3G IuPS is unreliable

Description

When first registering on a 3G network, IuPS data service often does not work right away. Going to flight mode and back into the network may resolve the issue. Sometimes it takes several of them. Once showing a website the first time, it seems to work well further on.

Related issues:

- Related to OsmoSGSN - Bug #1818: IuPS: CN should Iu Release in certain situations
- Related to OsmoSGSN - Support #3920: PCAPs files of 3G PS for Osmocom network
- Related to OsmoSGSN - Bug #3727: SGSN segfaults on network type change
- Related to OsmoSGSN - Bug #3995: OsmoSGSN doesn't close SCCP connection after...

History

#1 - 03/09/2017 05:01 PM - neels
- Related to Bug #1818: IuPS: CN should Iu Release in certain situations added

#2 - 03/09/2017 05:01 PM - neels

may or may not be related to #1818

#3 - 08/17/2017 06:51 AM - laforge
- Assignee changed from Osmocom CNI Developers to sysmocom

#4 - 08/30/2017 10:39 PM - neels

See #1818#note-4 (and #1818's attached pcap) indicating a likely solution to this issue: mismatching keystatus.

#5 - 08/30/2017 11:36 PM - neels

hmm, it doesn't seem so easy to reproduce a situation where the new_key flag reflects the wrong value.
I do get unreliable behavior, like web browser page failing to load, failing DNS lookups on-and-off, but all the while the new_key flag reflects the actual key status that is transmitted.
It doesn't seem to be as quick a fix as I thought.

#6 - 12/10/2017 08:10 PM - laforge
- Category set to Iu interface

#7 - 05/30/2018 03:01 PM - laforge
- Tags set to 3G

#8 - 04/13/2019 11:26 AM - laforge
- Related to Support #3920: PCAPs files of 3G PS for Osmocom network and Commercial one added

#9 - 09/04/2019 09:33 AM - laforge
- Assignee changed from sysmocom to lynxis
Do we still consider this to be the case? Or has this meanwhile been resolved?

#10 - 09/16/2019 04:58 PM - neels

I tried to quickly test IuPS to see how it fares, but hit a crash: #4208
I haven't yet seen a really reliable 3G data connection. Possibly problems are fixed, but let's consider this unresolved until osmo-sgsn works again.

#11 - 09/16/2019 07:37 PM - lynxis

- Status changed from New to In Progress
- % Done changed from 0 to 80

So far I see the following problems
- ran changes 2g/3g (patches in gerrit, but WIP)
- Iu release (patches needs to be merged)
- synchronize PDP Context: MS state with SGSN state (already merged)

#12 - 09/16/2019 07:38 PM - lynxis

- Related to Bug #3727: SGSN segfaults on network type change added

#13 - 09/16/2019 07:36 PM - lynxis

- Related to Bug #3995: OsmoSGSN doesn't close SCCP connection after successful LU over IuPS added

#14 - 09/17/2019 01:00 AM - neels

So, I learned that the crash is known and comes from changing from 2G to 3G.
Taking care not to do that, I tried the 3G IuPS successfully.

I actually don't see the weird behavior that made me create this issue originally. It seems that the cause making the IuPS data uplink hickup has indeed been fixed. lynxis from my side it seems that we can close this, and track the remaining known IuPS problems in their own issues each. Agree?

#15 - 09/28/2019 09:41 PM - lynxis

- Status changed from In Progress to Closed
- % Done changed from 80 to 100