(0) new CP state MM_ESTABLISHED -> WAIT_CP_ACK
20170505150618407 DLSMS <0022> gsm_04_11.c:143 sending CP message (trans=d)
20170505150618407 DLSMS <0022> gsm_04_11.c:127 GSM4.11 TX d9 01 02 03 0d
20170505150618407 DLSMS <0022> gsm0411_smr.c:185 SMR(0) TX: MNSMS-REL-REQ
20170505150618407 DLSMS <0022> gsm0411_smc.c:467 SMC(0) message MNSMS-REL-REQ received in state WAIT_CP_ACK
20170505150618407 DLSMS <0022> gsm0411_smc.c:332 SMC(0) cannot release yet current state: WAIT_CP_ACK
20170505150619088 DLSMS <0022> gsm_04_11.c:805 receiving data (trans_id=d)
20170505150619088 DLSMS <0022> gsm0411_smc.c:567 SMC(0) message MMSMS-DATA-IND (CP ACK) received in state WAIT
_CP_ACK
20170505150619088 DLSMS <0022> gsm0411_smc.c:256 SMC(0) received CP-ACK

20170505150619088 DLSMS <0022> gsm0411_smc.c:133 SMC(0) new CP state WAIT_CP_ACK -> MM_ESTABLISHED
20170505150619088 DLSMS <0022> gsm0411_smc.c:268 SMC(0) we have pending release.
20170505150619088 DLSMS <0022> gsm0411_smc.c:133 SMC(0) new CP state MM_ESTABLISHED -> IDLE
20170505150619088 DLSMS <0022> gsm_04_11.c:166 Got MMSMS_REL_REQ, destroying transaction.
20170505150619088 DLSMS <0022> gsm0411_smr.c:92 SMR(0) clearing SMR instance
20170505150619088 DLSMS <0022> gsm0411_smc.c:94 SMC(0) clearing instance
20170505150619110 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state ACTIVE -> RELEASE REQUESTED
20170505150619110 DRR <0003> gsm_04_08_utils.c:251 Sending Channel Release: Chan: Number: 1 Type: 1
20170505150619110 DRSL <0004> abis_rsl.c:768 (bts=0,trx=0,ts=0,ss=1) DEACTivate SACCH CMD
20170505150619116 DRSL <0004> abis_rsl.c:2027 (bts=0,trx=0,ts=0,ss=1) waiting for SAPI=0 to be released.
20170505150619322 DRSL <0004> abis_rsl.c:1718 (bts=0,trx=0,ts=0,ss=1) T3111 expired: releasing RF Channel
20170505150619322 DRSL <0004> abis_rsl.c:860 (bts=0,trx=0,ts=0,ss=1) RF Channel Release
20170505150619327 DRSL <0004> abis_rsl.c:931 (bts=0,trx=0,ts=0,ss=1) RF CHANNEL RELEASE ACK
20170505150619327 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state RELEASE REQUESTED -> NONE
20170505150619381 DLSMS <0022> sms_queue.c:220 Attempting to send 20 SMS
20170505150619394 DLSMS <0022> sms_queue.c:235 Sending SMS round 1
20170505150619394 DLSMS <0022> gsm_04_11.c:1008 Sending SMS: no connection open, start paging 901700000009032
20170505150619394 DMM <0002> gsm_subscriber.c:190 Subscriber 901700000009032 not paged yet.
20170505150619405 DLSMS <0022> sms_queue.c:235 Sending SMS round 2
20170505150619405 DLSMS <0022> sms_queue.c:251 Sending SMS done (loop) (1 attempted)
20170505150619405 DLSMS <0022> sms_queue.c:286 SMSqueue added 1 messages in 2 rounds
20170505150621125 DRSL <0004> abis_rsl.c:1867 (bts=0,trx=0,ts=0,ss=1) Activating ARFCN(868) SS(1) lctype SDCCCH
r=OTHER ra=0x10 ta=0
20170505150621125 DRSL <0004> abis_rsl.c:586 (bts=0,trx=0,ts=0,pchan=CCCH+SDCCCH4) Tx RSL Channel Activate with
act_type=INITIAL
20170505150621125 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state NONE -> ACTIVATION REQUESTED

20170505150621133 DRSL <0004> abis_rsl.c:1590 (bts=0,trx=0,ts=0,ss=1) CHANNEL ACTIVATE ACK
20170505150621133 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state ACTIVATION REQUESTED -> ACTIVE
20170505150621440 DRR <0003> gsm_04_08.c:1462 PAGING RESPONSE: MI(TMSI)=737688935
20170505150621440 DRR <0003> gsm_04_08.c:1495 <- Channel was requested by 901700000009032
20170505150621461 DLSMS <0022> gsm_04_11.c:965 paging_cb_send_sms(hooknum=1, event=0, msg=(nil),conn=0xe60c70,
sms=0xe8dfc0/id: 16)
20170505150621461 DLSMS <0022> gsm_04_11.c:893 gsm411_send_sms()

