

OsmoHLR - Bug #2785

OsmoHLR forgets to send InsertSubscriberData to VLR/SGSN when data changes

12/28/2017 02:47 AM - laforge

Status: Resolved	Start date: 12/28/2017
Priority: High	Due date:
Assignee: neels	% Done: 100%
Category:	
Target version:	
Description OsmoHLR allows for subscriber data to be changed, but forgets to inform the VLR+SGSN about related changes (such as MSISDN, service subscription). A quick fix is unfortunately not very simple as the ISD procedure is currently intertwined with the LocationUpdate procedure in the code :/	
Related issues:	
Related to OsmoHLR - Bug #3154: osmo-hlr should send updated subscriber data ...	Resolved 04/10/2018
Related to OsmoMSC - Bug #3601: OsmoMSC's GSUP client doesn't send CN domain ...	Resolved 09/28/2018

History

#1 - 01/04/2018 10:37 AM - laforge

- Assignee set to neels
- Priority changed from Normal to High

#2 - 02/20/2018 12:08 PM - laforge

- Assignee changed from neels to stsp

#3 - 03/01/2018 09:44 PM - laforge

There's now a test case: HLR_Tests.TC_vty_msisdn_isd

<https://gerrit.osmocom.org/7039>

#4 - 03/29/2018 04:44 PM - stsp

Looking at the HLR TC_vty_msisdn_isd test, it looks like this test:

1. Sends a location update sending the subscriber's initial msisdn.
2. Changes the subscriber's msisdn in the HLR's database via VTY.
3. Now waits and expects a communication of this new msisdn, initiated by the HLR.

I am unsure how the HLR could initiate this communication in its current implementation. The HLR runs as a gsup server loop which only responds to incoming requests from clients. The way I understand it, to fix the problem we would need to either:

1. Make the test send another location update or initiate some other GSUP communication with the HLR, and then expect to receive updated subscriber information.
2. Make it possible for the HLR to initiate a new (client) connection to the VLR (server) and then send the insert subscriber data message.

Am I missing something?

#5 - 03/29/2018 04:56 PM - stsp

- Status changed from New to In Progress

#6 - 04/03/2018 10:41 AM - neels

for the record, as discussed today: the GSUP connection between {MSC,SGSN} and HLR persists, you can send messages anytime. If an {MSC,SGSN} isn't connected then per definition it is not ready to receive subscriber updates (probably down or broken).

#7 - 04/09/2018 10:00 AM - stsp

This patch fixes the external behaviour: <https://gerrit.osmocom.org/7685>
It may not be the perfect solution in terms of code maintainability but already gets us one step further.

#8 - 04/12/2018 08:59 AM - stsp

Now waiting for a review of <https://gerrit.osmocom.org/#/c/7743/>

#9 - 04/30/2018 12:04 PM - neels

- Related to Bug #3154: osmo-hlr should send updated subscriber data to relevant VLR/SGSN only added

#10 - 05/07/2018 11:11 AM - stsp

Now waiting for review of this change: <https://gerrit.osmocom.org/#/c/7992/>

#11 - 05/18/2018 12:52 PM - stsp

- Status changed from In Progress to Resolved

Above change has been merged. Closing this issue.

#12 - 06/15/2018 04:05 PM - laforge

- Status changed from Resolved to New

I'll be reverting to the old behavior in <https://gerrit.osmocom.org/#/c/osmo-hlr/+9647>, so this bug must be reopened. The new behavior was just as broken as the previous...

#13 - 09/28/2018 12:38 AM - neels

- Related to Bug #3601: OsmoMSC's GSUP client doesn't send CN domain to the HLR added

#14 - 09/28/2018 01:19 AM - neels

- Assignee changed from stsp to neels

I have working patches ready on branches neels/upd_subscr (both in osmo-hlr and osmo-msc).
The remaining question is still what identification to use for GSUP clients like MSC and SGSN.
So far using the IPA_IDTAG_SERNR ('MSC-00-00-00-00-00') which is technically too long for the HLR db (enlarged the storage but that is questionable).

#15 - 10/04/2018 12:44 PM - neels

<https://gerrit.osmocom.org/11233>

#16 - 10/04/2018 12:44 PM - neels

- Status changed from New to In Progress

- % Done changed from 0 to 90

#17 - 10/10/2018 11:29 AM - neels

above patch waiting for <https://gerrit.osmocom.org/11232> which needs further code review, after first remarks were addressed.

#18 - 10/11/2018 11:56 AM - neels

first preparatory patch merged, now <https://gerrit.osmocom.org/c/osmo-hlr/+11233> waiting for code review.

#19 - 05/09/2019 12:27 AM - neels

- Status changed from In Progress to Resolved

- % Done changed from 90 to 100