Subject: OpenVZ vs. vserver
Posted by Enrico Weigelt on Thu, 22 Mar 2007 21:15:22 GMT
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Hi folks,

does anyone known an good compasiron between OVZ + vserver ?
I need an virtualization within embedded systems (small devices).

thx
--
---------- ---------
Enrico Weigelt == metux IT service - http://www.metux.de/
---------- ---------
Please visit the OpenSource QM Taskforce:
http://wiki.metux.de/public/OpenSource_QM_Taskforce
Patches / Fixes for a lot dozens of packages in dozens of versions:
http://patches.metux.de/
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Subject: Re: OpenVZ vs. vserver
Posted by pookey on Thu, 22 Mar 2007 21:36:07 GMT
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Enrico Weigelt wrote:
> Hi folks,
>
>
> does anyone known an good compasiron between OVZ + vserver ?
> I need an virtualization within embedded systems (small devices).

I'm not sure this will help - but when I was looking at various
visualizations systems, I decided vserver wasn't an option very quickly
when I noticed it didn't do migrations.

--
Ian P. Christian ~ http://pookey.co.uk

Subject: Re: OpenVZ vs. vserver
Posted by Darryl Ross on Fri, 23 Mar 2007 01:59:04 GMT
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[Ian P. Christian wrote on 23/03/2007 8:06 AM]:

> Enrico Weigelt wrote:
>> Hi folks,
>>
>> does anyone known an good compasiron between OVZ + vserver ?
>> I need an virtualization within embedded systems (small devices).
>
> I'm not sure this will help - but when I was looking at various
> visualizations systems, I decided vserver wasn't an option very quickly
> when I noticed it didn't do migrations.

Coming from the other direction, I've been using linux-vserver for a couple of years now and have recently started a job where we are using openvz.

I've not been able to get migrations working in openvz at all. I just end up using the same process I use under linux-vserver to migrate guests between machines: rsync once, rsync a second time (to reduce the time stopped), stop the guest, resync a third time, start guest on new host.

I also have some other issues with openvz as well.

One is related to the resource limits -- every guest I've built I've had to play with the limits to get the software I need to run. The defaults just don't seem usable.

One other thing, which isn't really a major issue, just an annoyance, is that if I run netstat or ps on the host it shows me all of the sockets open and programs running, even those inside the guests, whereas under linux-vserver the host machine is a context in it's own right, so they are hidden.

My only issue with linux-vserver is the lack of network interface virtualisation, but I've been working around that for so long it's not really that much of an issue for me.

My recommendation at this point is still towards linux-vserver. I'm planning on migrating work away from openvz back to linux-vserver as well.

Regards
Darryl

Subject: Re: OpenVZ vs. vserver
Posted by kir on Fri, 23 Mar 2007 11:19:51 GMT
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Darryl Ross wrote:
> I've not been able to get migrations working in openvz at all.

Care to file a bug report (or two) to bugzilla.openvz.org?
> I just
> end up using the same process I use under linux-vserver to migrate
> guests between machines: rsync once, rsync a second time (to reduce the
> time stopped), stop the guest, resync a third time, start guest on new host.
>

This is basically what vzmigrate script does (well, there's no
intermediate rsync, but it can be added quite easily.
> I also have some other issues with openvz as well.
>
> One is related to the resource limits -- every guest I've built I've had
> to play with the limits to get the software I need to run. The defaults
> just don't seem usable.
>

Perhaps those defaults are better suited for a lot of tiny/lightweight
VEs. If your VEs are relatively large, I suggest you to either use
vzsplit utility to generate an initial config, OR use something like
example C from http://wiki.openvz.org/UBC_configuration_examples_table

On the other side, the problem with linux-vserver is by default a guest
(a VE) is NOT limited, which means you can not give it to an untrusted
party without doing some additional work.

The OpenVZ idea is like the one for your firewall -- deny all by
default, then allow what you need. Here, as well, you start with a
limited set of resources, and then tailor those to your environment. Of
course it can be changed server-wide by having a different config set as
default.

> One other thing, which isn't really a major issue, just an annoyance, is
> that if I run netstat or ps on the host it shows me all of the sockets
> open and programs running, even those inside the guests, whereas under
> linux-vserver the host machine is a context in it's own right, so they
> are hidden.
>

There is a two-liner patch available to switch to "hide VE processes
from VE0" behavior:
http://download.openvz.org/contrib/kernel-patches/diff-ve0-p roc-own-processes-only
> My only issue with linux-vserver is the lack of network interface
> virtualisation, but I've been working around that for so long it's not
> really that much of an issue for me.
>
> My recommendation at this point is still towards linux-vserver. I'm
> planning on migrating work away from openvz back to linux-vserver as well.

What are the reasons (if other than specified above)?

