

Prelude Manager - Bug #385

Infinite loop in bufpool_add_message

08/02/2010 10:32 AM - Friedrich Delgado

Status:	Closed	Start date:	08/02/2010
Priority:	High	Due date:	
Assignee:	Yoann VANDOORSELAERE	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	Prelude OSS 1.0.1		
Resolution:			

Description

After some while (a few hours or a few days) our prelude-manager 1.0.0 with several sensors will go into an infinite loop in bufpool_add_message.

In an attached gdb it looks like this loop will never terminate:

```
while ( get_total_mem() + len >= on_disk_threshold ) {
    evicted = evict_from_memory();
    if ( evicted == bp )
        break;
}
```

get_total_mem() always returns 0 and evict_from_memory() appears to always return NULL. If I set a breakpoint in the line after the loop, it is never reached.

Specifically, with a breakpoint in line 227 of bufpool.c and display on 'evicted', 'len' and 'mem_msglen' (the value returned by get_total_mem) when the breakpoint is hit it will always look like this:

```
Breakpoint 5, bufpool_add_message (bp=0x809c0d8, msg=0xb64e6008) at bufpool.c:227
227         if ( evicted == bp )
3: mem_msglen = 0
2: len = 1124069
1: evicted = (bufpool_t *) 0x0
```

Associated revisions

Revision f13f3cf3 - 08/06/2010 12:00 PM - Yoann Vandoorselaere

Prevent infinite loop

An infinite loop was possible on insertion of an event in the processing queue in case the event len was higher than the 'on disk threshold' value. Closes #385.

Thanks Friedrich Delgado <delgado@pre-sense.de> for reporting the problem, and the useful debug information!

History

#1 - 08/02/2010 03:15 PM - Friedrich Delgado

Some additional info:

It appears that it's quite directly dependant on the amount of events coming in, if the manager will go into the loop. After it hasn't been accepting data for a few days and I restart it, it starts receiving lots of messages (at least 288 messages per day per sensor, from about 5 sensors) and then stops pretty quickly. After restarting it once or twice again, it will keep running for a few days.

I've tried to put

```
sched-buffer-size = 101M
```

into the prelude-manager.conf as a temporary workaround. This might lead to high memory consumption (101MB of main memory) but if I understand the logic correctly, the loop should not be entered at all.

I'm aware that you might need additional information to be able to reproduce this, but I have no idea which information that might be, so please just feel free to ask!

#2 - 08/02/2010 06:36 PM - Yoann VANDOORSELAERE

- File 0001-Prevent-infinite-loop.patch added
- Status changed from New to Assigned
- Assignee set to Yoann VANDOORSELAERE
- Priority changed from Normal to High
- Target version set to 1.0.1

Thank you for the detailed report! Could you please try the attached patch, and let us know whether this solve your problem?

Regards,

#3 - 08/02/2010 06:38 PM - Yoann VANDOORSELAERE

- File deleted (0001-Prevent-infinite-loop.patch)

#4 - 08/02/2010 06:38 PM - Yoann VANDOORSELAERE

- File 0001-Prevent-infinite-loop.patch added

#5 - 08/03/2010 11:58 AM - Friedrich Delgado

Thanks for the quick response.

I've applied the patch, recompiled and reinstalled and disabled the workaround.

I'm quite sure that there will be no infinite loop any more, but I'll get back to you in a few days, if I see any further problems.

#6 - 08/06/2010 10:56 AM - Friedrich Delgado

Patched prelude manager 1.0.0 has been running smoothly for 3 days now, no problems in sight. Thanks! wink.png

#7 - 08/06/2010 11:59 AM - Anonymous

- Status changed from Assigned to Resolved

- % Done changed from 0 to 100

Applied in changeset [f13f3cf321abf762e589877ac1601de4e89da4b7](#).

#8 - 11/08/2015 11:56 AM - Thomas ANDREJAK

- Target version changed from 1.0.1 to Prelude OSS 1.0.1

#9 - 11/08/2015 11:56 AM - Thomas ANDREJAK

- Status changed from Resolved to Closed

Files

0001-Prevent-infinite-loop.patch	1005 Bytes	08/02/2010	Yoann VANDOORSELAERE
----------------------------------	------------	------------	----------------------