
Subject: Documentation on Development
Posted by [Christian Kaiser2](#) on Fri, 11 May 2007 08:46:10 GMT
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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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Subject: Re: Documentation on Development
Posted by [kir](#) on Fri, 11 May 2007 13:00:41 GMT
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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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> 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?
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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,
>
> 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 :(

So I will test it in a few days ;-)

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> 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.

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:

>

>

>> Hello Christian,

>>

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>> quite easy. We have already ported to POWER, although we don't have
>> access to POWER hardware at the moment :(

>>

>

> So I will test it in a few days ;-)

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Good.

>

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>> start/stop test -- the idea is to have many VEs starting and stopping in
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> <http://ltp.sourceforge.net>) inside a VE. 20 Tests failed but more than 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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