Subject: Re: OpenVZ vs. vserver
Posted by Jim Zajkowski on Fri, 23 Mar 2007 13:46:14 GMT
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On Fri, 23 Mar 2007, Darryl Ross wrote:

> One other thing, which isn't really a major issue, just an annoyance, is
> that if I run netstat or ps on the host it shows me all of the sockets
> open and programs running, even those inside the guests, whereas under
> linux-vserver the host machine is a context in it's own right, so they
> are hidden.

IMHO I prefer this behaviour to not showing me each of the vm's. The only
thing I could ask for would be that there was a version of ps that showed
the veid of each process (this may exist, I'm pretty behind in versions)

--Jim

Subject: Re: OpenVZ vs. vserver
Posted by dev on Fri, 23 Mar 2007 14:39:19 GMT
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Jim Zajkowski wrote:
> On Fri, 23 Mar 2007, Darryl Ross wrote:
>
>
>>One other thing, which isn't really a major issue, just an annoyance, is
>>that if I run netstat or ps on the host it shows me all of the sockets
>>open and programs running, even those inside the guests, whereas under
>>linux-vserver the host machine is a context in it's own right, so they
>>are hidden.
>
>
> IMHO I prefer this behaviour to not showing me each of the vm's. The only
> thing I could ask for would be that there was a version of ps that showed
> the veid of each process (this may exist, I'm pretty behind in versions)
http://download.openvz.org/contrib/utils/vzprocps-2.0.11-6.1 3.swsoft.i386.rpm
vzps -E VEID
shows processes of required VE only.

Ok, we surely will add the ability to hide non-VE0
stuff in VE0 as was requested by some of people who get accustomed to vserver.
Maybe it will be a new default some day in OpenVZ also.

Thanks for your feedback,
Kirill

Subject: Re: OpenVZ vs. vserver
Posted by Mike Holloway on Fri, 23 Mar 2007 16:00:27 GMT
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The type of embedded platform you are developing for may steer your
decision. I went looking for which cpu architectures are supported
by openvz and vserver patches and found this wiki entry. Someone may
care to update that entry.

http://en.wikipedia.org/wiki/Comparison_of_virtual_machines

-mike

On Mar 22, 2007, at 4:36 PM, Ian P. Christian wrote:

> Enrico Weigelt wrote:
>> Hi folks,
>> does anyone known an good compasiron between OVZ + vserver ?
>> I need an virtualization within embedded systems (small devices).
>
> I'm not sure this will help - but when I was looking at various
> visualizations systems, I decided vserver wasn't an option very
> quickly when I noticed it didn't do migrations.
>
> --
> Ian P. Christian ~ http://pookey.co.uk

Subject: Re: OpenVZ vs. vserver
Posted by dev on Fri, 23 Mar 2007 17:53:05 GMT
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I've just added ppc64 and sparc64 to OpenVZ list.

> The type of embedded platform you are developing for may steer your
> decision. I went looking for which cpu architectures are supported
> by openvz and vserver patches and found this wiki entry. Someone may
> care to update that entry.

>
>
> http://en.wikipedia.org/wiki/Comparison_of_virtual_machines
>
>
> -mike
>
>
>
> On Mar 22, 2007, at 4:36 PM, Ian P. Christian wrote:
>
>
>>Enrico Weigelt wrote:
>>
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>>I'm not sure this will help - but when I was looking at various
>>visualizations systems, I decided vserver wasn't an option very
>>quickly when I noticed it didn't do migrations.
>>
>>--
>>Ian P. Christian ~ http://pookey.co.uk

Subject: Re: OpenVZ vs. vserver
Posted by pookey on Fri, 23 Mar 2007 20:11:59 GMT
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Darryl Ross wrote:
> I've not been able to get migrations working in openvz at all. I just
> end up using the same process I use under linux-vserver to migrate
> guests between machines: rsync once, rsync a second time (to reduce the
> time stopped), stop the guest, resync a third time, start guest on new host.

What problems did you have out of interest?

'vzmigrate --online' worked out of the box for me

--
Ian P. Christian ~ http://pookey.co.uk

Subject: AW: OpenVZ vs. vserver
Posted by Dietmar Maurer on Sat, 24 Mar 2007 09:31:00 GMT
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> Darryl Ross wrote:
> > I've not been able to get migrations working in openvz at
> all. I just
> > end up using the same process I use under linux-vserver to migrate
> > guests between machines: rsync once, rsync a second time (to reduce
> > the time stopped), stop the guest, resync a third time,
> start guest on new host.
>
> What problems did you have out of interest?
>
> 'vzmigrate --online' worked out of the box for me

We also used 'vzmigrate --online' several times, and it always worked without problem on stable kernels (2.6.9).

