Subject: OpenVZ vs. Other Virtualization?

Posted by tiger74 on Sat, 22 Sep 2007 05:08:31 GMT

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Hello all,

I'm new here. I've just heard OpenVZ from one of my friend and try it. I have been able to set it up, although just so far as setting up apache on it.

I want to know. What is the strong and weak point of OpenVZ against other Virtualization software such as Xen and Vmware?

One thing I notice is that OpenVZ doesn't support guest OS other than Fedora and Centos? Also there's no GUI of the guest OS?

Thank you for your info.

Subject: Re: OpenVZ vs. Other Virtualization?

Posted by ugob on Sat, 22 Sep 2007 14:01:56 GMT

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tiger74 wrote on Sat, 22 September 2007 01:08Hello all,

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I want to know. What is the strong and weak point of OpenVZ against other Virtualization software such as Xen and Vmware?

Strong point: Very low overhead, compared to xen and vmware.

Weak point: Can only run a limited number of linux distros, and no other OS

tiger74 wrote on Sat, 22 September 2007 01:08

One thing I notice is that OpenVZ doesn't support guest OS other than Fedora and Centos? Also there's no GUI of the guest OS?

It can more than that, but only linux, because all the containers run on the same kernel.

http://download.openvz.org/template/precreated/

There is no gui of the guest os... probably. I personnally don't mind because I use OpenVZ only on my servers. I think you could run X, but you'd need to connect using a X terminal, but I'm not familiar with that. Or maybe VNC... I don't know.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by JimL on Sun, 23 Sep 2007 20:30:51 GMT

As far as gui's are concerned, you might be interested in this: http://community.livejournal.com/openvz/17038.html

I run OpenVZ HN on a Centos system and a Ubuntu system. I have VPSs running Centos, Fedora, Debian and Ubuntu without much difficulty. All of my VPSs are servers, but I often do something like this to get gui apps displayed on my HN from a server:

ssh -CX CentosServer gvim xxx.yyy

That produces a gvim window on my X session on the HN node. I obviously haven't tried all possible X applications, but the ones I've used work fine. Don't expect Google Earth to run very well, however.

Jim.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by tiger74 on Mon, 24 Sep 2007 00:50:18 GMT

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Hello Jim, Ugob, Thanks for the sharing. So, ssh -X is the key That's great. I'm exploring openvz deeper. Love it.

Subject: Re: OpenVZ vs. Other Virtualization?
Posted by JimL on Mon, 24 Sep 2007 12:33:28 GMT
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Yes, ssh -X allows X forwarding. You also have to be sure that x forwarding is enabled in the sshd config file on the target system. That's the one you are ssh'ing to not the one you are displaying on.

grep Forward /etc/ssh/sshd\_config X11Forwarding yes

Subject: Re: OpenVZ vs. Other Virtualization? Posted by JimL on Tue, 25 Sep 2007 10:36:08 GMT

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Oh, and after you make changes to the sshd config file, you need to restart.

/etc/init.d/sshd restart on centos and /etc/init.d/ssh restart On Ubuntu

Jim.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by dowdle on Tue, 25 Sep 2007 23:02:05 GMT

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What is it you want to run on your virtual machine(s)?

Check out this link: http://en.wikipedia.org/wiki/Operating\_system-level\_virtuali zation

Basically, OS Virtualization offers a much lighter footprint per virtual machine than Machine Virtualization does. How much lighter? Well, in OpenVZ... a VPS/VE/VM (whatever you want to call it) only takes up the resources needed to run the services you want... so a simple VPS with only basic services and Apache (static pages, no PHP) takes up about 24MB or so in approximately 16 processes. That means that you can fit a lot of VPSes on a physical machine (density)... and they actually scale well... because they only add the overhead needed to run the additional processes.

Someone else already mentioned there are quite a few pre-created OS Templates for a number of distributions beyond Fedora and CentOS. Me? I prefer CentOS... as it is what I run on the HN and most VPSes... but that is a personal preference.

Regarding GUI environments within your VPS, I've successfully installed XFCE4, GNOME and KDE inside of both Fedora 7 and CentOS 5. There is a little trick involved to make sure you don't accidentally install udev... but other than that, it is doable... and you can access it via vncserver/vncviewer... but that is only if you want to run a complete desktop environment.

If you just want to occationally run a GUI app, as previously mentioned, you can do so over ssh with the -X flag.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by tiger74 on Wed, 26 Sep 2007 00:22:31 GMT

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Hello dowdle.

