
Subject: Re: Is there a stable OpenVZ kernel, and which should be fit for production

Posted by [MailingListe](#) on Wed, 23 Nov 2011 10:52:11 GMT

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Zitat von Kir Kolyshkin <kir@openvz.org>:

> On 11/22/2011 12:52 PM, Dariusz Pietrzak wrote:
>> Hello,
>> since 2.6.32 branch is no longer maintained:
>> "
>> Also, from now (30 August 2011) we no longer maintain the following
>> kernel branches:
>>
>> * 2.6.27
>> * 2.6.32
>> "
>> we have switched to RHEL6 branch, which seems to run fine, and solves some
>> long-running problems with 2.6.32 (vSwap, problem with accounting of
>> mmaped files usage).
>> All was nice until some heavier loaded servers came online with RHEL6, and
>> - they started crashing. And then came the upgrade train:
>> stab036.1 => stab037.1 => stab039.10 => stab040.1 => stab042.1 etc
>>
>> With one of the problems we caught, we were told to switch from stable to
>> testing kernels (now I see that that testing kernel later became stable,
>> so while confusing, it makes some sense).
>> All those kernels (and stab039.11, which from description should be
>> latest stable) exhibit the same problem/class of problems - when put under
>> stress, they crash.
>> It's quite easy to recreate, now that we've spent some time
>> tracking it down,
>> just start the machine with for example:
>>
>> stress --cpu 12 --io 16 --vm 32 -d 24 --hdd-bytes 10G
>> and maybe bonnie++ running in loop, and in few minutes/few hours you've got
>> dead machines spewing something like:
>>
>> [1515.249585] BUG: scheduling while atomic: stress/2054/0xffff8800
>> [1515.250189] BUG: unable to handle kernel paging request at
>> ffffffc047118e0
>> [1515.250189] IP: [<ffffffff8105620e>] account_system_time+0x9e/0x1f0
>> [1515.250189] PGD 1a27067 PUD 0
>> [1515.250189] Thread overran stack, or stack corrupted
>> [1515.250189] Oops: 0000 [#1] SMP
>>
>> or maybe:
>> [1876.747809] BUG: unable to handle kernel paging request at

```
>> 00000006000000bd
>> [ 1876.747815] IP: [<ffffffff8105a4fe>] select_task_rq_fair+0x32e/0xa20
>> [ 1876.747823] PGD 12d089067 PUD 0
>> [ 1876.747826] Oops: 0000 [#1] SMP
>>
>> or
>> [38764.623677] BUG: unable to handle kernel paging request at
>> 000000000001e440
>> [38764.623677] IP: [<ffffffff814c8efe>] _spin_lock+0xe/0x30
>> [38764.623677] PGD 12c7b4067 PUD 12c7b5067 PMD 0
>> [38764.623677] Oops: 0002 [#2] SMP
>> [38764.623677] last sysfs file: /sys/devices/virtual/block/ram9/stat
>> [38764.623677] CPU 1
>> or sometimes strangely affecting HP smart array, and causing it to
>> disconnect it's raids ( I don't understand how that's possible, but it
>> doesn't happen with old openvz )
>>
>> Under the same load, classic 2.6.32-openvz kernels do just fine ( although
>> my personal feeling is that rhel6 is way more snappy under such a load ).
>>
>> It usually takes less then few hours for rhel6 kernel to crash, although
>> with lighter load it might take weeks or months.
>
> I am very sad to hear this. Could you please file a bug to
> bugzilla.openvz.org so our kernel guys will start working on that?
>
```

Sad but true it looks like the RHEL6 based kernels have many rough edges. We tried to move from some stable Ubuntu 8.04 based OpenVZ server to RHEL6 based ones, primarily to get better IPv6 support. After some test we got different kernel panics like this one

http://bugzilla.openvz.org/show_bug.cgi?id=2095 and another one when using ipt_recent iptable rules inside the VE.

So basically ip(6)tables is not usable inside VE with RHEL6 based kernels :-(
We have also tried the Debian 6 included openvz kernel which works fine regarding iptables, but got unkillable processes (vsftpd, apache) spinning at 100% CPU from time to time.

So we have to stick with the Ubuntu 8.04 (2.6.24) OpenVZ until RHEL6 based line really reaches "stable".

Regards

Andreas

File Attachments

1) [smime.p7s](#), downloaded 568 times