- Dietmar

Subject: Re: OpenVZ vs. vserver
Posted by kir on Sat, 24 Mar 2007 10:36:20 GMT
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As per my experience porting to powerpc platform, OpenVZ is easily portable, i.e. it is 95% platform-independent code (not counting the checkpointing functionality, which IS very platform-specific).

So, if somebody needs OpenVZ for some currently unsupported platform (say, ARM), they can either do a port themselves, or provide us with a couple of boxes and we will do the port.

Mike Holloway wrote:
>
> The type of embedded platform you are developing for may steer your
> decision. I went looking for which cpu architectures are supported by
> openvz and vserver patches and found this wiki entry. Someone may
> care to update that entry.
>
>
> http://en.wikipedia.org/wiki/Comparison_of_virtual_machines
>
>
> -mike
>
>
>
> On Mar 22, 2007, at 4:36 PM, Ian P. Christian wrote:
>
>> Enrico Weigelt wrote:

>>> Hi folks,
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>> I'm not sure this will help - but when I was looking at various
>> visualizations systems, I decided vserver wasn't an option very
>> quickly when I noticed it didn't do migrations.
>>
>> --Ian P. Christian ~ http://pookey.co.uk

Subject: Re: OpenVZ vs. vserver
Posted by Enrico Weigelt on Tue, 27 Mar 2007 18:04:31 GMT
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* Darryl Ross <spam@afoyi.com> wrote:

Hi,

> One other thing, which isn't really a major issue, just an annoyance,
> is that if I run netstat or ps on the host it shows me all of the sockets
> open and programs running, even those inside the guests, whereas under
> linux-vserver the host machine is a context in it's own right, so they
> are hidden.

I personally prefer that way, so I can easily see what's going
on in the VPS. But there should be some additional info from
which VPS the stuff is coming from. Maybe the VPS' process names
could contain some prefix ie. "[${VPSID}]".

> My only issue with linux-vserver is the lack of network interface
> virtualisation, but I've been working around that for so long it's
> not really that much of an issue for me.

That could be an killer requirement for the virtualization.

I do not yet completely know what my current customer really needs
here. But I can imagine they want to isolate routing stuff.

For my own projects, I'll need an completely virtualized routing,
so I can easily use VPS'es as VPN hub, just as they were dedicated
machines.

cu
--
---------- ---------
Enrico Weigelt == metux IT service - http://www.metux.de/

Please visit the OpenSource QM Taskforce:
http://wiki.metux.de/public/OpenSource_QM_Taskforce
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http://patches.metux.de/

Subject: Re: OpenVZ vs. vserver
Posted by Enrico Weigelt on Tue, 27 Mar 2007 18:05:55 GMT
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* Kir Kolyshkin <kir@openvz.org> wrote:

Hi,

> There is a two-liner patch available to switch to "hide VE processes
> from VE0" behavior:
> http://download.openvz.org/contrib/kernel-patches/diff-ve0-p roc-own-processes-only

didn't read it yet ... but I'd like to have this feature configurable
(at least at build-time, but runtime would be better).

cu
--

Enrico Weigelt == metux IT service - http://www.metux.de/

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http://patches.metux.de/

Subject: Re: OpenVZ vs. vserver
Posted by Enrico Weigelt on Tue, 27 Mar 2007 18:08:27 GMT
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* Kir Kolyshkin <kir@openvz.org> wrote:

Hi,

> As per my experience porting to powerpc platform, OpenVZ is easily
> portable, i.e. it is 95% platform-independent code (not counting the

> checkpointing functionality, which IS very platform-specific).

we probably won't need checkpointing, so I hope it will run
on mips ...

> So, if somebody needs OpenVZ for some currently unsupported platform
> (say, ARM), they can either do a port themselves, or provide us with a
> couple of boxes and we will do the port.

maybe I'll have a look at it in a few weeks.

cu
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---------- ---------
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Subject: Re: OpenVZ vs. vserver
Posted by Enrico Weigelt on Tue, 27 Mar 2007 18:27:53 GMT
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* Enrico Weigelt <weigelt@metux.de> wrote:

Hi.

> > There is a two-liner patch available to switch to "hide VE processes
> > from VE0" behavior:
> > http://download.openvz.org/contrib/kernel-patches/diff-ve0-p roc-own-processes-only
>
> didn't read it yet ... but I'd like to have this feature configurable
> (at least at build-time, but runtime would be better).

