

OsmoPCU - Bug #1931

Downlink TBF allocation problem during PDP-Context Deact REQ on OCTBTS

01/30/2017 12:04 PM - dexter

Status:	Rejected	Start date:	01/30/2017
Priority:	Normal	Due date:	
Assignee:	dexter	% Done:	10%
Category:			
Target version:			
Spec Reference:			

Description

In some cases, primarily when a the MS requests to deactivate the PDP context a problem allocating a downlink TBF occurs:

The observation of the diag interface of the MS shows that that the MS is sending a PDP context deactivation request. The request reaches SGSN and the SGSN responds correctly with a PDP context deactivation ACK. The diag interface on the modem shows that the PDP context deactivation ACK is never received. The MS repeats the request 4 times until it finally gives up.

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Thu Jan 19 11:27:19 2017 <0011> gprs_bssgp.c:379 BSSGP TLLI=0xd4d4ca34 Rx UPLINK-UNITDATA
Thu Jan 19 11:27:19 2017 <0012> gprs_llc_parse.c:82 LLC SAPI=1 C U GEA0 IOV-UI=0x000000 FCS=0x20
b16a CMD=UI DATA
Thu Jan 19 11:27:19 2017 <0002> gprs_gmm.c:2444 MM(001010000000001/d4d4ca34) -> DEACTIVATE PDP CON
TEXT REQ (cause: Regular deactivation)
Thu Jan 19 11:27:19 2017 <000f> sgsn_libgtp.c:286 PDP(001010000000001/0) Delete PDP Context
Thu Jan 19 11:27:19 2017 <000f> sgsn_libgtp.c:613 PDP Context was deleted
Thu Jan 19 11:27:19 2017 <000f> sgsn_libgtp.c:590 libgtp cb_conf(type=20, cause=128, pdp=(nil), cb
p=0x1a2e010)
Thu Jan 19 11:27:19 2017 <000f> sgsn_libgtp.c:513 PDP(001010000000001/0) Received DELETE PDP CTX C
ONF, cause=128(Request accepted)
Thu Jan 19 11:27:19 2017 <0013> gprs_sndcp.c:509 SNSM-DEACTIVATE.ind (lle=0x1a2be20, TLLI=d4d4ca34
, SAPI=3, NSAPI=5)
Thu Jan 19 11:27:19 2017 <0002> gprs_gmm.c:2127 MM(001010000000001/d4d4ca34) <- DEACTIVATE PDP CON
TEXT ACK
Thu Jan 19 11:27:24 2017 <0011> gprs_bssgp.c:797 BSSGP BVCI=23 Rx Flow Control BVC
Thu Jan 19 11:27:27 2017 <0011> gprs_bssgp.c:379 BSSGP TLLI=0xd4d4ca34 Rx UPLINK-UNITDATA
Thu Jan 19 11:27:27 2017 <0012> gprs_llc_parse.c:82 LLC SAPI=1 C U GEA0 IOV-UI=0x000000 FCS=0xac
2522 CMD=UI DATA
Thu Jan 19 11:27:27 2017 <0002> gprs_gmm.c:2444 MM(001010000000001/d4d4ca34) -> DEACTIVATE PDP CON
TEXT REQ (cause: Regular deactivation)
Thu Jan 19 11:27:27 2017 <0002> gprs_gmm.c:2451 MM(001010000000001/d4d4ca34) Deactivate PDP Contex
t Request for non-existing PDP Context (IMSI=001010000000001, TI=0)
Thu Jan 19 11:27:27 2017 <0002> gprs_gmm.c:2127 MM(001010000000001/d4d4ca34) <- DEACTIVATE PDP CON
TEXT ACK
Thu Jan 19 11:27:30 2017 <000f> gprs_sgsn.c:870 Checking for inactive LLMEs, time = 126147
Thu Jan 19 11:27:34 2017 <0010> gprs_ns.c:528 NSEI=23 Tx NS ALIVE_ACK (NSVCI=23)
Thu Jan 19 11:27:34 2017 <0011> gprs_bssgp.c:797 BSSGP BVCI=23 Rx Flow Control BVC
Thu Jan 19 11:27:34 2017 <0010> gprs_ns.c:582 NSEI=23 Timer expired in mode tns-test (30 seconds)