20170505150621461 DLSMS <0022> gsm0411_smc.c:87 SMC(16) instance created for network
20170505150621461 DLSMS <0022> gsm0411_smr.c:85 SMR(16) instance created for network.
20170505150621461 DLSMS <0022> gsm_04_11.c:946 TX: SMS DELIVER
20170505150621477 DLSMS <0022> gsm0411_smr.c:416 SMR(16) message SM-RL-DATA_REQ received in state IDLE
20170505150621477 DLSMS <0022> gsm0411_smr.c:215 SMR(16) TX SMS RP-DATA
20170505150621477 DLSMS <0022> gsm0411_smr.c:139 SMR(16) new RP state IDLE -> WAIT_FOR_RP_ACK
20170505150621477 DLSMS <0022> gsm0411_smc.c:467 SMC(16) message MNSMS-EST-REQ received in state IDLE
20170505150621477 DLSMS <0022> gsm0411_smc.c:133 SMC(16) new CP state IDLE -> MM_CONN_PENDING
20170505150621477 DLSMS <0022> gsm0411_smc.c:567 SMC(16) message MMSMS-EST-CNF received in state MM_CONN_PENDI
NG
20170505150621477 DLSMS <0022> gsm0411_smc.c:180 SMC(16) send CP data

20170505150621477 DLSMS <0022> gsm0411_smc.c:133 SMC(16) new CP state MM_CONN_PENDING -> WAIT_CP_ACK
20170505150621477 DLSMS <0022> gsm_04_11.c:143 sending CP message (trans=0)
20170505150621477 DLSMS <0022> gsm_04_11.c:127 GSM4.11 TX 09 01 2b 01 00 07 91 44 77 58 10 06 50 00 1f 00 04 8
0 01 01 00 00 71 50 50 31 60 12 00 12 f4 f2 9c 0e 9a b7 e7 20 fa 1b 74 7e 8b d3 a0 19
20170505150622852 DLSMS <0022> gsm_04_11.c:805 receiving data (trans_id=0)

20170505150622853 DLSMS <0022> gsm0411_smc.c:567 SMC(16) message MMSMS-DATA-IND (CP ACK) received in state WAI
T_CP_ACK
20170505150622853 DLSMS <0022> gsm0411_smc.c:256 SMC(16) received CP-ACK

20170505150622853 DLSMS <0022> gsm0411_smc.c:133 SMC(16) new CP state WAIT_CP_ACK -> MM_ESTABLISHED
20170505150623088 DLSMS <0022> gsm_04_11.c:805 receiving data (trans_id=0)

```

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20170505150623088 DLSMS <0022> gsm0411_smc.c:567 SMC(16) message MMSMS-DATA-IND (CP DATA) received in state MM
_ESTABLISHED
20170505150623088 DLSMS <0022> gsm0411_smc.c:284 SMC(16) received CP-DATA

20170505150623088 DLSMS <0022> gsm_04_11.c:143 sending CP message (trans=0)
20170505150623088 DLSMS <0022> gsm_04_11.c:127 GSM4.11 TX 09 04
20170505150623088 DLSMS <0022> gsm_04_11.c:769 MNSMS-DATA/EST-IND
20170505150623088 DLSMS <0022> gsm0411_smr.c:483 SMR(16) message MNSMS-DATA-IND received in state WAIT_FOR_RP_
ACK
20170505150623088 DLSMS <0022> gsm0411_smr.c:309 SMR(16) RX SMS RP-ACK

20170505150623088 DLSMS <0022> gsm0411_smr.c:139 SMR(16) new RP state WAIT_FOR_RP_ACK -> IDLE
20170505150623088 DLSMS <0022> gsm_04_11.c:712 RX SMS RP-ACK (MO)
20170505150623114 DLSMS <0022> sms_queue.c:220 Attempting to send 20 SMS
20170505150623127 DLSMS <0022> sms_queue.c:230 Sending SMS done (0 attempted)
20170505150623127 DLSMS <0022> sms_queue.c:286 SMSqueue added 0 messages in 0 rounds
20170505150623127 DLSMS <0022> gsm0411_smr.c:185 SMR(16) TX: MNSMS-REL-REQ
20170505150623127 DLSMS <0022> gsm0411_smc.c:467 SMC(16) message MNSMS-REL-REQ received in state MM_ESTABLISHE
D
20170505150623127 DLSMS <0022> gsm0411_smc.c:133 SMC(16) new CP state MM_ESTABLISHED -> IDLE

20170505150623127 DLSMS <0022> gsm_04_11.c:166 Got MMSMS_REL_REQ, destroying transaction.
20170505150623127 DLSMS <0022> gsm0411_smr.c:92 SMR(16) clearing SMR instance
20170505150623128 DLSMS <0022> gsm0411_smc.c:94 SMC(16) clearing instance
20170505150623147 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state ACTIVE -> RELEASE REQUESTED
20170505150623147 DRR <0003> gsm_04_08_utils.c:251 Sending Channel Release: Chan: Number: 1 Type: 1
20170505150623147 DRSL <0004> abis_rsl.c:768 (bts=0,trx=0,ts=0,ss=1) DEACTivate SACCH CMD
20170505150623154 DRSL <0004> abis_rsl.c:2027 (bts=0,trx=0,ts=0,ss=1) waiting for SAPI=0 to be released.
20170505150623323 DRSL <0004> abis_rsl.c:1718 (bts=0,trx=0,ts=0,ss=1) T3111 expired: releasing RF Channel
20170505150623323 DRSL <0004> abis_rsl.c:860 (bts=0,trx=0,ts=0,ss=1) RF Channel Release
20170505150623328 DRSL <0004> abis_rsl.c:931 (bts=0,trx=0,ts=0,ss=1) RF CHANNEL RELEASE ACK
20170505150623328 DRSL <0004> abis_rsl.c:1224 (bts=0,trx=0,ts=0,ss=1) state RELEASE REQUESTED -> NONE

