

LTTng-UST - Bug #487

Per UID buffer: Can not see any data being logged

03/27/2013 11:46 AM - Tan le tran

Status:	Resolved	Start date:	03/27/2013
Priority:	Critical	Due date:	
Assignee:	Mathieu Desnoyers	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:			

Description

Problem Description:

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```
* After the session is activated and instrumented app launched, no
log can be obtained. Only metadata file contain "seem to be valid" data.
Babeltrace the session directory gives nothing.
```

Is problem reproducible ?

=====

```
* yes 100%
```

How to reproduce (if reproducible):

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```
1)_
  export TC=ses1
  ps -ef | egrep 'lttng'
  netstat -etn | head -n 2 ; netstat -etn | egrep lttng
  lttng-relayd -C tcp://0.0.0.0:53000 -D tcp://0.0.0.0:53001 -o /cluster/temp/log/$TC &
  netstat -etn | head -n 2 ; netstat -etn | egrep lttng
  time lttng list
  time lttng create $TC -U net://192.168.0.1:53000:53001/.
  time lttng list
  sleep 1
  time lttng enable-channel -u --buffers-uid chan1
  sleep 1
  time lttng enable-event -s $TC "com*" -u -c chan1
  sleep 1
  time lttng list $TC
  sleep 1
  time lttng start;
  sleep 1
  time lttng list
2)_ Launch the application
  /home/test_apps/TestApp_type1 50000 np &
  lttng list -u
  #-- shows that the instr app has registered and sessionD sees all their tracepoints
  # all tracepoints start with com_....
3)_ dir ses1/SC-1/ust/uid/0/64-bit/ (current directory is : /cluster/temp/log/)
  total 0
  -rwxr-xr-x 1 root root 0 Mar 26 17:54 metadata
  -rwxr-xr-x 1 root root 0 Mar 26 17:54 chan1_3
  -rwxr-xr-x 1 root root 0 Mar 26 17:54 chan1_2
  -rwxr-xr-x 1 root root 0 Mar 26 17:54 chan1_1
  -rwxr-xr-x 1 root root 0 Mar 26 17:54 chan1_0
```

```
Repeat the above command again and again, but still see all filesize 0.
The above instr app should produce about 10000 events per sec, and
we are expecting to get about 600KB/s of data.
```

```
4)_ lttng stop
    lttng destroy
    pkill relayd
```

```
5)_ dir ses1/SC-1/ust/uid/0/64-bit/
```

```
total 44
-rwxr-xr-x 1 root root 12288 Mar 26 17:55 metadata
-rwxr-xr-x 1 root root 8192 Mar 26 17:55 chan1_3
-rwxr-xr-x 1 root root 8192 Mar 26 17:55 chan1_2
-rwxr-xr-x 1 root root 8192 Mar 26 17:55 chan1_1
-rwxr-xr-x 1 root root 8192 Mar 26 17:55 chan1_0
```

```
6)_ more ses1/SC-1/ust/uid/0/64-bit/metadata #-- shows that the tracepoints are present
```

```
7)_ babeltrace ses1/SC-1/ust/uid/0/64-bit/
babeltrace ses1/SC-1/ust/uid/0/64-bit/
babeltrace ses1/SC-1/ust/uid/0/
babeltrace ses1/SC-1/ust/
babeltrace ses1/SC-1/
babeltrace ses1/
```

```
#--- get nothing in printout
```

```
Commit used:
```

```
=====
```

```
userspace : d107390 (HEAD, origin/master, origin/HEAD, globalBuffer) Add tab to output in ...
ltnng-ust : e2ad3b4 (HEAD, origin/master, origin/HEAD, globalBuffer) Add demo README
ltnng-tools : 9f9ee9c (HEAD, origin/master, origin/HEAD, globalBuffer) Fix: UST context activation
on
babeltrace : c99b191 (HEAD, tag: v1.1.0) Version 1.1.0
```

```
Any other information:
```

```
=====
```

- The above terminal log are attached.
- The corresponding session directory is also attached

Associated revisions

Revision 46c881a7 - 03/28/2013 06:39 PM - Mathieu Desnoyers

Fix: tracepoint instrumentation constructor order issue

If the linker decides to run a constructor from a tracepoint probe before the constructor from the application, a recent modification (commit 558b9d86247004f8e9bbaf8c982f3b2b182093d1) allowed that the wrong constructor execution order could prohibit the program's tracepoints from being registered.

Fix this by making two separate constructors.

Fixes #487

Signed-off-by: Mathieu Desnoyers <mathieu.desnoyers@efficios.com>

Revision de774d10 - 06/19/2013 12:05 AM - Mathieu Desnoyers

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Fixes #487

Signed-off-by: Mathieu Desnoyers <mathieu.desnoyers@efficios.com>

History

#1 - 03/27/2013 12:14 PM - David Goulet

This works well here. After the stop, you should get your data.

Note that in your case you use "" as a wild card but with double quotes. That may cause your shell to replace the star with some unwanted input.

```
$ lttn enable-event -s $TC "com*" -u -c chan1
```

That would explain why the trace is valid but does not have anything in it. If not, let me know.