Thu Jan 19 11:27:34 2017 <0010> gprs_ns.c:515 NSEI=23 Tx NS ALIVE (NSVCI=23)
Thu Jan 19 11:27:34 2017 <0010> gprs_ns.c:554 NSEI=23 Starting timer in mode tns-alive (3 seconds)
Thu Jan 19 11:27:34 2017 <0010> gprs_ns.c:554 NSEI=23 Starting timer in mode tns-test (30 seconds)
Thu Jan 19 11:27:35 2017 <0011> gprs_bssgp.c:379 BSSGP TLLI=0xd4d4ca34 Rx UPLINK-UNITDATA
Thu Jan 19 11:27:35 2017 <0012> gprs_llc_parse.c:82 LLC SAPI=1 C U GEA0 IOV-UI=0x000000 FCS=0xb5
5300 CMD=UI DATA
Thu Jan 19 11:27:35 2017 <0002> gprs_gmm.c:2444 MM(001010000000001/d4d4ca34) -> DEACTIVATE PDP CON
TEXT REQ (cause: Regular deactivation)
Thu Jan 19 11:27:35 2017 <0002> gprs_gmm.c:2451 MM(001010000000001/d4d4ca34) Deactivate PDP Contex
t Request for non-existing PDP Context (IMSI=001010000000001, TI=0)
Thu Jan 19 11:27:35 2017 <0002> gprs_gmm.c:2127 MM(001010000000001/d4d4ca34) <- DEACTIVATE PDP CON
TEXT ACK
Thu Jan 19 11:27:43 2017 <0011> gprs_bssgp.c:379 BSSGP TLLI=0xd4d4ca34 Rx UPLINK-UNITDATA
Thu Jan 19 11:27:43 2017 <0012> gprs_llc_parse.c:82 LLC SAPI=1 C U GEA0 IOV-UI=0x000000 FCS=0x39
c748 CMD=UI DATA
Thu Jan 19 11:27:43 2017 <0002> gprs_gmm.c:2444 MM(001010000000001/d4d4ca34) -> DEACTIVATE PDP CON
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TEXT REQ (cause: Regular deactivation)
Thu Jan 19 11:27:43 2017 <0002> gprs_gmm.c:2451 MM(001010000000001/d4d4ca34) Deactivate PDP Context Request for non-existing PDP Context (IMSI=001010000000001, TI=0)
Thu Jan 19 11:27:43 2017 <0002> gprs_gmm.c:2127 MM(001010000000001/d4d4ca34) <- DEACTIVATE PDP CONTEXT ACK
Thu Jan 19 11:27:44 2017 <0011> gprs_bssgp.c:797 BSSGP BVCI=23 Rx Flow Control BVC
Thu Jan 19 11:27:51 2017 <0011> gprs_bssgp.c:379 BSSGP TLLI=0xd4d4ca34 Rx UPLINK-UNITDATA
Thu Jan 19 11:27:51 2017 <0012> gprs_llc_parse.c:82 LLC SAPI=1 C U GEA0 IOV-UI=0x000000 FCS=0xf7702b CMD=UI DATA
Thu Jan 19 11:27:51 2017 <0002> gprs_gmm.c:2444 MM(001010000000001/d4d4ca34) -> DEACTIVATE PDP CONTEXT REQ (cause: Regular deactivation)
Thu Jan 19 11:27:51 2017 <0002> gprs_gmm.c:2451 MM(001010000000001/d4d4ca34) Deactivate PDP Context Request for non-existing PDP Context (IMSI=001010000000001, TI=0)
Thu Jan 19 11:27:51 2017 <0002> gprs_gmm.c:2127 MM(001010000000001/d4d4ca34) <- DEACTIVATE PDP CONTEXT ACK
Thu Jan 19 11:27:54 2017 <0011> gprs_bssgp.c:797 BSSGP BVCI=23 Rx Flow Control BVC
Thu Jan 19 11:28:00 2017 <000f> gprs_sgsn.c:870 Checking for inactive LLMEs, time = 126177
Thu Jan 19 11:28:04 2017 <0010> gprs_ns.c:528 NSEI=23 Tx NS ALIVE_ACK (NSVCI=23)
Thu Jan 19 11:28:04 2017 <0011> gprs_bssgp.c:797 BSSGP BVCI=23 Rx Flow Control BVC
Thu Jan 19 11:28:04 2017 <0010> gprs_ns.c:582 NSEI=23 Timer expired in mode tns-test (30 seconds)

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By the diag log we see that the downlink assignment message, the PCU is sending is missing, while the log of the PCU confirms that the downlink assignment message is sent:

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Thu Jan 19 11:27:51 2017 <0001> pcu_ll_if.cpp:350 RACH request received: sapi=1 qta=0, ra=123, fn=82125
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:562 MS requests UL TBF on RACH, so we provide one ra=0x7b Fn=82125 qta=0 is_11bit=0:
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:708 pcu has not received burst type from bts
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:694 ***** TBF starts here *****
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:696 Allocating UL TBF: MS_CLASS=0/0
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:115 Creating MS object, TLLI = 0x00000000
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:454 Searching for first unallocated TFI: TRX=0
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:464 Found TFI=0.
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:525 Slot Allocation (Algorithm B) for unknown class (assuming 12)
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:560 - Rx=4 Tx=4 Sum Rx+Tx=5 Tta=2 Ttb=1 Tra=2 Trb=1 Type=1
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 0, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 1, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 2, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 3, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 4, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 5, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:157 - Skipping TS 6, because not enabled
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:579 - Possible DL/UL slots: (TS=0)".....C" (TS=7)
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:940 - Selected UL slots: (TS=0)".....U" (TS=7), single
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:966 Using single slot at TS 7 for UL
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:990 - Reserved DL/UL slots: (TS=0)".....C" (TS=7)
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:1017 - Assigning UL TS 7
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:1681 PDCH(TS 7, TRX 0): Attaching TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=NULL), 1 TBFs, USFs = 01, TFIs = 00000001.
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:399 - Setting Control TS 7
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:268 Attaching TBF to MS object, TLLI = 0x00000000, TBF = TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=NULL)
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:647 Allocated TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=NULL): trx = 0, ul_slots = 80, dl_slots = 00
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:471 Modifying MS object, TLLI = 0x00000000, TA 220 -> 0
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:294 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=NULL) changes state from NULL to FLOW
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:422 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=FLOW) starting timer 3169.
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:611 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=FLOW) [UPLINK]

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START
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:617 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=FLOW) RX: [PCU
<- BTS] RACH qbit-ta=0 ra=0x7b, Fn=82125 (29,15,17)
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:620 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=FLOW) TX: START
Immediate Assignment Uplink (AGCH)
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:640 - TRX=0 (866) TS=7 TA=0 TSC=7 TFI=0 USF=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
34 block_nr=6 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
38 block_nr=7 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
42 block_nr=8 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
47 block_nr=9 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
51 block_nr=10 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
55 block_nr=11 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
60 block_nr=0 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
64 block_nr=1 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
68 block_nr=2 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
73 block_nr=3 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
77 block_nr=4 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
81 block_nr=5 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:109 Received RTS for PDCH: TRX=0 TS=7 FN=821
86 block_nr=6 scheduling USF=0 for required uplink resource of UL TFI=0
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:426 TBF(TFI=0 TLLI=0x00000000 DIR=UL STATE=FLOW) restartin
g timer 3169 while old timer 3169 pending
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:457 Modifying MS object, TLLI = 0x00000000, IMSI '' ->
'0010100000000001'
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:361 Clearing MS object, TLLI: 0xd4d4ca34, IMSI: '00101
00000000001'
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:396 Modifying MS object, UL TLLI: 0x00000000 -> 0xd4d4
ca34, not yet confirmed
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:141 Destroying MS object, TLLI = 0x00000000
Thu Jan 19 11:27:51 2017 <0009> tbf_ul.cpp:373 LLC [PCU -> SGSN] TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL
STATE=FLOW) len=10
Thu Jan 19 11:27:51 2017 <0002> tbf_ul.cpp:294 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FLOW) change
s state from FLOW to FINISHED
Thu Jan 19 11:27:51 2017 <0009> gprs_bssgp_pcu.cpp:180 LLC [SGSN -> PCU] = TLLI: 0xd4d4ca34 IMSI:
0010100000000001 len: 8
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:775 ***** TBF starts here *****
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:777 Allocating DL TBF: MS_CLASS=0/0
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:454 Searching for first unallocated TFI: TRX=0
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:464 Found TFI=0.
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:902 - Selected DL slots: (TS=0)".....D"
(TS=7), single
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:966 Using single slot at TS 7 for DL
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac_ts_alloc.cpp:1004 - Assigning DL TS 7
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:1681 PDCH(TS 7, TRX 0): Attaching TBF(TFI=0 TLLI=0x0000000
0 DIR=DL STATE=NULL), 1 TBFs, USFs = 01, TFIs = 00000001.
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:399 - Setting Control TS 7
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:287 Attaching TBF to MS object, TLLI = 0xd4d4ca34, TBF
= TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=NULL)
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:647 Allocated TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=NULL)
: trx = 0, ul_slots = 80, dl_slots = 80
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:430 Modifying MS object, TLLI: 0xd4d4ca34 confirmed
Thu Jan 19 11:27:51 2017 <0002> tbf_dl.cpp:161 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=NULL) [DOWNL
INK] START
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:749 Send downlink assignment for TBF(TFI=0 TLLI=0xd4d4ca34
DIR=DL STATE=NULL) on PCH, no TBF exist (IMSI=0010100000000001)

