

OsmoSGSN - Bug #3356

OsmoSGSN doesn't provide unique IDTAG_SERNR in IPA CCM

06/23/2018 05:49 PM - laforge

Status:	In Progress	Start date:	06/23/2018
Priority:	Normal	Due date:	
Assignee:	osmith	% Done:	0%
Category:	GSUP interface		
Target version:			
Spec Reference:			
Description			
OsmoSGSN currently identifies itself simply as "SGSN" over the IPA/GSUP link to OsmoHLR.			
This is wrong as it results in all OsmoSGSNs (in a multi-SGSN network) to register using the same identity, which in turn will render the HLR unable to store which SGSN is actually serving the subscriber, and/or to route messages accordingly.			
It appears the change to "SGSN" was made in Change-Id: I0a60681ab4a4d73e26fe8f0637447db4b6fe6eb2 from "SGSN-00-00-00-00-00-00" before. Both the old and the new name are wrong though, as they're not unique.			
The correct behavior AFAICT is "SGSN-" prefix with whatever unique identifier behind. We could make that suffix configurable in the VTY, if there's no other way to derive any other locally unique identifier. MAC addresses work fine for BTSs, but not for SGSNs: There might be any number of OsmoSGSNs running on the same physical / virtual machine with only one MAC address...			
Related issues:			
Related to OsmoMSC - Bug #3355: OsmoMSC doesn't provide unique IDTAG_SERNR in...		Resolved	06/23/2018
Related to OsmoHLR - Bug #2796: OsmoHLR doesn't update VLR during UpdateLocation		Resolved	12/30/2017
Related to OsmoHLR - Feature #3644: allow arbitrary bytes in Global Title (GT...		New	10/11/2018

History

#1 - 06/23/2018 05:49 PM - laforge

- Related to Bug #3355: OsmoMSC doesn't provide unique IDTAG_SERNR in IPA CCM added

#2 - 06/23/2018 05:49 PM - laforge

- Related to Bug #2796: OsmoHLR doesn't update VLR during UpdateLocation added

#3 - 06/23/2018 05:51 PM - laforge

Note: The identifier must stay unique even across re-starts of the SGSN.

#4 - 07/30/2018 02:49 PM - stsp

Would uuid_generate be a reasonable solution?

https://linux.die.net/man/3/uuid_generate

#5 - 08/20/2018 09:38 AM - neels

stsp wrote:

Would uuid_generate be a reasonable solution?

https://linux.die.net/man/3/uuid_generate

The difficulty is to get the same UUID **across program restarts**, i.e. no random involved. We should probably use an ID to be set in the config file (and loudly error-log if missing)?

#6 - 09/28/2018 01:22 AM - neels

it would be good if the identification were at most 15 characters wide, so it fits in the HLR's sgsn_number.

#7 - 10/02/2018 02:43 PM - neels

neels wrote:

it would be good if the identification were at most 15 characters wide, so it fits in the HLR's sgsn_number.

OK, turns out the GSUP clients are free to send pretty much anything they want (in the sense of arbitrary Global Title), and osmo-hlr should be able to deal with that.

#8 - 11/26/2018 10:48 PM - neels

- *Related to Feature #3644: allow arbitrary bytes in Global Title (GT), a.k.a. the VLR,SGSN's identification towards the HLR added*

#9 - 12/11/2018 02:31 PM - stsp

- *Status changed from New to In Progress*

This has already been fixed in osmo-msc (see issue [#3355](#)). I'll prepare a corresponding patch for osmo-sgsn.

#10 - 12/11/2018 03:23 PM - stsp

Proposed patch: <https://gerrit.osmocom.org/c/osmo-sgsn/+12243>

#11 - 04/09/2019 11:22 AM - laforge

- *Assignee changed from stsp to osmith*

- *Priority changed from High to Normal*