

LTTng - Bug #937

Babeltrace failure in live mode

09/10/2015 01:51 AM - Li Liguang

Status:	New	Start date:	09/10/2015
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			

Description

When using LTTng in live mode, with the Babeltrace tool, the output of Babeltrace stalls after a while. The tracing continues, but the output is no longer seen from Babeltrace. The scenario seems to happen mostly under heavy loaded tracing.

lttng version is :
lttng version 2.7.0-pre - Gaia -v2.6.0-rc1-242-g60f7035.

When the failure occurs Babeltrace outputs the following message:

```
[error] Unexpected end of packet. Either the trace data stream is corrupted or metadata description does not match data layout.  
[error] Reading event failed.  
[warning] [Context] Cannot open_trace of format lttng-live at path net://localhost/host/localhost/dcsession.  
[warning] [Context] cannot open trace "net://localhost/host/localhost/dcsession" for reading.  
[error] opening trace "net://localhost/host/localhost/dcsession" for reading.
```

```
[error] none of the specified trace paths could be opened.
```

Sometimes Babeltrace outputs the following message:

```
[error] get_next_index: error  
[error] get_next_index failed
```

The scenario can easily be reproduced as follows:

1. ~~lttng-relayd -d -o /tmp/lttng/live~~
2. ~~lttng-sessiond --no-kernel-daemonize~~
3. ~~lttng -n create-session --live 1000000 -U net://localhost/~~
4. ~~lttng enable-channel channel0 -u -buffers-uid G 1024k -W 1~~
5. ~~lttng enable-event userspace-channel channel0 -a~~
6. ~~lttng start~~
7. ~~./hello -->(demo application)~~
8. ~~babeltrace --clock-date --no-delta -i lttng-live net://localhost/host/localhost/session~~

This is my demo application:

```
1 #include <stdio.h>;  
2 #include "hello-tp.h"  
3  
4 void test_bp(void)  
5 {  
6 printf("\r\n come in bp function for testing\r\n");  
7 return;  
8 }  
9  
10 int main(int argc, char* argv[])  
11 {  
12 int x;  
13  
14 puts("Hello, World!\nPress Enter to continue...");  
15  
16 /* The following getchar() call is only placed here for the purpose  
17 * of this demonstration, for pausing the application in order for  
18 * you to have time to list its events. It's not needed otherwise.  
19 */
```

```

20 getchar();
21
22 / A tracepoint() call. Arguments, as defined in hello-tp.tp:
23 *
24 * 1st: provider name (always)
25 * 2nd: tracepoint name (always)
26 * 3rd: my_integer_arg (first user-defined argument)
27 * 4th: my_string_arg (second user-defined argument)
28 *
29 * Notice the provider and tracepoint names are NOT strings;
30 * they are in fact parts of variables created by macros in
31 * hello-tp.h.
32 */
33 for(;;)
34 {
35 // sleep(2);
36 tracepoint(hello_world, my_first_tracepoint, 23, "hi there!");
37
38 for (x = 0; x < argc; ++x) {
39 tracepoint(hello_world, my_first_tracepoint, x, argv[x]);
40 }
41 // test_bp();
42 }
43 puts("Quitting now!");
44
45 // test_bp();
46 tracepoint(hello_world, my_first_tracepoint, x * x, "x^2");
47
48
49
50 return 0;
51 }

```

History

#1 - 09/10/2015 02:00 AM - Li Liguang

Li Liguang wrote:

When using LTTng in live mode, with the Babeltrace tool, the output of Babeltrace stalls after a while. The tracing continues, but the output is no longer seen from Babeltrace. The scenario seems to happen mostly under heavy loaded tracing.

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[warning] [Context] cannot open trace "net://localhost/host/localhost/dcsession" for reading.
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[error] none of the specified trace paths could be opened.

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The scenario can easily be reproduced as follows:

1. lttng-relayd -d -o /tmp/lttng/live
2. lttng-sessiond --no-kernel --daemonize
3. lttng -n create session --live 1000000 -U net://localhost/
4. lttng enable-channel channel0 -u --buffers-uid -C 1024k -W 1
5. lttng enable-event --userspace --channel channel0 -a
6. lttng start
7. ./hello (demo application)
8. babeltrace --clock-date --no-delta -i lttng-live net://localhost/host/localhost/session

This is my demo application:

```

1 #include <stdio.h>
2 #include "hello-tp.h"
3
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5 {
6 printf("\n\ncome in bp function for testing\n\n");
7 return;
8 }
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10 int main(int argc, char* argv[])
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12 int x;
13
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16 /* The following getchar() call is only placed here for the purpose
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19 /
20 getchar();
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22 / A tracepoint() call. Arguments, as defined in hello-tp.tp:
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35 // sleep(2);
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38 for (x = 0; x < argc; ++x) {
39 tracepoint(hello_world, my_first_tracepoint, x, argv[x]);
40 }
41 // test_bp();
42 }
43 puts("Quitting now!");
44
45 // test_bp();
46 tracepoint(hello_world, my_first_tracepoint, x * x, "x^2");
47
48
49
50 return 0;
51 }

```

#2 - 09/16/2015 05:18 AM - Li Liguang

Today i update the lttng-tools and lttng-ust to the latest version, try to reproduce this defect but another error is reported as following, hope this log is helpful.

```

[14:46:54.848671885] (+0.000000234) pek-fjia-d1 hello_world:my_first_tracepoint: { cpu_id = 1 }, { my_string_field = "./hello_bab0", my_integer_field = 0 }
[14:46:54.848672122] (+0.000000237) pek-fjia-d1 hello_world:my_first_tracepoint: { cpu_id = 1 }, { my_string_field = "hi there!", my_integer_field = 23 }
[error] Remote side has closed connection
[error] get_next_index failed
[error] Error sending get_next_index request: Broken pipe
[error] get_next_index failed
[error] Error sending cmd: Broken pipe
[error] get_next_index failed

```

Version

Lttng-tools: v2.7.0-rc1-197-gda412cd

Lttng-ust: v2.7.0-rc2.