

# OsmoGGSN (former OpenGGSN) - Bug #4172

## osmoggsn crashes when stopping

08/23/2019 10:00 PM - lynxis

<b>Status:</b> New	<b>Start date:</b> 08/23/2019
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assignee:</b>	<b>% Done:</b> 0%
<b>Category:</b>	
<b>Target version:</b>	
<b>Spec Reference:</b>	
<b>Description</b>	
on the cccamp 2019 the ggsn crashed. Direct before that, the sgsn crashed.	
<pre>(gdb) bt #0  gtp_delete_context_req2 (gsn=0x0, pdp=0x7f9e66094138, cbp=0x0, teardown=1)     at ../../../../src/osmo-ggsn/gtp/gtp.c:2449 #1  0x000055702696abf6 in pool_close_all_pdp (pool=0x557027b1ed90) at ../../../../src/osmo-ggsn/ggsn/ggsn.c:111 #2  0x000055702696cc17 in apn_stop (apn=0x557027b1eaa0) at ../../../../src/osmo-ggsn/ggsn/ggsn.c:124 #3  0x000055702696ce60 in ggsn_stop (ggsn=0x557027b1e650) at ../../../../src/osmo-ggsn/ggsn/ggsn.c:1182 #4  0x0000557026968a16 in ggsn_stop (ggsn=0x557027b1e650) at ../../../../src/osmo-ggsn/ggsn/ggsn.c:1177 #5  main (argc=3, argv=0x7fffd20cd068) at ../../../../src/osmo-ggsn/ggsn/ggsn.c:1319</pre>	

### History

#### #1 - 08/29/2019 10:34 AM - pespin

- Subject changed from *osmoggsn crashes when stopping* to *osmoggsn crashes when stopping*

#### #2 - 08/29/2019 11:35 AM - pespin

This one looks really weird. `pdp->gsn` should never be NULL, since `pdp` is always related to a `gsn_t`. In no place `pdp->gsn` is set to NULL, and actually only place where `pdp->gsn` is set is in `gtp_pdp_newpdp()`:

```
(*pdp)->gsn = gsn;
```

And `gsn` cannot be NULL there because it's deferred to get access to `pdpa` before in the same function:

```
struct pdp_t *pdpa = gsn->pdpa;
```

However, `pdp_freepdp()` does this:

```
memset(pdp, 0, sizeof(struct pdp_t));
```

So only way `pdp->gsn` is NULL is that `pdp_freepdp` was already called on that `pdp` context.

`osmo-ggsn` only makes use of `pdp_freepdp()` in one place and it's not triggered here: `cb_conf(type=GTP_DELETE_PDP_REQ)`, basically because we free the `pdp` context before that point whenever we do a `DeletePdpReq` in `osmo-ggsn`. For other cases, `osmo-ggsn` calls `gtp_freepdp_teardown()` which would call the `delete_ctx` cb and appropriately remove it from `ippool`.

`libgtp` never calls `pdp_freepdp()` (which does not call `delete_ctx` cb), and it should only do it when the user/app doesn't have knowledge about that `pdp` context (so no associated structures are managed).

Would be great to know which commit/version was this one running when the crash appeared.

Some log file would have been great too, it would be a lot more clear to understand what happened.