

Re: temporary freezes when pressing capslock / numlock

Re: temporary freezes when pressing capslock / numlock

Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/hackers/2008-05/msg00312.html>

- *From:* Jeremy Chadwick <koitsu@xxxxxxxxxxx>
 - *Date:* Mon, 26 May 2008 22:11:09 -0700
-

On Mon, May 26, 2008 at 11:12:36PM -0500, Rick C. Petty wrote:

On Sat, May 24, 2008 at 01:16:33PM -0700, Jeremy Chadwick wrote:

On Sat, May 24, 2008 at 01:38:08PM +1000, Fraser Tweedale wrote:

Since upgrading to RELENG_7_0 I was experiencing momentary freezes (of about .5 seconds) whenever the capslock or numlock buttons were pressed.

Let me guess --- you're using a USB keyboard.

The issue occurs both in console and in X, and for both ULE and 4BSD. The problem was reproducible with USB keyboards only (ukbd); atkbd seems fine.

It also occurs when numlockx is used to set numlock on or off without keyboard interaction.

I figured as much. I hadn't checked numlock/capslock myself, but vcons switching also has that problem. Yes, it's semi-documented; see section "USB" below:

http://wiki.freebsd.org/JeremyChadwick/Commonly_reported_issues

For what it's worth, the systems I've confirmed the problem on are Intel and nForce 4. Meaning, the issue is not specific to a single chipset.

I've seen this on certain chipsets (nForce4, Intel) and not on others (nForce5+). I originally reported this problem over two years ago:

<http://lists.freebsd.org/pipermail/freebsd-hackers/2006-March/015724.html>

Re: temporary freezes when pressing capslock / numlock

Re: temporary freezes when pressing capslock / numlock

This problem started when the kbdmux was added to the kernel and has not been fixed since (although the "delay" has been reduced from around two seconds to about 0.4 seconds). I verified the problem still persists with 7-stable as of last week.

This "pause" actually blocks the entire kernel, not just things under GIANT. One test involved having a gmirror sync or fsck run while I switched virtual consoles and watched the drive activity LEDs turn off for the entire duration of the pause.

Interestingly, if you add enough keyboards, the problem vanishes, which led me to kbdmux. Sure enough, removing device kbdmux from the kernel makes the problem go away (at the expense of some functionality of course, but this is my current workaround).

An interesting find! I'll add this to the details in the above wiki. I've also CC'd kbdmux's maintainer.

I've noticed that even plugging in a PS/2 keyboard fixes the problem. However unplugging the PS/2 keyboard restores the problematic behavior. I never found a solution to this problem except for buying different hardware or keeping a PS/2 keyboard plugged in.

Being that the issue is on your wiki page, does that mean this problem will be fixed some day?

Hopefully. :-) I'd like to point fingers at kbdmux being the responsible piece, but the USB stack has a history of being flakey in many regards, hence my reluctance.

--

| Jeremy Chadwick jdc at parodius.com |
| Parodius Networking <http://www.parodius.com/> |
| UNIX Systems Administrator Mountain View, CA, USA |
| Making life hard for others since 1977. PGP: 4BD6C0CB |

freebsd-hackers@xxxxxxxxxxx mailing list
<http://lists.freebsd.org/mailman/listinfo/freebsd-hackers>
To unsubscribe, send any mail to "freebsd-hackers-unsubscribe@xxxxxxxxxxx"