
Subject: OpenVZ kernel reliability - production ready?
Posted by [rkelleyrtp](#) on Tue, 10 Dec 2013 14:04:55 GMT
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Greetings all,

We are in the process of re-architecting our WordPress environment and are looking at OpenVZ (running on CentOS 6.4) as an option. Each site will be running in its own OpenVZ container nginx, mysql, and php. At a glance, the big benefit is the security OpenVZ provides per site as well as the ability to adjust container resources on the fly.

However, I am concerned about the reliability and stability of OpenVZ. I have heard the kernel is prone to crashing (thus taking all sites down) as well as some containers using more resources than allocated. I have not personally seen the OpenVZ kernel crash, but I know the CentOS 6.4 kernel is rock solid. We will be hosting >2000 WP sites on 5 or 6 server nodes, and we cannot afford any stability issues. Our business depends on reliability of the environment; if sites go up and down we loose money (and can go out of business).

Can someone please share their experience with regards to the reliability and stability of the latest OpenVZ kernel (042stab083.2)?

Thanks.

-Ron

Subject: Re: OpenVZ kernel reliability - production ready?
Posted by [Paparaciz](#) on Wed, 11 Dec 2013 20:22:18 GMT
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I'm not sure what answer you expect, but I didn't saw any big issues to use openvz in rhel5 or rhel6 based os and kernel.

what you heard of kernel crashing needs to be checked (is it hardware, or openvz specific problem), but I didn't saw such thing.

It's quite strange that you want stick to some specific versions.

Also take a mention that separate nginx/php/mysql services will need resources.

Finally I don't understand what you want to achieve with such setup.

Subject: Re: OpenVZ kernel reliability - production ready?
Posted by [rkelleyrtp](#) on Wed, 11 Dec 2013 20:44:22 GMT
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Thanks for your reply. Please see my answers below.

Paparaciz wrote on Wed, 11 December 2013 15:22 I'm not sure what answer you expect, but I didn't see any big issues to use openvz in rhel5 or rhel6 based os and kernel.

what you heard of kernel crashing needs to be checked (is it hardware, or openvz specific problem), but I didn't see such thing.

I was hoping some people would chime in with their experience deploying OpenVZ in production environments. Such as, "I am running <xxx> containers on a node with <yyy> resources and have seen (or not seen) OpenVZ crash" Basically, some real-world feedback for deploying OpenVZ. For what it's worth, we are running production-grade hardware with ECC RAM, dual power supplies, dual NICs, etc.

Quote: It's quite strange that you want to stick to some specific versions.

Not strange at all. Typical production environments are tested against very specific versions of code before deployments. I would be surprised if anyone would randomly update their Linux kernels on production environments without adequate testing.

Quote: Also take a mention that separate nginx/php/mysql services will need resources.

Yep, I have profiled our typical run-time environment (how much RAM, CPU, HDD) and have some good baseline numbers to start with. With those numbers, I know each OpenVZ node can support XXX number of containers. Thus, I have a scaling plan in mind.

Quote: Finally I don't understand what you want to achieve with such setup.

As I mentioned in the original post, I want to spin up an OpenVZ container per web site we will be hosting. But, before we go down this route, I need to make sure we won't have any kernel-level issues (random reboots, etc) once we are in production.

In the end, I am hoping a bunch of people would chime in with their experience deploying OpenVZ in real production networks where reliability is paramount. I don't know how many people actually use OpenVZ in production - thus all the questions.

Thanks.

Subject: Re: OpenVZ kernel reliability - production ready?

Posted by [Ales](#) on Fri, 13 Dec 2013 12:00:54 GMT

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Have you seen this: <http://stats.openvz.org/>

Methodology and other details are explained here: <http://openvz.org/Vzstats>

The above statistics should give you a reference point when comparing the number of bug reports, the number of people reporting issues on various forums, etc. I came to the conclusion that the vast majority of openvz users are silent, therefore reasonably content.

Since you seem to have a healthy approach to testing and implementing new features & software, the only advice I can give you is to test openvz kernels & tools in your specific environment.

As for our experiences - I haven't witnessed a catastrophic openvz kernel crash on any of our production servers, ever. I've witnessed some bugs (both kernel and tools) but nothing that we haven't worked through without much trouble.

Subject: Re: OpenVZ kernel reliability - production ready?

Posted by [rkelleyrtp](#) on Fri, 13 Dec 2013 12:53:23 GMT

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Thanks for the great links and pointers. Really appreciate the feedback. Now, on to testing!
