Subject: OpenVZ 7 - should I upgrade?
Posted by mperkel on Mon, 24 Oct 2016 15:44:00 GMT
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Been using OpenVZ for many years and love it. Just works. So - should I upgrade to OpenVZ 7? Only running Linux and wondering ..

What is the migration path?
Is it worth it to migrate?
Any downside to upgrading?

Just like to get an overview of version 7.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by dowdle on Mon, 24 Oct 2016 16:09:30 GMT
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Your upgrade path would be to create a new OpenVZ 7 host and migrate any existing containers to it.

Rather than doing it blindly, you are strongly recommended to check out the documentation for 7 here:

https://docs.openvz.org/

In particular, read the Readme to see what's new and known issues and restrictions. Some current significant restrictions include:

- Private networks are not supported.
- Basic firewall is not supported.

For some, those will be a deal breaker until the limitations are overcome.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by williamt on Wed, 11 Jan 2017 20:01:30 GMT
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What exactly does this mean? iptables isn't supported?
What are private networks in this context?

- Private networks are not supported.
- Basic firewall is not supported.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by A(r|d)min on Mon, 06 Feb 2017 15:59:17 GMT
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Also I would be interested (like williamt) in details of the private network restriction. Can someone explain or provide a link to the related documentation?

As I read in the documentation, it's only possible to add bridged interfaces to a VE. This is additionally to the host-routed network which is used by a VE by default. Is this the mentioned restriction?

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by samiam123 on Thu, 02 Mar 2017 18:49:43 GMT
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I am at a crossroads with this as well. It is not clear to me yet whether I should upgrade to OpenVZ v7 or LXC + KVM.

I think OpenVZ made a mistake to use their own operating system with VZ7. LXC can use CentOS or Debian or Ubuntu etc. So that is most likely going to make that a more widely adopted platform. However, I think both are unstable right now so there is still no clear winner. It looks like LXC is more of an open source project and will have more tools like for backup. OpenVZ is still mostly just Parallels corporation and is trying to encourage commercial adoption by limiting the tools that OpenVZ gets.

Parallels have very good kernel engineers. So I can't count them out. I will need to make a decision soon because OVZ 6 is approaching end of life.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by khorenko on Thu, 02 Mar 2017 19:58:28 GMT
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A(r|d)min wrote on Mon, 06 February 2017 18:59Also I would be interested (like williamt) in details of the private network restriction. Can someone explain or provide a link to the related documentation?

As I read in the documentation, it's only possible to add bridged interfaces to a VE. This is additionally to the host-routed network which is used by a VE by default. Is this the mentioned restriction?

No, this is not about iptables or bridged/host-routed networking, please see the feature description in Virtuozzo version 6:

http://updates.virtuozzo.com/doc/pcs/en_us/virtuozzo/6/curre
nt/html/Virtuozzo_Users_Guide/33573.htm

Hope that helps.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by ehab on Wed, 08 Mar 2017 16:41:37 GMT
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Personally i am planning to migrate to lxc, it is in main line kernel

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by samiam123 on Wed, 08 Mar 2017 17:20:25 GMT
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I am looking at it. The problem is that it is not secure at the moment. Not even close. That is why nobody is using it for hosting. It's only good enough for internal use where security is not a concern.

I think OpenVZ7 is currently much more secure. However, I don't think it is stable enough for production yet.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by tomp on Fri, 10 Mar 2017 15:40:02 GMT
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I am facing the same decision. Have been using OpenVZ since CentOS 5, and am now running CentOS 6 for many years.

Very happy with OpenVZ 6.

But with only 2 years left on security support from CentOS, I need to start planning the replacement.

I have experimented with CentOS 7 and OpenVZ 7 using the unofficial upgrade script vzdeploy

https://marc.ttias.be/openvz-users/2016-08/msg00027.php
http://repo.virtuozzo.com/vzlinux/vzdeploy/vzdeploy

This does work, however I am left uneasy as it is an non-official approach.

I can't understand why OpenVZ team would not allow CentOS upgrades, given its worked fine for years, and that it makes installing it on remote hosts so much easier than using an ISO.

The other major problem for me is the lack of container level disk quotas when using simfs.

Simfs with quotas in OpenVZ 6 was great, along with vzmigrate and our own backup/restore

system, things worked great.

