

## OsmoTRX - Bug #4828

### Building osmo-trx-lms fails due to linker errors

10/24/2020 12:31 AM - fixeria

<b>Status:</b>	Resolved	<b>Start date:</b>	10/24/2020
<b>Priority:</b>	High	<b>Due date:</b>	
<b>Assignee:</b>	fixeria	<b>% Done:</b>	100%
<b>Category:</b>	LimeSDR		
<b>Target version:</b>			
<b>Spec Reference:</b>			
<b>Description</b>			
I have no idea why this is happening:			
<pre>\$ autoreconf -fi \$ ./configure --with-lms --with-uhd \$ make  ...  CXXLD    osmo-trx-uhd CXXLD    osmo-trx-lms /usr/bin/ld: ./device/lms/.libs/libdevice.a(LMSDevice.o): in function `LMSDevice::do_clock_src_freq(ReferenceType, double)': /home/wmn/wmn/osmocom/osmo-trx/Transceiver52M/device/lms/LMSDevice.cpp:493: undefined reference to `get_value_string(value_string const*, unsigned int)' /usr/bin/ld: ./device/lms/.libs/libdevice.a(LMSDevice.o): in function `LMSDevice::assign_band_desc(gsm_band)': /home/wmn/wmn/osmocom/osmo-trx/Transceiver52M/device/lms/LMSDevice.cpp:237: undefined reference to `osmo_panic(char const*, ...)' collect2: error: ld returned 1 exit status</pre>			
while both osmo-trx-{ipc,uhd} seem to compile just fine. Here is more detailed output:			
<pre>\$ make V=s /bin/sh ../libtool --tag=CXX --mode=link g++ -lpthread -I/usr/local/include/ -pthread -I/usr/local/include/ -I/usr/local/include/ -g -O2 -o osmo-trx-lms osmo_trx_lms-osmo-trx.o ./device/lms/libdevice.la libtransceiver_common.la ../Transceiver52M/arch/x86/libarch.la ../GSM/libGSM.la ../CommonLibs/libcommon.la -lfft3f -L/usr/local/lib -Wl,-rpath,/usr/lib -ltalloc -losmocore -L/usr/local/lib -Wl,-rpath,/usr/lib -ltalloc -losmoctrl -losmogsm -losmocore -L/usr/local/lib -Wl,-rpath,/usr/lib -ltalloc -losmovty -losmocore -lLimeSuite libtool: link: g++ -I/usr/local/include/ -pthread -I/usr/local/include/ -I/usr/local/include/ -g -O2 -o osmo-trx-lms osmo_trx_lms-osmo-trx.o -Wl,-rpath -Wl,/usr/lib -Wl,-rpath -Wl,/usr/lib -Wl,-rpath -Wl,/usr/lib ./device/lms/.libs/libdevice.a ../Transceiver52M/arch/x86/.libs/libarch.a ../GSM/.libs/libGSM.a ../CommonLibs/.libs/libcommon.a -lpthread -L/usr/local/lib -lfft3f /usr/local/lib/libosmoctrl.so /usr/local/lib/libosmogsm.so -lgnutls /usr/local/lib/libosmovty.so /usr/local/lib/libosmocore.so -ltalloc -lsctp -ldl -lsystemd -lLimeSuite -pthread /usr/bin/ld: ./device/lms/.libs/libdevice.a(LMSDevice.o): in function `LMSDevice::do_clock_src_freq(ReferenceType, double)': /home/wmn/wmn/osmocom/osmo-trx/Transceiver52M/device/lms/LMSDevice.cpp:493: undefined reference to `get_value_string(value_string const*, unsigned int)' /usr/bin/ld: ./device/lms/.libs/libdevice.a(LMSDevice.o): in function `LMSDevice::assign_band_desc(gsm_band)': /home/wmn/wmn/osmocom/osmo-trx/Transceiver52M/device/lms/LMSDevice.cpp:237: undefined reference to `osmo_panic(char const*, ...)' collect2: error: ld returned 1 exit status</pre>			
See also: <a href="https://jenkins.osmocom.org/jenkins/job/gerrit-osmo-trx/1007/">https://jenkins.osmocom.org/jenkins/job/gerrit-osmo-trx/1007/</a> .			

#### History

#1 - 10/24/2020 12:16 PM - fixeria

- Category set to LimeSDR
- Status changed from New to In Progress
- Assignee set to fixeria

#### #2 - 10/24/2020 12:30 PM - fixeria

- Status changed from In Progress to Feedback
- % Done changed from 0 to 100

C++ is amazing (of course not), especially when mixed up with C:

<https://gerrit.osmocom.org/c/osmo-trx/+20881> device/lms: fix: 'trx\_vty.h' header requires C linkage

We probably need to back-port this change to latest v1.2.0 and tag a patch release.

#### #3 - 10/24/2020 12:38 PM - fixeria

While trying to understand why the hell it fails, I also submitted a bunch of misc changes:

<https://gerrit.osmocom.org/c/osmo-trx/+20882> device/lms: fix missing semicolon in LMSDevice::assign\_band\_desc()

<https://gerrit.osmocom.org/c/osmo-trx/+20876> device/lms: get rid of 'using namespace std'

<https://gerrit.osmocom.org/c/osmo-trx/+20874> device/uhd: re-introduce OSMO\_ASSERT() in async\_event\_loop()

<https://gerrit.osmocom.org/c/osmo-trx/+20873> device/common/Makefile.am: remove \$(LMS\_CFLAGS) from AM\_CXXFLAGS

<https://gerrit.osmocom.org/c/osmo-trx/+20875> device: drop unreasonable LIBOSMO{CTRL,VTY}\_{CFLAGS,LIBS}

<https://gerrit.osmocom.org/c/osmo-trx/+20878> Transceiver: use size\_t and ARRAY\_SIZE() in constructor

<https://gerrit.osmocom.org/c/osmo-trx/+20879> Transceiver: explicitly set m{Rx,Tx}LowerLoopThread to NULL

#### #4 - 10/25/2020 08:10 AM - fixeria

- Status changed from Feedback to Resolved

We probably need to back-port this change to latest v1.2.0 and tag a patch release.

Nope, this regression was actually introduced after the release tag. Patches merged, closing.

[1] l7658615787c5bc41c365bab9c11733b701ac2ae5 <https://gerrit.osmocom.org/c/osmo-trx/+16876>