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Thu Jan 19 11:27:51 2017 <0002> bts.cpp:294 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=NULL) changes s
tate from NULL to ASSIGN
Thu Jan 19 11:27:51 2017 <0002> gprs_rlcmac.cpp:35 TX: [PCU -> BTS] Paging Request (CCCH)
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:770 TX: START TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIG
N) Immediate Assignment Downlink (PCH)
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:777 - TRX=0 (866) TS=7 TA=0 pollFN=-1
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:422 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) startin
g timer 0.
Thu Jan 19 11:27:51 2017 <0002> tbf_dl.cpp:90 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) appen
d
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED): Sche
duling polling at FN 82203 TS 7
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TB
F(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED) (TRX=0, TS=7)
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:426 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED) resta
rting timer 3169 while old timer 3169 pending
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:426 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED) resta
rting timer 3169 while old timer 3169 pending
Thu Jan 19 11:27:51 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=821
99 block_nr=9 scheduling free USF for polling at FN=82203 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STAT
E=FINISHED)
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:1448 ++++++ RX : Uplink Control Block +
+++++
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:1451 ----- RX : Uplink Control Block -
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Thu Jan 19 11:27:51 2017 <0002> bts.cpp:955 RX: [PCU <- BTS] TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STAT
E=FINISHED) Packet Control Ack
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:960 TBF: [UPLINK] END TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STA
TE=FINISHED)
Thu Jan 19 11:27:51 2017 <0007> gprs_rlcmac_meas.cpp:104 UL RSSI of TLLI=0xd4d4ca34: -103 dBm
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:342 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED) free
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:447 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED) stopp
ing timer 3169.
Thu Jan 19 11:27:51 2017 <0002> bts.cpp:1701 PDCH(TS 7, TRX 0): Detaching TBF(TFI=0 TLLI=0xd4d4ca3
4 DIR=UL STATE=FINISHED), 0 TBFs, USFs = 00, TFIs = 00000000.
Thu Jan 19 11:27:51 2017 <0002> gprs_ms.cpp:324 Detaching TBF from MS object, TLLI = 0xd4d4ca34, T
BF = TBF(TFI=0 TLLI=0xd4d4ca34 DIR=UL STATE=FINISHED)
Thu Jan 19 11:27:51 2017 <0002> tbf.cpp:363 ***** TBF ends here *****
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:829 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) timer 0
expired.
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:372 ***** TBF update *****
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:1701 PDCH(TS 7, TRX 0): Detaching TBF(TFI=0 TLLI=0xd4d4ca3
4 DIR=DL STATE=ASSIGN), 0 TBFs, USFs = 00, TFIs = 00000000.
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:454 Searching for first unallocated TFI: TRX=0
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:464 Found TFI=0.
Thu Jan 19 11:27:53 2017 <0002> gprs_rlcmac_ts_alloc.cpp:902 - Selected DL slots: (TS=0)".....D"
(TS=7)
Thu Jan 19 11:27:53 2017 <0002> gprs_rlcmac_ts_alloc.cpp:970 Using 1 slots for DL
Thu Jan 19 11:27:53 2017 <0002> gprs_rlcmac_ts_alloc.cpp:1004 - Assigning DL TS 7
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:1681 PDCH(TS 7, TRX 0): Attaching TBF(TFI=0 TLLI=0xd4d4ca3
4 DIR=DL STATE=ASSIGN), 1 TBFs, USFs = 00, TFIs = 00000001.
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:736 Send downlink assignment on PACCH, because TBF(TFI=0 TL
LI=0xd4d4ca34 DIR=DL STATE=ASSIGN) exists
Thu Jan 19 11:27:53 2017 <0002> bts.cpp:294 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) changes
state from ASSIGN to ASSIGN
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:422 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) startin
g timer 0.
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34
DIR=DL STATE=ASSIGN)
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start
Packet Downlink Assignment (PACCH)
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assign
ment ++++++
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assign
ment -----
Thu Jan 19 11:27:53 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Schedu
ling polling at FN 82636 TS 7

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Thu Jan 19 11:27:53 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)

Thu Jan 19 11:27:53 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=82632 block_nr=1 scheduling free USF for polling at FN=82636 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:498 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) poll timeout for FN=82636, TS=7 (curr FN 82697)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:553 - Timeout for polling PACKET CONTROL ACK for PACKET DOWNLINK ASSIGNMENT.