BTW: having the VPS' processes visible in the host is an very
interesting feature for debugging. So it should stay, at least
optional.

cu
--
---------- ---------
Enrico Weigelt == metux IT service - http://www.metux.de/

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http://wiki.metux.de/public/OpenSource_QM_Taskforce
Patches / Fixes for a lot dozens of packages in dozens of versions:
http://patches.metux.de/

Subject: Re: OpenVZ vs. vserver
Posted by kir on Tue, 27 Mar 2007 18:32:43 GMT
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Enrico Weigelt wrote:
> * Darryl Ross <spam@afoyi.com> wrote:
>
> Hi,
>
>
>> One other thing, which isn't really a major issue, just an annoyance,
>> is that if I run netstat or ps on the host it shows me all of the sockets
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>> are hidden.
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>
> I personally prefer that way, so I can easily see what's going
> on in the VPS. But there should be some additional info from
> which VPS the stuff is coming from. Maybe the VPS' process names
> could contain some prefix ie. "[${VPSID}]".
>
You can use vzps/vztop utils from vzprocps
(http://download.openvz.org/contrib/utils/), whey show VEID.

OR, alternatively, you can look up VEID manually from the 'envId' field
of /proc/$PID/status file.

Subject: Re: OpenVZ vs. vserver
Posted by kir on Tue, 27 Mar 2007 18:33:47 GMT
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Enrico Weigelt wrote:
> * Kir Kolyshkin <kir@openvz.org> wrote:
>
> Hi,
>
>> There is a two-liner patch available to switch to "hide VE processes

>> from VE0" behavior:
>> http://download.openvz.org/contrib/kernel-patches/diff-ve0-p roc-own-processes-only
>>
>
> didn't read it yet ... but I'd like to have this feature configurable
> (at least at build-time, but runtime would be better).
>
There is already a bug for that: http://bugzilla.openvz.org/511

Subject: Re: OpenVZ vs. vserver
Posted by kir on Tue, 27 Mar 2007 18:39:41 GMT
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Enrico Weigelt wrote:
> * Kir Kolyshkin <kir@openvz.org> wrote:
>
> Hi,
>
>
>> As per my experience porting to powerpc platform, OpenVZ is easily
>> portable, i.e. it is 95% platform-independent code (not counting the
>> checkpointing functionality, which IS very platform-specific).
>>
>
> we probably won't need checkpointing, so I hope it will run
> on mips ...
>
>
>> So, if somebody needs OpenVZ for some currently unsupported platform
>> (say, ARM), they can either do a port themselves, or provide us with a
>> couple of boxes and we will do the port.
>>
>
> maybe I'll have a look at it in a few weeks.
>
See http://wiki.openvz.org/Porting_the_kernel

Also, you can look up http://git.openvz.org/?p=linux-2.6.18-openvz for
patches with PPC prefix in commit subject -- those enable OpenVZ for
powerpc arch. Same for sparc -- check for commits from OpenVZ team
members with [SPARC] prefix. There are less than ten patches for each arch.

Subject: Re: OpenVZ vs. vserver
Posted by jarcher on Tue, 27 Mar 2007 22:42:41 GMT
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--On Tuesday, March 27, 2007 10:32 PM +0400 Kir Kolyshkin <kir@openvz.org>
wrote:

> You can use vzps/vztop utils from vzprocps
> (http://download.openvz.org/contrib/utils/), whey show VEID.

Hm, can these be installed on a Debian system?

Subject: Re: OpenVZ vs. vserver
Posted by Thorsten Schifferdeck on Tue, 27 Mar 2007 23:37:54 GMT
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Yes, pre-build debian package of vzprocps can be found at
debian.systs.org :

i386 and amd64 port: http://debian.systs.org/debian/pool/openvz/v/vzprocps/

Bye,
Thorsten

Jim Archer schrieb:
> --On Tuesday, March 27, 2007 10:32 PM +0400 Kir Kolyshkin
> <kir@openvz.org> wrote:
>
>> You can use vzps/vztop utils from vzprocps
>> (http://download.openvz.org/contrib/utils/), whey show VEID.
>
> Hm, can these be installed on a Debian system?
>

Subject: Re: OpenVZ vs. vserver
Posted by dev on Wed, 28 Mar 2007 06:54:12 GMT
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>>>So, if somebody needs OpenVZ for some currently unsupported platform
>>>(say, ARM), they can either do a port themselves, or provide us with a
>>>couple of boxes and we will do the port.
>>>
>>
>>maybe I'll have a look at it in a few weeks.
>>
>
> See http://wiki.openvz.org/Porting_the_kernel
>
> Also, you can look up http://git.openvz.org/?p=linux-2.6.18-openvz for

> patches with PPC prefix in commit subject -- those enable OpenVZ for
> powerpc arch. Same for sparc -- check for commits from OpenVZ team
> members with [SPARC] prefix. There are less than ten patches for each arch.
Looking at ppc is better. Sparc is special - it has 64bit kernel space and 32bit
user space, so it required much more efforts (compat ioctl and syscalls).

Thanks,
Kirill