

# OsmocomBB - Bug #3629

## mobile aborting after 'test re-selection 1' on vty

10/04/2018 02:55 PM - roh

|  |        |                        |            |
|--|--------|------------------------|------------|
| <b>Status:</b>   | New    | <b>Start date:</b>     | 10/04/2018 |
| <b>Priority:</b>   | Normal | <b>Due date:</b>       |            |
| <b>Assignee:</b>   |        | <b>% Done:</b>         | 0%         |
| <b>Category:</b>   |        |                        |            |
| <b>Target version:</b>   |        |                        |            |
| <b>Resolution:</b>   |        | <b>Spec Reference:</b> |            |
| <b>Description</b>   |        |                        |            |
| .....  |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI c7dc0057 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI dec9307f (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI 4f4f724b (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI cfbd1151 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI d6b320fb (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI f6beb2a8 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI f9b722ca (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI e5b4e117 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2149 PAGING REQUEST 1  |        |                        |            |
| <000b> gsm48_rr.c:2107 TMSI e6c15278 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI ebd3408d (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI ebb808ae (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI edc3e833 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI dbb040f6 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2204 PAGING REQUEST 2  |        |                        |            |
| <000b> gsm48_rr.c:2227 TMSI d8af781a (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2238 TMSI f1da701a (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2116 IMSI 262011406448616 (not for us)                         |        |                        |            |
| <000b> gsm48_rr.c:2204 PAGING REQUEST 2  |        |                        |            |
| <000b> gsm48_rr.c:2227 TMSI e7dd9110 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2238 TMSI cdb343e1 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2107 TMSI f4d568f9 (not for us)                                |        |                        |            |
| <0001> gsm48_rr.c:2425 IMMEDIATE ASSIGNMENT:                                     |        |                        |            |
| <0001> gsm48_rr.c:2448 (ta 1/553m ra 0x7d chan_nr 0x0e ARFCN 56 TS 6 SS 0 TSC 4) |        |                        |            |
| <0001> gsm48_rr.c:2453 Not for us, no request.                                   |        |                        |            |
| <0001> gsm48_rr.c:665 MON: f=56 lev=-73 snr= 0 ber= 30 LAI=262 01 1406 ID=ddc8   |        |                        |            |
| <0001> gsm48_rr.c:2425 IMMEDIATE ASSIGNMENT:                                     |        |                        |            |
| <0001> gsm48_rr.c:2448 (ta 1/553m ra 0x7d chan_nr 0x0e ARFCN 56 TS 6 SS 0 TSC 4) |        |                        |            |
| <0001> gsm48_rr.c:2453 Not for us, no request.                                   |        |                        |            |
| <0001> gsm48_rr.c:2425 IMMEDIATE ASSIGNMENT:                                     |        |                        |            |
| <0001> gsm48_rr.c:2448 (ta 1/553m ra 0x7d chan_nr 0x0e ARFCN 56 TS 6 SS 0 TSC 4) |        |                        |            |
| <0001> gsm48_rr.c:2453 Not for us, no request.                                   |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI 5056eff9 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI f8d5f816 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI c2a970b3 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI fac7a0f9 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI c3b16112 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI ceb8b000 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI c0ce7a11 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI 725305e3 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2273 PAGING REQUEST 3  |        |                        |            |
| <000b> gsm48_rr.c:2297 TMSI e6bb843b (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2308 TMSI e6c628f6 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2319 TMSI e5cfc012 (not for us)                                |        |                        |            |
| <000b> gsm48_rr.c:2330 TMSI e9ce71e8 (not for us)                                |        |                        |            |