However with simfs in OpenVZ 7 there is no quota, so I am now looking at options such as:

* LVM/LVM thin per container
* Ploop

Both approaches work, but present their own new set of challenges, LVM requires additional outside scripts for container creation and migration, and I have seen some pretty worrying comments about ploop's stability and efficiency. This worries me.
https://github.com/pavel-odintsov/OpenVZ_ZFS/blob/master/plo op_issues.md

With all of these new requirements I began to look at LXC. LXC 2 is supported until June 2021.

I've managed to create an OpenVZ-like setup in LXC using LVM thin (and LXC's hook scripts), and proxy arp to give a venet like network config without bridging.

I am aware that in CentOS 7 there is not user namespace, so we cannot run unprivileged LXC containers, but as my usage is for internal systems (where root user is trusted) this is acceptable to me.

Also, root is also privileged in OpenVZ containers anyway.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by tomp on Fri, 10 Mar 2017 15:59:20 GMT
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Actually there is beta support for user namespace in CentOS 7

https://github.com/procszoo/procszoo/wiki/How-to-enable-%22u
ser%22-namespace-in-RHEL7-and-CentOS7%3F

Although it does need shadow-utils >= 4.2.1 whereas CentOS 7 has 4.1.5.1

This is needed to get a dedicated UID/GID range for a container.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by samiam123 on Fri, 10 Mar 2017 17:44:30 GMT
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I think ploop is the only way to go in OVZ7 containers. simfs support is there but basically deprecated with no more development. I think they already said it will not be there next major version change. It has been very reliable for me and makes things very easy to administer so I

am sad to see that go.

That link talking about ploop problems is from 2015. I would be interested in a more current assessment since ploop has been under very active development the past 2 years.

The problem with unprivileged in CE7 appears to have more to do with systemd and some missing packages. So I think that will be there eventually.

Bottom line is neither LXC or OVZ7 appear ready yet. It's still not clear which direction everyone is going. OVZ7 basic DNA is more mature so I think it will be ready before LXC v1 is. It will be even longer before LXC v2 and LXD are ready.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by dowdle on Fri, 10 Mar 2017 18:25:19 GMT
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Regarding LXC, I'm in the #centos channel on the Freenode IRC network during regular MST business hours... and I have seen it mentioned in the channel several times that Red Hat and CentOS do not support LXC and consider it deprecated. If you want to support it yourself, that's fine.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by samiam123 on Fri, 10 Mar 2017 18:50:23 GMT
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Perhaps you are thinking of libvirt-lxc.

Does not stop you from running LXC as far as I know. A lot of what makes up LXC is built into the kernel.

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by dowdle on Fri, 10 Mar 2017 20:36:57 GMT
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Again, I didn't say you couldn't run LXC (lxc is more userland)... just that Red Hat (and CentOS) don't care about it and don't want to help with it / support it, and refer to it (so far as they are concerned) as "deprecated".

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by tomp on Sat, 11 Mar 2017 14:57:29 GMT
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Although CentOS 7 does have usernamespace as a tech preview, and you can get an LXC container running as unprivileged.

It has a problem (as does docker too) that if you try and install an RPM that tries to set a capability on a file (e.g. mtr or httpd) it fails to install the RPM.

This is because right now the kernel doesn't allow set_file_cap from within a user namespace:

https://lkml.org/lkml/2016/11/19/158

Its frustrating as right now the decision is between:

* CentOS 6 & OpenVZ 6 - custom kernel, stable, but, with only 2 years left
* CentOS 7 & OpenVZ 7 - unsupported installation process (vzdeploy), no SIMFS quotas, need to use potentially problematic ploop and custom kernel
* CentOS 7 & LXC - vanilla kernel, long security updates, need to maintain own LXC package (supported until 2021), need to use some sort of LVM for disk quotas

What a pickle!

Subject: Re: OpenVZ 7 - should I upgrade?
Posted by samiam123 on Mon, 13 Mar 2017 19:46:21 GMT
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I think OVZ7 is the way to go as of today. Not saying it's production ready yet or that LXC won't catch up or that LXD won't get there someday. Just as of today it looks like the way things 'may' be heading. Pretty sure it is much more secure in a hosting environment as of today compared to LXC.

Solus and Virtualizor both have beta OVZ 7 support now. Emphasis on "beta". Maybe even more like alpha.
