

libosmo-sccp + libosmo-sigtran - Bug #3383

libosmo-sigtran performs blocking connect() for M3UA

07/05/2018 11:58 AM - laforge

Status:	Resolved	Start date:	07/05/2018
Priority:	High	Due date:	
Assignee:	laforge	% Done:	100%
Category:			
Target version:			
Spec Reference:			
Description			
When trying to establish a connection from OsmoBSC to a MSC, and the MSC/STP doesn't either a) actively refuse the connection (port unreachable or the like), or b) accept the connection			
We are blocking the entire BSC process, so no vty or Abis processing is happening.			
it basically looks like this in strace:			
<pre>bind(8, {sa_family=AF_INET, sin_port=htons(30003), sin_addr=inet_addr("0.0.0.0")}, 16) = 0 connect(8, {sa_family=AF_INET, sin_port=htons(30003), sin_addr=inet_addr("12.13.14.15")}, 16) = 0 strace: Process 56640 detached <detached ...></pre>			

History

#1 - 07/05/2018 12:04 PM - laforge

- Status changed from New to In Progress
- Assignee set to laforge
- % Done changed from 0 to 10

libosmo-sigtran is using osmo_stream_cli* API of libosmo-netif in order to perform the client side connection to an STP.

In the end, osmo_stream_cli_open2 is called, which will

- first call osmo_sock_init2(AF_INET, SOCK_STREAM, ... OSMO_SOCKET_F_CONNECT|OSMO_SOCKET_F_BIND)
- later (if cli->flags & OSMO_STREAM_CLI_F_NODELAY) setsockopt_nodelay()

At no point we seem to be setting FIONBIO / non-blocking on that socket. libosmocore can do this if OSMO_SOCKET_F_NONBLOCK is set - which libosmo-netif doesn't do.

#2 - 07/05/2018 12:07 PM - laforge

- % Done changed from 10 to 50

<https://gerrit.osmocom.org/#/c/libosmo-netif/+9888> is a tentative fix for this

#3 - 07/05/2018 12:24 PM - laforge

- % Done changed from 50 to 90

I just did a quick test using LD_PRELOAD of the modified libosmo-netif, and indeed the OsmoBSC is now using non-blocking connect. After about 5 minutes, the non-blocking connect fails and the re-connect logic of libosmo-netif kicks in. looks good so far.

#4 - 07/05/2018 12:54 PM - laforge

- Status changed from In Progress to Resolved
- % Done changed from 90 to 100

patch merged