<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI d5d67042 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI d0dd710e (not for us)  
<000b> gsm48\_rr.c:2319 TMSI e6d90165 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI e6a93071 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI cbd3083e (not for us)  
<000b> gsm48\_rr.c:2308 TMSI fdabc8c5 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI f6bed0db (not for us)  
<000b> gsm48\_rr.c:2330 TMSI e7d8488d (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI d2ad8024 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI ccb198f7 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI c4b4ebe1 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI c2b94054 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI c1bbd866 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI 4f4f724b (not for us)  
<000b> gsm48\_rr.c:2319 TMSI fbb3286a (not for us)  
<000b> gsm48\_rr.c:2330 TMSI e1cc5089 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI c3cd801d (not for us)  
<000b> gsm48\_rr.c:2308 TMSI 89586d39 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI e7bf1a63 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI c6b6c808 (not for us)  
<000b> gsm48\_rr.c:2149 PAGING REQUEST 1  
<000b> gsm48\_rr.c:2107 TMSI e6c15278 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI ecaea29d (not for us)  
<000b> gsm48\_rr.c:2308 TMSI ebd3408d (not for us)  
<000b> gsm48\_rr.c:2319 TMSI dbb040f6 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI d2aabb7c (not for us)  
<000b> gsm48\_rr.c:2204 PAGING REQUEST 2  
<000b> gsm48\_rr.c:2227 TMSI d8d02804 (not for us)  
<000b> gsm48\_rr.c:2238 TMSI c9d9b800 (not for us)  
<000b> gsm48\_rr.c:2116 IMSI 262011406448616 (not for us)  
<000b> gsm48\_rr.c:2149 PAGING REQUEST 1  
<000b> gsm48\_rr.c:2116 IMSI 262017246007073 (not for us)  
<000b> gsm48\_rr.c:2107 TMSI daad40ee (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI e5afc3d4 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI f8bc0825 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI cdb343e1 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI e7dd9110 (not for us)  
<000b> gsm48\_rr.c:2204 PAGING REQUEST 2  
<000b> gsm48\_rr.c:2227 TMSI e9b0f8e6 (not for us)  
<000b> gsm48\_rr.c:2238 TMSI dlc39191 (not for us)  
<000b> gsm48\_rr.c:2107 TMSI f6b43002 (not for us)  
<000b> gsm48\_rr.c:2149 PAGING REQUEST 1  
<000b> gsm48\_rr.c:2107 TMSI f9bf40dc (not for us)  
<000b> gsm48\_rr.c:2204 PAGING REQUEST 2  
<000b> gsm48\_rr.c:2227 TMSI eab2c809 (not for us)  
<000b> gsm48\_rr.c:2238 TMSI e3acba24 (not for us)  
<000b> gsm48\_rr.c:2107 TMSI ddb7407a (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI e4cf59b1 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI ecce49a9 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI 5056eff9 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI 5056eff9 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI 1545f55c (not for us)  
<000b> gsm48\_rr.c:2308 TMSI 115eccc4 (not for us)  
<000b> gsm48\_rr.c:2319 TMSI 15635214 (not for us)  
<000b> gsm48\_rr.c:2330 TMSI f3bd1031 (not for us)  
<000b> gsm48\_rr.c:2273 PAGING REQUEST 3  
<000b> gsm48\_rr.c:2297 TMSI d3bd7963 (not for us)  
<000b> gsm48\_rr.c:2308 TMSI f0cd3163 (not for us)

