Subject: Building OpenVZ kernels is very difficult
Posted by Alexey Eremenko on Sat, 19 May 2007 23:53:35 GMT
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hi all !

Building OpenVZ kernels is very difficult... Not matter what I tried or did for openSUSE 10.2 it was just no-go.

I'we built several kernels, installed several others from this website, but all of those didn't work. Tried SUSE-ovz kernels, without luck too - they all didn't work.

The *only* way by which I could get OpenVZ to work was by *copying* Knoppix-OpenVZ kernel from the liveCD, along with the modules.

It feels like this project is very RedHat-centric about everything: patches/packages/templates/documentation/you-name-it...

All the packages from this site just didn't work for me.

I have been trying to build a kernel for several weeks, and ended up with copying a knoppix one.

Why is that ?

Why is that so impossible to build a good OpenVZ kernel ?

My primary target is to build good integration between openSUSE and OpenVZ - at least on documentation level.

-Alexey Eremenko "Technologov"

Subject: Re: Building OpenVZ kernels is very difficult
Posted by rickb on Sun, 20 May 2007 01:56:52 GMT
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Hello, what specific problems did you run into? - "it doesn't work" give us nothing to go on. At this level of information, the problem could be anything from patching the source code to a missing driver and the system fails to boot. Include as much information as you can, so that you can receive an intelligent answer.

Subject: Re: Building OpenVZ kernels is very difficult
Posted by Alexey Eremenko on Sun, 20 May 2007 20:33:57 GMT
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OK, so problems:
1. Official Documentation is very RedHat-centric. I see that as a disadvantage. It's OK to be both specific *and* generic, but specific-only !?! Is there any documentation more Linux-generic ?

2. Kernel package provided officially doesn't install:

opensuse:/home/tux # rpm -ivh kernel-2.6.20-ovz005.1.i686.rpm.rpm
warning: /E/Lin-Install/openvz/kernel-2.6.20-ovz005.1.i686.rpm.rpm: Header V3 DSA signature: NOKEY, key ID a7a1d4b6
error: Failed dependencies:
    initscripts >= 5.83 is needed by kernel-2.6.20-ovz005.1.i686
    mkinitrd >= 3.5.5 is needed by kernel-2.6.20-ovz005.1.i686
NOTE: initscripts packages doesn't exist on SUSE.

3. The newest ovz patch (and kernel-2.6.20) doesn't compile at all. See:

 http://forum.openvz.org/index.php?t=tree&th=2446&mid =12649&&rev=&reveal=
http://bugzilla.openvz.org/show_bug.cgi?id=545

4. The patch that compiles on 2.6.18 fails to start "vzmon" LKM.

5. The kernels that I found for openSUSE-ovz also failed to start "vzmon" LKM.

You see? No matter what I did, all failed. I have tried many times on compiling both 2.6.18 and 2.6.20 kernels... no success so far. 2.6.20 doesn't compile at all, while with 2.6.18 the vzmon service fails.

-Alexey Eremenko "Technologov"

Hi. I see your frustration!

 The devs explained that rpm does not have a method of specifying deps per distribution, this is what is causing the dependency's on packages which do not exist on suse. Kernel RPM is rather simple (necessary files in /boot, kernel modules for /lib/modules/kver). So, I feel you can force the rpm installation and it won't cause any problems.

do you have a bugzilla or forum post about #4? I use the 2.6.18 branch, I find it to be the most stable, but never ran across that problem.

Rick

Subject: Re: Building OpenVZ kernels is very difficult
Posted by dim on Mon, 21 May 2007 08:13:47 GMT

Alexey Eremenko wrote on Sun, 20 May 2007 16:33OK, so problems:
1. Official Documentation is very RedHat-centric. I see that as a disadvantage. It's OK to be both specific *and* generic, but specific-only !?! Is there any documentation more Linux-generic ?

It is because of historical reasons. Check wiki, it contains a lot of articles for other distribs. But you are right, there is a lack of Suse-related documentation. Please, help and expand.

2. Kernel package provided officially doesn't install:

Quote:
opensuse:/home/tux # rpm -ivh kernel-2.6.20-ovz005.1.i686.rpm.rpm
warning: /E/Lin-Install/openvz/kernel-2.6.20-ovz005.1.i686.rpm.rpm: Header V3 DSA signature: NOKEY, key ID a7a1d4b6
error: Failed dependencies:
        initscripts >= 5.83 is needed by kernel-2.6.20-ovz005.1.i686
        mkinitrd >= 3.5.5 is needed by kernel-2.6.20-ovz005.1.i686
NOTE: initscripts packages doesn't exist on SUSE.

As Rick already explained, this is because of rpm issue. Use '--nodeps' flag.

Quote:
3. The newest ovz patch (and kernel-2.6.20) doesn't compile at all. See:

  http://forum.openvz.org/index.php?t=tree&th=2446&mid =12649&&rev=&reveal=
http://bugzilla.openvz.org/show_bug.cgi?id=545

git-kernel may have compilation issues, it is development process. I advice to use tagged versions. As for 2.6.20 version, it's development and stabilization is low priority task for now, that's why its fixes are so late.

Quote:
4. The patch that compiles on 2.6.18 fails to start "vzmon" LKM.

Please, fill the bug with more info on it.

Quote:
5. The kernels that I found for openSUSE-ovz also failed to start "vzmon" LKM.

Strange issue too. Please, post more info on what kernel do you use, what commands did you try, and what were info in 'dmesg'.

Quote:
You see? No matter what I did, all failed. I have tried many times on compiling both 2.6.18 and 2.6.20 kernels... no success so far. 2.6.20 doesn't compile at all, while with 2.6.18 the vzmon service fails.

about Suse support. OpenVZ's openSUSE kernels are out-of-date - they were built for openSUSE 10.0 and most probably, do not support the latest hardware and features, present in openSUSE 10.2. But they are quite operational (for example, one of it were run on my workstation more than half of the year without any issue), and I'm wondered why do you have so many issues with them.

Subject: Re: Building OpenVZ kernels is very difficult
Posted by Alexey Eremenko on Thu, 24 May 2007 15:15:02 GMT
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opensuse:/E/Lin-Install/openvz # rpm -ivh kernel-2.6.20-ovz005.1.i686.rpm.rpm
warning: kernel-2.6.20-ovz005.1.i686.rpm.rpm: Header V3 DSA signature: NOKEY, key ID a7a1d4b6
error: Failed dependencies:
    initscripts >= 5.83 is needed by kernel-2.6.20-ovz005.1.i686
    mkinitrd >= 3.5.5 is needed by kernel-2.6.20-ovz005.1.i686

opensuse:/E/Lin-Install/openvz # rpm -ivh --nodeps kernel-2.6.20-ovz005.1.i686.rpm.rpm
warning: kernel-2.6.20-ovz005.1.i686.rpm.rpm: Header V3 DSA signature: NOKEY, key ID a7a1d4b6
Preparing...   ### [100%]
   1:kernel   ### [100%]
error: %post(kernel-2.6.20-ovz005.1.i686) scriptlet failed, exit status 1

OK, so installing from RPM went with "--nodeps" but there were errors.

BTW: About cross-distro RPMs: AFAIK while you cannot base your RPM dependencies on distro, you can base you're dependencies on alternative packages, that is either *thus-or-that* package must be present.