

## LTTng-tools - Bug #833

### memcpy of non-packed struct into packed struct (possible layout mismatch)

09/09/2014 09:17 AM - Mathieu Desnoyers

<b>Status:</b> Confirmed	<b>Start date:</b> 09/09/2014
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assignee:</b>	<b>% Done:</b> 0%
<b>Category:</b>	<b>Estimated time:</b> 0.00 hour
<b>Target version:</b> 2.9	

**Description**

ltnng-tools src/lib/ltnng-ctl/ltnng-ctl.c:

```
ltnng_enable_event_with_exclusions()  
  
memcpy(&lsm.u.enable.event, ev, sizeof(lsm.u.enable.event));  
  
copy "ev" (non-packed) into a packed structure.
```

We should copy each field one by one (create a copy\_event\_to\_event\_packed() helper to do so).

#### History

**#1 - 09/11/2014 02:17 PM - David Goulet**

- Status changed from New to Feedback

How do you copy the union in the ltnng\_event field by field... ? That union contains non packed structure.

**#2 - 09/30/2014 02:16 PM - David Goulet**

- Status changed from Feedback to Confirmed

- Assignee deleted (David Goulet)

We need helper functions to copy field by field depending on the union type also.

**#3 - 11/07/2014 02:52 PM - Christian Babeux**

- Target version set to 2.0

**#4 - 12/12/2014 11:19 AM - Christian Babeux**

- Target version changed from 2.0 to 2.7

**#5 - 08/14/2015 03:09 PM - Michael Jeanson**

The "ltnng\_event" struct is not defined with the packed attribute, this attribute is only added when "ltnng\_event" is declared as a member of the "ltnng\_session\_msg" struct. Adding the packed attribute to an already defined struct is ignored by the compiler, when it's done outside of a parent struct it generates a warning.

What this all means is that we are not copying a non-packed struct into a packed struct because there is no packed version of ltnng\_event. This also means we are using unpacked structures in the communication protocol between the client and the sessiond.

**#6 - 09/01/2015 04:09 PM - Jérémie Galarneau**

- Target version changed from 2.7 to 2.8

**#7 - 05/04/2016 10:34 PM - Jérémie Galarneau**

- Target version changed from 2.8 to 2.9