

LTTng-modules - Bug #169

Lttng Kernel Module: Timestamp offset invalid on a 32 bit OS

03/13/2012 04:36 PM - Matthew Khouzam

Status:	Resolved	Start date:	03/13/2012
Priority:	High	Due date:	
Assignee:	Mathieu Desnoyers	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	2.0 stable		

Description

In the metadata of a kernel trace we have the following clock descriptor:

```
clock {
name = monotonic;
uuid = "ed4eb84f-b43c-4133-8db8-28203028f97b";
description = "Monotonic Clock";
freq = 1000000000; /* Frequency, in Hz /
/ clock value offset from Epoch is: offset * (1/freq) */
offset = 18445690674791632402;
};
```

The offset is too high, it should be

```
clock {
name = monotonic;
uuid = "ed4eb84f-b43c-4133-8db8-28203028f97b";
description = "Monotonic Clock";
freq = 1000000000; /* Frequency, in Hz /
/ clock value offset from Epoch is: offset * (1/freq) */
offset = 1330617403233586776;
};
```

Like in UST.

History

#1 - 03/15/2012 12:53 PM - Matthew Khouzam

Fixed in latest version.

#2 - 03/15/2012 01:25 PM - Mathieu Desnoyers

- Status changed from New to Resolved

- Assignee set to Mathieu Desnoyers

- Priority changed from Normal to High

- Target version set to 2.0 stable

fixed by:

commit 17ec046afa9b641b95951ca9594c3b7351d5e658

Author: Mathieu Desnoyers <mathieu.desnoyers@efficios.com>

Date: Tue Mar 13 16:09:52 2012 -0400

Ensure that multiplication of clock offset is done on 64-bit

This is not a bug in UST per se, because we happen to force multiplication by a ULL number, but force cast to uint64_t anyway to ensure we don't trigger this overflow if the constant ever happen to change.

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