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<000b> gsm48_rr.c:2319 TMSI ffc5f136 (not for us)
<000b> gsm48_rr.c:2330 TMSI ded22813 (not for us)
<000b> gsm48_rr.c:2273 PAGING REQUEST 3
<000b> gsm48_rr.c:2297 TMSI c8ac4103 (not for us)
<000b> gsm48_rr.c:2308 TMSI d5bec118 (not for us)
<000b> gsm48_rr.c:2319 TMSI d5d67042 (not for us)
<000b> gsm48_rr.c:2330 TMSI d0dd710e (not for us)
<000b> gsm48_rr.c:2273 PAGING REQUEST 3
<000b> gsm48_rr.c:2297 TMSI cfcdd9b1 (not for us)
<000b> gsm48_rr.c:2308 TMSI d4d33909 (not for us)
<000b> gsm48_rr.c:2319 TMSI cbd3083e (not for us)
<000b> gsm48_rr.c:2330 TMSI fdabc8c5 (not for us)
<000b> gsm48_rr.c:2204 PAGING REQUEST 2
<000b> gsm48_rr.c:2227 TMSI ead6a05d (not for us)
<000b> gsm48_rr.c:2238 TMSI c8d788b6 (not for us)
<000b> gsm48_rr.c:2116 IMSI 262011402065931 (not for us)
<000b> gsm48_rr.c:2273 PAGING REQUEST 3
<000b> gsm48_rr.c:2297 TMSI caad3023 (not for us)
<000b> gsm48_rr.c:2308 TMSI c7dc0057 (not for us)
<000b> gsm48_rr.c:2319 TMSI dec9307f (not for us)
<000b> gsm48_rr.c:2330 TMSI clbbd866 (not for us)
<000b> gsm48_rr.c:2273 PAGING REQUEST 3
<000b> gsm48_rr.c:2297 TMSI c3cd801d (not for us)
<000b> gsm48_rr.c:2308 TMSI 89586d39 (not for us)
<000b> gsm48_rr.c:2319 TMSI e7bfla63 (not for us)
<000b> gsm48_rr.c:2330 TMSI c6b6c808 (not for us)
<000b> gsm48_rr.c:2273 PAGING REQUEST 3
<000b> gsm48_rr.c:2297 TMSI ecaea29d (not for us)
<000b> gsm48_rr.c:2308 TMSI d2aabb7c (not for us)
<000b> gsm48_rr.c:2319 TMSI c3bed234 (not for us)
<000b> gsm48_rr.c:2330 TMSI e3b858ab (not for us)
<0003> gsm322.c:479 Sync to ARFCN=79 rxlev=-64 (No sysinfo yet, ccch mode NONE)
<0003> gsm322.c:2952 Channel synched. (ARFCN=79, snr=16, BSIC=57)
<0001> gsm322.c:2973 using DSC of 90
<0003> gsm322.c:703 Starting CS timer with 2 seconds.
<0003> gsm48_rr.c:4815 Channel provides data.
<0001> sysinfo.c:705 New SYSTEM INFORMATION 3 (mcc 262 mnc 01 lac 0x1406)
<0001> gsm48_rr.c:1907 Changing CCCH_MODE to 1
<0003> gsm322.c:713 stopping pending CS timer.
<0003> gsm322.c:2579 Relevant sysinfo of neighbour cell is now received or updated.
<0003> gsm322.c:479 Sync to ARFCN=58 rxlev=-96 (No sysinfo yet, ccch mode NONE)
<0003> gsm322.c:2952 Channel synched. (ARFCN=58, snr=5, BSIC=23)
<0001> gsm322.c:2973 using DSC of 90
<0003> gsm322.c:703 Starting CS timer with 2 seconds.
<0003> gsm48_rr.c:4815 Channel provides data.
<0001> gsm48_rr.c:1940 New SYSTEM INFORMATION 4 (mcc 262 mnc 01 lac 0x1406)
<0003> gsm322.c:713 stopping pending CS timer.
<0003> gsm322.c:2579 Relevant sysinfo of neighbour cell is now received or updated.
<0003> gsm322.c:479 Sync to ARFCN=72 rxlev=-102 (No sysinfo yet, ccch mode NONE)
<000c> llctl.c:99 FBSB RESP: result=255
<0003> gsm322.c:2995 Channel sync error, try again
<0003> gsm322.c:479 Sync to ARFCN=72 rxlev=-102 (No sysinfo yet, ccch mode NONE)
<000c> llctl.c:99 FBSB RESP: result=255
<0003> gsm322.c:3008 Channel sync error.
<0003> gsm322.c:3013 free sysinfo ARFCN=72
<0003> gsm322.c:509 Unselecting serving cell.
=====
==837==ERROR: AddressSanitizer: heap-use-after-free on address 0x61b00009aee6 at pc 0x5592b66d6dd5
bp 0x7fffel10e39c0 sp 0x7fffel10e39b8
WRITE of size 1 at 0x61b00009aee6 thread T0
#0 0x5592b66d6dd4 in gsm322_unselect_cell /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-osmocom-bb/osmocom-bb/src/host/layer23/src/mobile/gsm322.c:513
#1 0x5592b66e7163 in gsm322_nb_trigger_event /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-osmocom-bb/osmocom-bb/src/host/layer23/src/mobile/gsm322.c:4625
#2 0x5592b66eac52 in gsm322_nb_synched /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-osmocom-bb/osmocom-bb/src/host/layer23/src/mobile/gsm322.c:4670
#3 0x5592b66f84f9 in gsm322_ll_signal /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-

```