```

#2 - 05/14/2017 11:17 AM - laforge

- Assignee changed from Osmocom CNI Developers to lynxis

#3 - 05/15/2017 01:11 PM - neels

- Related to Bug #2188: ofono: Gobi modem refuses to set Online=true added

#4 - 05/16/2017 04:23 PM - lynxis

- Status changed from New to Feedback

neels: can you please try: https://code.fe80.eu/lynxis/ofono/tree/lynxis_sms_storage

also sent upstream.

#5 - 07/24/2017 11:42 PM - neels

- Assignee changed from lynxis to pespín

- neels redirects request to pespín

#6 - 08/02/2017 01:29 PM - pespín

- Assignee changed from pespín to lynxis

lynxis, what's the status of the following branch you proposed? Is it already merged upstream? merged in osmo-gsm-tester sysmocom branch? Please update ofono in the main unit as you see is needed.

Anyway I could not test this due to issue [#2421](#)

#7 - 08/08/2017 12:35 PM - lynxis

There is already a fix upstream and in our repo. It fixes the `Can not receive part` of the problem. But there are still SMS in the ME storage we do not receive atm.

#8 - 08/29/2017 03:05 PM - pespín

Using latest ofono systocom:lynxis/master There are still issues. Ofono doesn't send a signal when a message is received in a gobi modem.

I added the print log below to ofono:

```
$ git diff
diff --git a/drivers/qmimodem/sms.c b/drivers/qmimodem/sms.c
index 79ea042e..72cba557 100644
--- a/drivers/qmimodem/sms.c
+++ b/drivers/qmimodem/sms.c
@@ -361,6 +361,8 @@ static void event_notify(struct qmi_result *result, void *user_data)
     DBG("msg format %d PDU length %d", message->msg_format, plen);

     ofono_sms_deliver_notify(sms, message->msg_data, plen, plen);
+   } else {
+       DBG("empty message!");
   }
}
```

Looking at ofono -n -d log, this is printed when an sms is received:

```
ofonod[19751]: drivers/qmimodem/qmibridge.c:ask_qmi() READ: QMI QMUX:
QMI length = 20
QMI flags = 0x80
QMI service = "wms"
QMI client = 4
QMI QMI:
QMI flags = "indication"
QMI transaction = 0
QMI tlv_length = 8
QMI message = "Event Report" (0x0001)
QMI TLV:
QMI type = "MT Message" (0x10)
QMI length = 5
QMI value = 01:03:00:00:00
QMI translated = [ storage_type = 'nv' memory_index = '3' ]
ofonod[19751]: drivers/qmimodem/sms.c:event_notify()
ofonod[19751]: drivers/qmimodem/sms.c:event_notify() storage type 1 index 3
ofonod[19751]: drivers/qmimodem/sms.c:event_notify() empty message!
```

Which means following line is failing, because the TLV doesn't seem to be there:

```
message = qmi_result_get(result, QMI_WMS_RESULT_MESSAGE, &len);
```

As a result, the sms is not notified.

Is it possible to read the SMS from other place? (ie internal storage of the modem). We can perhaps get it from there?

#9 - 09/12/2017 01:20 PM - lynxis

- Status changed from Feedback to New
- Assignee changed from lynxis to laforge

Yes, it's possible to implement this case.

[laforge](#): Should I continue to work on this? Because it's only an issue on the gobi2000.

#10 - 09/12/2017 02:33 PM - laforge

On Tue, Sep 12, 2017 at 01:20:26PM +0000, lynxis [REDMINE] wrote:

[laforge](#): Should I continue to work on this? Because it's only an issue on the gobi2000.

What's the related effort? If it's >= 4h, then do it. If not, let's leave it for now.
Low priority.

#11 - 09/15/2017 04:10 PM - laforge

- Assignee changed from laforge to lynxis

#12 - 10/16/2017 06:33 AM - lynxis

- Status changed from New to In Progress

#13 - 10/16/2017 01:58 PM - pespin

It seems a patch which may fix the issue was submitted today to ofono ml. Name of the topic: "qmi: support SMS receive on Quectel EC21".

#14 - 01/04/2018 11:07 AM - laforge

- Priority changed from High to Normal

#15 - 01/08/2020 10:42 PM - laforge

- Assignee deleted (lynxis)

- Parent task deleted (#2187)