

Re: Fine-grained locking for POSIX local sockets (UNIX domain sockets)

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Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/performance/2006-05/msg00042.html>

- *From:* "Greg 'groggy' Lehey" <grog@xxxxxxxxxxxxx>
 - *Date:* Tue, 9 May 2006 11:13:02 -0700
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On Monday, 8 May 2006 at 21:11:09 -0400, Kris Kennaway wrote:

On Mon, May 08, 2006 at 08:43:28PM -0400, Kris Kennaway wrote:

On Mon, May 08, 2006 at 02:52:07AM -0400, Kris Kennaway wrote:

OK, David's patch fixes the umtx thundering herd (and seems to give a 4-6% boost). I also fixed a thundering herd in FILEDESC_UNLOCK (which was also waking up 2-7 CPUs at once about 30% of the time) by doing s/wakeup/wakeup_one/. This did not seem to give a performance impact on this test though.

Turning down kern.hz from 1000 to 100 also made a big difference on 12 CPUs (+6.1%).

Note also that the system is no less than 40% idle during the runs (at any load), so the bottlenecks are serious.

top -H shows the threads mostly in umtx state.

This doesn't lend much support to the idea that the gettimeofday() calls are a bottleneck. I've just been through the code, but if there are any mutexes acquired there, I missed them.

Greg

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See complete headers for address and phone numbers

Attachment: [pgp10iYrbrOrV.pgp](#)

Description: PGP signature

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