```
ild-osmocom-bb/osmocom-bb/src/host/layer23/src/mobile/gsm322.c:3030
#4 0x7fde91715563 in osmo_signal_dispatch (/usr/lib/x86_64-linux-gnu/libosmocore.so.11+0xa563)
#5 0x5592b67bf6dc in rx_ll_fbsb_conf /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_bui
ld-osmocom-bb/osmocom-bb/src/host/layer23/src/common/l1ctl.c:102
#6 0x5592b67bf6dc in l1ctl_recv /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-os
mocom-bb/osmocom-bb/src/host/layer23/src/common/l1ctl.c:906
#7 0x5592b67c3901 in layer2_read /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-o
smocom-bb/osmocom-bb/src/host/layer23/src/common/l1l2_interface.c:85
#8 0x7fde91719332 in osmo_wqueue_bfd_cb (/usr/lib/x86_64-linux-gnu/libosmocore.so.11+0xe332)
#9 0x7fde91715151 in osmo_select_main (/usr/lib/x86_64-linux-gnu/libosmocore.so.11+0xa151)
#10 0x5592b66d26b6 in main /home/osmocom-build/jenkins/workspace/osmo-gsm-tester_build-osmocom
-bb/osmocom-bb/src/host/layer23/src/mobile/main.c:277
#11 0x7fde8fd62e0 in __libc_start_main (/lib/x86_64-linux-gnu/libc.so.6+0x202e0)
#12 0x5592b66d2f59 in _start (/root/osmocom-bb/bin/mobile+0x1adf59)
```

0x61b00009ae6 is located 102 bytes inside of 1548-byte region [0x61b00009ae80,0x61b00009b48c) freed by thread T0 here:

```
#0 0x7fde91c08a10 in free (/usr/lib/x86_64-linux-gnu/libasan.so.3+0xc1a10)
#1 0x7fde9193786a in _talloc_free (/usr/lib/x86_64-linux-gnu/libtalloc.so.2+0x486a)
```

previously allocated by thread T0 here:

```
#0 0x7fde91c08d28 in malloc (/usr/lib/x86_64-linux-gnu/libasan.so.3+0xc1d28)
#1 0x7fde91939acd in _talloc_zero (/usr/lib/x86_64-linux-gnu/libtalloc.so.2+0x6acd)
```

SUMMARY: AddressSanitizer: heap-use-after-free /home/osmocom-build/jenkins/workspace/osmo-gsm-tester\_build-osmocom-bb/osmocom-bb/src/host/layer23/src/mobile/gsm322.c:513 in gsm322\_unselect\_cell

Shadow bytes around the buggy address:

```
0x0c368000b580: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c368000b590: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c368000b5a0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c368000b5b0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c368000b5c0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
=>0x0c368000b5d0: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
0x0c368000b5e0: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
0x0c368000b5f0: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
0x0c368000b600: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
0x0c368000b610: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
0x0c368000b620: fd fd fd fd fd fd fd fd fd fd fd fd fd fd fd
```

Shadow byte legend (one shadow byte represents 8 application bytes):

```
Addressable:                00
Partially addressable: 01 02 03 04 05 06 07
Heap left redzone:          fa
Heap right redzone:         fb
Freed heap region:          fd
Stack left redzone:         f1
Stack mid redzone:          f2
Stack right redzone:        f3
Stack partial redzone:      f4
Stack after return:         f5
Stack use after scope:      f8
Global redzone:             f9
Global init order:          f6
Poisoned by user:           f7
Container overflow:         fc
Array cookie:               ac
Intra object redzone:       bb
ASan internal:              fe
Left alloca redzone:        ca
Right alloca redzone:       cb
```

==837==ABORTING

build used: [https://jenkins.osmocom.org/jenkins/view/osmo-gsm-tester/job/osmo-gsm-tester\\_build-osmocom-bb/427/](https://jenkins.osmocom.org/jenkins/view/osmo-gsm-tester/job/osmo-gsm-tester_build-osmocom-bb/427/)

## History

#1 - 10/04/2018 02:58 PM - roh

things i forgot to add:

device used: C118 with kevins power-board modified for high-side power switching

mobile.cfg: copy from examples

L1:

```
./sbin/osmocon -p /dev/ttyUSB0 -m c123xor opt/osmocom-bb/target/firmware/board/compal_e88/layer1.compalram.bin
```