

OsmoPCU - Bug #1775

LC15: No PDCH allocation across two TRX

07/12/2016 11:50 AM - mqng2

Status: Stalled	Start date: 07/12/2016
Priority: Normal	Due date:
Assignee: sysmocom	% Done: 10%
Category:	
Target version:	
Spec Reference:	
Description I am currently testing GPRS with PDCH configuration across two TRX, i.e. TS3 - TS7 are configured as PDCH in TRX0, TS0-TS3 are configured as PDCH in TRX1. Two MS are used for surfing the Web. I have noticed that the both MS always use TS3-TS7 of the TRX0 for DL TBF, they never use TS0-TS3 of the TRX1 for DL TBF. Is it the limitation of the multi-TRX PCU implementation? FYI: If I configure TS0-TS7 as PDCH in the TRX1, 8 PDCH will be used for both MS (4 PDCH of DL TBF each MS)	
Related issues:	
Related to OsmoPCU - Feature #1553: Multi-TRX support of PCU	Closed 02/23/2016
Related to OsmoBTS - Feature #1648: Verify Multi-TRX support for osmo-bts-trx	Closed 03/11/2016
Related to OsmoPCU - Feature #2282: uplink multi-slot allocations	Stalled 05/22/2017
Related to OsmoPCU - Bug #2603: Review the various incomplete and never merge...	New 10/29/2017

History

#1 - 07/12/2016 12:11 PM - laforge

- Assignee set to msuraev

Hi Max,

can you please quickly comment on whether this is the expected behavior or not? Also, if it is expected, what is needed to have it changed?

#2 - 07/12/2016 02:13 PM - msuraev

I'm not quite sure what should be the proper behavior in this case. I could re-test but the firmware of hw which we have is not compatible with the latest changes for litecell in osmo-bts master.

This was discussed as part of RT#4600. Are there any updates with regards to this?

#3 - 07/13/2016 03:55 PM - msuraev

- Status changed from New to In Progress

I can reproduce this on our device with both ascending and descending channel allocators. Not sure what's the root cause yet.

#4 - 07/14/2016 02:05 PM - msuraev

- Related to Feature #1553: Multi-TRX support of PCU added

#5 - 07/18/2016 01:40 PM - msuraev

Note: build osmo-pcu with ENABLE_TS_ALLOC_DEBUG to gather additional info.

#6 - 10/13/2016 01:52 PM - msuraev

- Related to Feature #1648: Verify Multi-TRX support for osmo-bts-trx added

#7 - 10/13/2016 01:53 PM - msuraev

- % Done changed from 0 to 10

Note to self: try to reproduce with osmo-bts-trx.

#8 - 10/13/2016 03:33 PM - msuraev

Also - reproduce with edge instead of gprs: currently one of the test phones (MTK-based) fails to bring up DL TBF for some reason.

#9 - 10/14/2016 03:14 PM - msuraev

While trying to reproduce with osmo-trx:

Osmo-PCU# show tbf all

UL TBFs

TBF: TFI=0 TLLI=0xc6e23633 (valid) DIR=UL IMSI=001640000076847
created=1476457106 state=00000006 1st_TS=7 1st_cTS=7 ctrl_TS=7 MS_CLASS=12/12
TS_alloc=7! CS=CS-1 WS=64 V(Q)=13 V(R)=13

TBF: TFI=1 TLLI=0xc29225ff (valid) DIR=UL IMSI=001640000005666
created=1476457099 state=00000006 1st_TS=6 1st_cTS=6 ctrl_TS=6 MS_CLASS=10/10
TS_alloc=6! CS=CS-1 WS=64 V(Q)=38 V(R)=38

DL TBFs

TBF: TFI=1 TLLI=0xc6e23633 (valid) DIR=DL IMSI=001640000076847
created=1476457094 state=0000004a 1st_TS=5 1st_cTS=7 ctrl_TS=7 MS_CLASS=12/12
TS_alloc=5 6 7! CS=CS-4 WS=64 V(A)=118 V(S)=22 nBSN=-1

TBF: TFI=0 TLLI=0xc29225ff (valid) DIR=DL IMSI=001640000005666
created=1476457061 state=0000000a 1st_TS=4 1st_cTS=6 ctrl_TS=6 MS_CLASS=10/10
TS_alloc=4 5 6! 7 CS=CS-4 WS=64 V(A)=82 V(S)=90 nBSN=84

On following configuration with 2 trx:

trx 0
rf_locked 0
arfcn 876
nominal power 23
max_power_red 0
rsl e1 tei 0
timeslot 0
phys_chan_config CCCH
hopping enabled 0
timeslot 1
phys_chan_config SDCCH8
hopping enabled 0
timeslot 2
phys_chan_config TCH/F
hopping enabled 0
timeslot 3
phys_chan_config TCH/F
hopping enabled 0
timeslot 4
phys_chan_config PDCH
hopping enabled 0
timeslot 5
phys_chan_config PDCH
hopping enabled 0
timeslot 6
phys_chan_config PDCH
hopping enabled 0

timeslot 7
phys_chan_config PDCH
hopping enabled 0
trx 1
rf_locked 0
arfcn 880
nominal power 23
max_power_red 0
rsl e1 tei 0
timeslot 0
phys_chan_config PDCH
hopping enabled 0
timeslot 1
phys_chan_config PDCH
hopping enabled 0
timeslot 2
phys_chan_config PDCH
hopping enabled 0
timeslot 3
phys_chan_config PDCH
hopping enabled 0
timeslot 4
phys_chan_config TCH/F
hopping enabled 0
timeslot 5
phys_chan_config TCH/F
hopping enabled 0
timeslot 6
phys_chan_config TCH/F
hopping enabled 0
timeslot 7
phys_chan_config TCH/F
hopping enabled 0

#10 - 10/18/2016 02:26 PM - msuraev

Note: might be good idea to try with dynamic channels once it's tested in multiTRX configuration.

#11 - 11/29/2016 09:10 AM - msuraev

- Status changed from In Progress to Stalled

#12 - 12/16/2016 10:14 AM - arvind.sirsikar

- Status changed from Stalled to In Progress

- Assignee changed from msuraev to arvind.sirsikar

#13 - 01/18/2017 02:45 PM - wireless

Arvind please update this ticket. Thank you!

#14 - 02/07/2017 10:55 AM - msuraev

Gerrit 1512 has patch for this under review.

#15 - 06/26/2017 02:46 PM - msuraev

- Status changed from In Progress to Stalled

#16 - 08/15/2017 04:34 PM - laforge

#17 - 08/17/2017 06:53 AM - laforge

- Assignee changed from arvind.sirsikar to sysmocom

#18 - 08/31/2017 03:25 PM - msuraev

- Related to Feature #2282: uplink multi-slot allocations added

#19 - 10/30/2017 01:59 PM - msuraev

- Related to Bug #2603: Review the various incomplete and never merged changes in radisys branch added

#20 - 10/02/2018 03:47 PM - laforge