Thank you for the insight. Now I know why they call it VMware (Virtual Machine ware?). I see... So, OpenVZ is another level of virtualization that is the OS? Ok.. I see.. much lighter. This is great. Well, distro is not a problem. I love Centos and the Redhat family.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by blaise on Tue, 20 Jul 2010 08:07:19 GMT

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Hi,

I am new to virtualization from the technical side, and this is an old threat, but it seems a good starting point to me

I have the intention to install a Ubuntu 8.04 VPS (CentOS is the host) to host a local Web site for internal testing. At the same time I would like to perform code development for the site on the same VPS (I am too ambitious I know), therefore I need to use an IDE (i.e. IntelliJ, netbeans, ...). Since GUI is mentioned in this threat, my question is: would that be a bad experience from a performance point of view? I mean, would it be slow for the graphical IDE? If that is doable, what memory allocation is best advisable for that VPS? Any other suggestions, help, advices are welcome.

P.S. if you see that this is not the right threat to post this question, pls let me know and I will move it to an appropriate one.

Thanks,

Blaise

Subject: Re: OpenVZ vs. Other Virtualization? Posted by JimL on Tue, 20 Jul 2010 11:04:06 GMT

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blaise wrote on Tue, 20 July 2010 04:07Hi,

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Thanks.

## Blaise

I do what you are wanting to do and more. I can't tell the difference in operation from a stand alone machine when running IDEs, gvim or any other X based program. I'm sure some of the more graphically intense programs like games aren't as fast, but I do development/testing mostly. The way I do it is to connect via ssh (ssh -X) and just run the program. When installing and X program via apt-get or aptitude you'll drag in the necessary X libraries and other files automatically. I usually start building my VPS with the output of vzsplit (man vzsplit). If you aren't going to run but one VPS I'd use vzsplit -n 4 just for a start. If you find the /proc/userbeancounters has errors simply bump the count up 20% for the parameter that has the errors and reboot.

You can even run update-manager via ssh -X if you want. I think you'll find it fairly easy to do what you propose.

Jim.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by blaise on Tue, 20 Jul 2010 17:10:44 GMT

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JimL wrote on Tue, 20 July 2010 07:04

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Jim.

Thank you Jim for sharing your experience. It was a green light for me to proceed.

First step today: I successfully installed OpenVz on CentOS-5.5 using this howto:

http://www.howtoforge.com/installing-and-using-openvz-on-centos5.2

Apparently the same procedure for CentOS-5.2 works for CentOS-5.5. That needs confirmation from the experts.

Do I need to do more tweaking to my host before creating templates? By the way I will be running 2 VPSs on that host.

And I meant Thread NOT Threat in my previous post

Subject: Re: OpenVZ vs. Other Virtualization?

Posted by efball on Tue, 20 Jul 2010 22:18:21 GMT

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blaise wrote on Tue, 20 July 2010 04:07

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There will be no hardware acceleration for graphics, but otherwise they work fine. An Ubuntu VPS on a CentOS host will probably break udev in Ubuntu (depends on kernel versions). The way to fix this is to remove udev and create any missing /dev/ files with MAKEDEV.

Subject: Re: OpenVZ vs. Other Virtualization?

Posted by JimL on Wed, 21 Jul 2010 11:26:59 GMT

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blaise wrote on Tue, 20 July 2010 13:10JimL wrote on Tue, 20 July 2010 07:04 I do what you are wanting to do and more. I can't tell the difference in operation from a stand alone machine when running IDEs, gvim or any other X based program. I'm sure some of the more graphically intense programs like games aren't as fast, but I do development/testing mostly. The way I do it is to connect via ssh (ssh -X) and just run the program. When installing and X program via apt-get or aptitude you'll drag in the necessary X libraries and other files automatically. I usually start building my VPS with the output of vzsplit (man vzsplit). If you aren't going to run but one VPS I'd use vzsplit -n 4 just for a start. If you find the /proc/userbeancounters has errors simply bump the count up 20% for the parameter that has the errors and reboot.

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And I meant Thread NOT Threat in my previous post

Blaise

There shouldn't be any significant differences between installing on 5.5 vs 5.2. I didn't follow any instructions beyond the ones on the openvz site. I added a couple of repositories to yum and installed the kernel and utilities. Do look at the openvz wiki for instructions on changing some of the system parameters, but I'm sure the howtoforge instructions also cover that. My experience with the howtoforge site has been quite positive WRT other projects.

Review the steps here http://wiki.openvz.org/Quick installation and compare to what you've done. They should match up fairly closely.

Once you've run the vzsplit -n 4 and trapped the output you are ready to create a container. It's easiest to use precreated templates. See http:// wiki.openvz.org/OS template cache preparation#Alternative: u se precreated template cache

Grab a template from http://download.openvz.org/contrib/template/precreated/

Good luck.

Jim.

Subject: Re: OpenVZ vs. Other Virtualization? Posted by blaise on Thu, 22 Jul 2010 10:07:44 GMT View Forum Message <> Reply to Message

Thanks again Jim

Though now I am facing Networking problems. I cannot ping domains from inside the container.

I posted the problem in a related thread: http://forum.openvz.org/index.php?t=tree&goto=40141& #msg\_40141

Blaise