OsmoSGSN - Bug #2857

No automatic testing of IuPS interface

01/22/2018 01:35 AM - laforge

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
<th>Start date:</th>
<th>01/23/2018</th>
</tr>
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<tr>
<td>Priority:</td>
<td>High</td>
<td>Due date:</td>
<td>01/23/2018</td>
</tr>
<tr>
<td>Assignee:</td>
<td>lynxis</td>
<td>% Done:</td>
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<tr>
<td>Category:</td>
<td>Iu interface</td>
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<td>Target version:</td>
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<td>Spec Reference:</td>
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**Description**

Similar to the situation in OsmoMSC with IuCS, we don't have any automatic testing of the IuPS interface. Once we figured out how to properly interface RANAP from TITAN, we should be able to write test cases in TTCN-3 to automatically test our IuPS implementation.

**Related issues:**

- Related to OsmoSGSN - Bug #3224: verify ciphering after UMTS AKA
  - New 04/30/2018
- Related to OsmoSGSN - Bug #4157: SGSN test regressions (likely testsuite)
  - Resolved 08/19/2019
- Follows OsmoMSC - Bug #2856: No automatic testing of IuCS interface
  - Resolved 01/22/2018

**History**

**#1 - 01/22/2018 01:35 AM - laforge**
- Due date set to 01/23/2018
- Start date changed from 01/22/2018 to 01/23/2018
- Follows Bug #2856: No automatic testing of IuCS interface added

**#2 - 05/30/2018 03:00 PM - laforge**
- Tags set to TTCN3, 3G

**#3 - 06/23/2018 07:42 PM - laforge**
- Related to Bug #3224: verify ciphering after UMTS AKA added

**#4 - 04/15/2019 07:35 AM - laforge**
- Status changed from New to In Progress
- Assignee set to laforge
- % Done changed from 0 to 20

I have RANAP encoding/decoding now working in TTCN-3, and I've also created a set of RANAP templates to use. Integration into the SGSN testsuite is currently ongoing.

**#5 - 04/15/2019 08:18 PM - laforge**
- Status changed from In Progress to Stalled

The core RANAP integration, the templates etc. appear to be working. The problem is that due to bugs in the proprietary asn1 compiler we're not able to reliably transcode between BER and APER at this point. Setting to stalled again.

**#6 - 07/18/2019 08:10 PM - laforge**

The transcoding issues have long been resolved, as can be seen when looking at IuCS related tests that are already in production.

The "problem" now with IuPS is that for the Gb/BSSAP based SGSN tests we don't have the notion of a (scpp or otherwise) connection between the RAN and the SGSN. LLC messages are simply exchanged "stateless" over BSSGP. For IuPS, this needs to change substantially, so it's much harder to have "portable" test logic that works over both a 2G and a 3G RAN.

**#7 - 07/18/2019 08:11 PM - laforge**

05/15/2020
latest code is in laforge/iu branch of osmo-ttcn3-hacks.git

#8 - 08/19/2019 01:15 PM - pespin
- Related to Bug #4157: SGSN test regressions (likely testsuite) added

#9 - 08/29/2019 03:09 PM - laforge
- Category set to Iu interface
- Status changed from Stalled to In Progress
- Assignee changed from laforge to lynxis
- Priority changed from Normal to High
- % Done changed from 20 to 80

branch has meanwhile been merged AFAIR, but I don't see any lu tests as part of SGSN_Tests.ttcn executed yet?

#10 - 09/15/2019 11:20 PM - lynxis
- Status changed from In Progress to Feedback
- % Done changed from 80 to 90

waiting for https://gerrit.osmocom.org/c/docker-playground/+/15534 to be merged.

#11 - 09/17/2019 11:17 AM - lynxis
- Status changed from Feedback to Closed

#12 - 09/17/2019 11:17 AM - lynxis
- % Done changed from 90 to 100