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:914 - Assignment was on PACCH

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:922 - No downlink ACK received yet

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start Packet Downlink Assignment (PACCH)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assignment ++++++

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assignment -----

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Scheduling polling at FN 82710 TS 7

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=82706 block_nr=6 scheduling free USF for polling at FN=82710 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:498 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) poll timeout for FN=82710, TS=7 (curr FN 82771)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start Packet Downlink Assignment (PACCH)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assignment ++++++

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assignment -----

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Scheduling polling at FN 82784 TS 7

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=82779 block_nr=11 scheduling free USF for polling at FN=82784 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:498 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) poll timeout for FN=82784, TS=7 (curr FN 82849)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start Packet Downlink Assignment (PACCH)

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assignment ++++++

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assignment -----

Thu Jan 19 11:27:54 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Scheduling polling at FN 82862 TS 7

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)

Thu Jan 19 11:27:54 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=82857 block_nr=5 scheduling free USF for polling at FN=82862 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:498 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) poll timeout for FN=82862, TS=7 (curr FN 82927)

Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN)

Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start Packet Downlink Assignment (PACCH)

Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assignment ++++++

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ment ++++++
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assign
ment -----
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Schedu
ling polling at FN 82940 TS 7
Thu Jan 19 11:27:55 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TB
F(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)
Thu Jan 19 11:27:55 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=829
35 block_nr=11 scheduling free USF for polling at FN=82940 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STA
TE=ASSIGN)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:498 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) poll ti
meout for FN=82940, TS=7 (curr FN 83005)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:985 New and old TBF are the same TBF(TFI=0 TLLI=0xd4d4ca34
DIR=DL STATE=ASSIGN)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1007 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) start
Packet Downlink Assignment (PACCH)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1014 ++++++ TX : Packet Downlink Assign
ment ++++++
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:1017 ----- TX : Packet Downlink Assign
ment -----
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:487 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN): Schedu
ling polling at FN 83018 TS 7
Thu Jan 19 11:27:55 2017 <0006> gprs_rlcmac_sched.cpp:181 Scheduling control message at RTS for TB
F(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) (TRX=0, TS=7)
Thu Jan 19 11:27:55 2017 <0006> gprs_rlcmac_sched.cpp:329 Received RTS for PDCH: TRX=0 TS=7 FN=830
13 block_nr=5 scheduling free USF for polling at FN=83018 of TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STAT
E=ASSIGN)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:829 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) timer 0
expired.
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:838 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) releasi
ng due to PACCH assignment timeout.
Thu Jan 19 11:27:55 2017 <0002> tbf_dl.cpp:294 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=ASSIGN) chan
ges state from ASSIGN to RELEASING
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:342 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=RELEASING) free
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:354 TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=RELEASING) Soft
ware error: Pending downlink assignment. This may not happen, because the assignment message never
gets transmitted. Please be sure not to free in this state. PLEASE FIX!
Thu Jan 19 11:27:55 2017 <0002> bts.cpp:1701 PDCH(TS 7, TRX 0): Detaching TBF(TFI=0 TLLI=0xd4d4ca3
4 DIR=DL STATE=RELEASING), 0 TBFs, USFs = 00, TFIs = 00000000.
Thu Jan 19 11:27:55 2017 <0002> gprs_ms.cpp:324 Detaching TBF from MS object, TLLI = 0xd4d4ca34, T
BF = TBF(TFI=0 TLLI=0xd4d4ca34 DIR=DL STATE=RELEASING)
Thu Jan 19 11:27:55 2017 <0002> tbf.cpp:363 ***** TBF ends here *****

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With some experimentation we found out that after changing "gprs mode gprs" to "gprs mode egprs" in nitb.cfg the problem seems to disappear, this leads to the assumption that it is a timing problem between osmo-bts and osmo-pcu.

The problem has been observed with an OCTBTS/Octphy, see also traces, logs and configuration files in the attachment.

History

#1 - 01/30/2017 01:33 PM - dexter

- Description updated

#2 - 07/17/2017 07:59 PM - dexter

When I remember things correctly, this is fixed long time ago and can be closed.

#3 - 07/24/2017 07:26 PM - dexter

- Status changed from New to Stalled

#4 - 08/07/2017 09:23 PM - dexter

- Status changed from Stalled to Feedback

#5 - 10/04/2017 04:31 PM - dexter

- Status changed from Feedback to Rejected

Files

19012017_problem_on_octbts.tar.gz	3.82 MB	01/30/2017	dexter
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