#2 - 03/27/2013 12:27 PM - Mathieu Desnoyers

The proper usage for wildcard is to use single quote, not double, indeed.

"" rather than "".

Thanks,

Mathieu

--

Mathieu Desnoyers
EfficiOS Inc.
<http://www.efficios.com>

#3 - 03/27/2013 12:58 PM - Tan le tran

Negative !

The reason I used "com*" is to get a quick file size increase.
The problem has been spotted when using a single specific tracepoint:
com_ericsson_cba_trace_testapp_lowtraf:OnePerSecB

Can we safely assume that "com*" has been interpreted properly by lttn because the corresponding tracepoints are shown in the metadata file ? Otherwise, none of the tracepoints should be present in that file, isn't it ?

I tried with 'com*' anyway and same problem. no Data .

Will try to run again with verbose mode... will update later.

#4 - 03/27/2013 01:23 PM - David Goulet

Can I have the TestApp (tarball) so I can test the same exact use case because I'm unable to have an empty trace here with the exact command you are using.

Thanks!

#5 - 03/27/2013 03:20 PM - Tan le tran

- File ses9_terminal_log.log added
- File ses9_sessionD_verbose.log added
- File TestApp_type1.tar added

We have rerun the scenario with "sessionD -vvv".

The following files are attached:
"ses9_terminal_log.log"
Terminal log file when session "ses9" is being created, start, stop, destroy.
"ses9_sessionD_verbose.log"
Corresponding sessiond -vvv output
"TestApp_type1.tar" the requested tarball of TestApp_type1 used in the test.

#6 - 03/27/2013 04:16 PM - Tan le tran

I have rerun the case using the "hello" program under "lttn-ust/tests/hello-static-lib" with the instructions steps below and the problem is still the same. I could not get any log data. Only metadata.

```
export TC=ses102

ps -ef | egrep 'lttn'
    lttn-relayd -C tcp://0.0.0.0:53000 -D tcp://0.0.0.0:53001 -o /cluster/temp/log/$TC &

lttn create $TC -U net://192.168.0.1:53000:53001/./
    lttn list
```

```

sleep 1
lttng enable-channel chan1 -u --buffers-uid
sleep 1
lttng enable-event -s $TC -u -c chan1 ust_tests_hello:tpptest_sighandler
sleep 1
lttng list $TC
sleep 1
lttng start;
sleep 1
lttng list $TC
sleep 1
netstat -etnnp | head -n 2 ; netstat -etnnp | grep 'lttng'
sleep 1
lttng list -u
sleep 1
/cluster/temp/tdlt/hello 20 &
sleep 1
lttng list -u
dir -R /cluster/temp/log/$TC
sleep 22
dir -R /cluster/temp/log/$TC
lttng stop
sleep 1
dir -R $TC/SC-1/ust/uid/0/64-bit
lttng destroy $TC
sleep 1
dir -R $TC/SC-1/ust/uid/0/64-bit
pkill relayd
ps -ef | grep 'lttng'
pkill TestApp
lttng list -u
babeltrace $TC/SC-1/ust/uid/0/64-bit

```

I am still using the same set of lttng commits indicated at the beginning of this report.

#7 - 03/27/2013 04:23 PM - David Goulet

I can't get an empty trace here... I used "com*" and after only "com_ericsson_cba_trace_testapp_lowtraf:OnePerSecB:" with the application started before and after the lttng commands and I'm unable to get an empty trace. (at the same commit as you are in all projects).

Is your system 32 bit?

Second thing, can you set the application in debug mode using LTTNG_UST_DEBUG=1 ./TestApp_type1 (or simply hello). Also, add "--verbose-consumer" to the session daemon logs so we can look if the consumer is the problem.

#8 - 03/27/2013 05:44 PM - Tan le tran

- File ses13_withUST_DEBUG.log added

- File ses13_sessionD_consumerD_verbose.log added

We are using a 64 bit system.

I have run a new session with the info you requested (ses13).
Logs are attached.

From the consumer output, there are plenty of complaints about:

Reserving sub buffer failed (everything is normal, it is due to concurrency) [ret: -11] (in lttng_ustconsumer_read_subbuffer() at ust-consumer.c:1188)

#9 - 03/28/2013 02:41 PM - Mathieu Desnoyers

- Project changed from LTTng-tools to LTTng-UST

- Status changed from New to Confirmed

- Assignee set to Mathieu Desnoyers

- Priority changed from Normal to Critical

#10 - 03/28/2013 02:52 PM - Mathieu Desnoyers

- Status changed from Confirmed to Resolved

- % Done changed from 0 to 100

Applied in changeset [46c881a7d6839761e3371a93ba29e7a0202bcd03](#).

Files

Terminal.log	38.2 KB	03/27/2013	Tan le tran
ses1.tar	1.94 KB	03/27/2013	Tan le tran
ses9_terminal_log.log	21.2 KB	03/27/2013	Tan le tran
ses9_sessionD_verbose.log	141 KB	03/27/2013	Tan le tran
TestApp_type1.tar	790 KB	03/27/2013	Tan le tran
ses13_withUST_DEBUG.log	40.8 KB	03/27/2013	Tan le tran
ses13_sessionD_consumerD_verbose.log	1.21 MB	03/27/2013	Tan le tran