Subject: Documentation on Development
Posted by Christian Kaiser2 on Fri, 11 May 2007 08:46:10 GMT

Hi all,

I just started to do some research on OpenVZ. In about one week I will
start to work on OpenVZ on POWER and later to I will try to get it work on
Cell. I wanted to know if there are some more Documents concerning the
OpenVZ Development? Is there a test suite or something like that to test
OpenVZ?

Christian Kaiser

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Registergericht: Amtsgericht Stuttgart, HRB 243294

Subject: Re: Documentation on Development
Posted by kir on Fri, 11 May 2007 13:00:41 GMT

Hello Christian,

To begin with, OpenVZ is 95% platform-independent that makes porting
quite easy. We have already ported to POWER, although we don't have
access to POWER hardware at the moment :(

We keep the sources of our kernels in git repository, see
http://git.openvz.org/. You might start working with either 2.6.18-based
or 2.6.20-based kernel, or both.

Regarding the porting process, there is some basic information on our
wiki here: http://wiki.openvz.org/Porting_the_kernel. You can certainly
post all your questions (and patches) here, and can rely on support from
our kernel team.

Having said that, there is one feature that is very arch-specific. This
is checkpointing, an ability to freeze a VE and dump its complete state

into a file (and later restore it) -- a precursor for live migration
feature. If you want to port this stuff, you need to dig deep into
kernel/cpt/ and ask questions to this list.

As for the testing, aside from basic functionality, we usually run VE
start/stop test -- the idea is to have many VEs starting and stopping in
parallel -- trying to catch some locking bugs etc. Unfortunately we do
not have any tests open sourced, but we will definitely want to help
testing as well.

Christian Kaiser2 wrote:
> Hi all,
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> start to work on OpenVZ on POWER and later to I will try to get it work on
> Cell. I wanted to know if there are some more Documents concerning the
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Subject: Re: Documentation on Development
Posted by Christian Kaiser2 on Mon, 14 May 2007 10:13:35 GMT
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Kir Kolyshkin <kir@openvz.org> wrote on 11.05.2007 15:00:41:

> Hello Christian,
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> quite easy. We have already ported to POWER, although we don't have
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So I will test it in a few days ;-)

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> testing as well.

I did some Kernel System Call Tests of the LTP-20070430 (
http://ltp.sourceforge.net) inside a VE. 20 Tests failed but more then 700
passed. Most of the failed ones had to do with Swap space and Setting time.
This is unavailable inside a VE, right?

Christian Kaiser

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Subject: Re: Documentation on Development
Posted by kir on Mon, 14 May 2007 12:03:48 GMT

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Christian Kaiser2 wrote:
> Kir Kolyshkin <kir@openvz.org> wrote on 11.05.2007 15:00:41:
>
>
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Good.
>
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> http://ltp.sourceforge.net) inside a VE. 20 Tests failed but more then 700
> passed. Most of the failed ones had to do with Swap space and Setting time.
> This is unavailable inside a VE, right?
>
Right, some hardware-dependent functionality is naturally not available
in VE. So, each fail has to be checked and examined -- is that a fail or
this test have to be removed (or reworked).

Still, in case of setting system time -- if you grant a VE a sys_time capability (vzctl set NNN --capability sys_time:on --save) you'll be able to set system time from inside a VE.

> Mit freundlichen Grüßen / Best Regards
> Christian Kaiser
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