Subject: Wild clock fluctuation within container
Posted by JohnM on Tue, 14 Jun 2011 13:32:41 GMT
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I'm a customer of a VPS hosting provider that uses OpenVZ, and I've been trying to work with them to sort out a weird problem we've been getting, but they don't seem to be getting anywhere so I'm hoping someone here might be able to help.

Basically, the clock inside my VPS is fluctuating wildly from one minute to the next. I have a cron job which shows this, by writing `date` to a log every minute, and this is what it's showing for the last few minutes:

Tue Jun 14 13:16:01 UTC 2011
Tue Jun 14 13:22:01 UTC 2011
Tue Jun 14 13:23:01 UTC 2011
Tue Jun 14 13:19:01 UTC 2011
Tue Jun 14 13:20:02 UTC 2011
Tue Jun 14 13:21:01 UTC 2011
Tue Jun 14 13:27:01 UTC 2011
Tue Jun 14 13:28:01 UTC 2011
Tue Jun 14 13:24:01 UTC 2011
Tue Jun 14 13:25:01 UTC 2011

Time is jumping backwards and forwards, but always in a number of whole minutes at a time. This was occurring on an Ubuntu VPS, so I ditched that and started with a Debian one, which suddenly developed the exact same problem after a restart. I do not believe that anything I am doing within the container could actually have this effect, as I don't have permission to change the clock. Is this right? Also, another curiosity is that another cron job which calls a Python script each minute shows the correct time, via Python's time.asctime().

The same set of software running on a 'real' physical server, and on an Amazon EC2 instance, show no such problems.

Any ideas, anyone?

Subject: Re: Wild clock fluctuation within container
Posted by khorenko on Wed, 15 Jun 2011 07:48:03 GMT
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http://bugzilla.openvz.org/show_bug.cgi?id=1826

Kernel update or disabling vdso will help.

--
Konstantin

Subject: Re: Wild clock fluctuation within container
Posted by kir on Wed, 15 Jun 2011 08:01:45 GMT
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It's a known kernel bug (and it does not depend on what you have in a container). Please ask your provider to update to the latest kernel (028stab091.1 fixed this).

Subject: Re: Wild clock fluctuation within container
Posted by JohnM on Wed, 15 Jun 2011 08:15:09 GMT
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Thanks for the suggestions. They're updating the kernel today, hope it helps.

Subject: Re: Wild clock fluctuation within container
Posted by JohnM on Thu, 16 Jun 2011 14:35:02 GMT
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I understand that the kernel has now been updated without solving this problem. On closer inspection of the logs, I have discovered that the clock is not randomly screwy at all - there is in fact a very distinct pattern to it. We have 3 minutes of correct behaviour (e.g, 14:06, 14:07, 14:08), then we leap back in time 4 minutes and have 2 minutes of correct behaviour (14:04, 14:05), followed by a leap forward in time of 6 minutes (to 14:11), whereupon the pattern repeats.

It does suggest to me some rogue behaviour by an ntp daemon or daemons. Is it possible there are 2 (or more) ntp daemons fighting it out over the clock on that node (one in the HW node, one in a container which has, somehow, managed to get clock-altering rights)? And why would this be occurring on such a frequent basis (when the update is normally only once daily).

Subject: Re: Wild clock fluctuation within container
Posted by khorenko on Thu, 16 Jun 2011 15:18:50 GMT
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Hi,

well, that's strange.
This definitely seems to be the same problem we've already fixed.

Can you please
1) tell the kernel name installed on the node after the update
(you need 91.1 kernel)
2) ask provider if he really updated the kernel (he could just change "uname" output for your CT)

Thank you.

--
Konstantin

Subject: Re: Wild clock fluctuation within container
Posted by JohnM on Thu, 16 Jun 2011 15:30:45 GMT
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You're quite right. Just after I posted the message here, I found out that they were still running 85.3, not 91.1, so I got back to them and asked them to sort it. I'll post back here when they've done that.

Subject: Re: Wild clock fluctuation within container
Posted by mindstormmaster on Mon, 11 Jul 2011 06:55:12 GMT
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I think I'm seeing the same problem.

I was running on 2.6.18-194.17.1.el5.028stab070.7 with Ksplice Uptrack patches applied to make it effective 2.6.18-238.9.1.el5.028stab089.1. Under this, there were no problems.

I migrated containers to a different box running 2.6.18-238.9.1.el5.028stab089.1 without Ksplice, and now some containers report times 5 minutes faster than the hardware node. This time problem seemed to cause problems with running a Mumble server where users would get disconnected every 5 minutes.

I migrated the container again to a server running 2.6.18-238.12.1.el5.028stab091.1 and it seemed to work.

Subject: Re: Wild clock fluctuation within container
Posted by conner061 on Mon, 11 Jul 2011 12:53:10 GMT
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I know it will work.....