
Subject: OpenVZ kernel RPM name

Posted by [Dag Wieers](#) on Mon, 16 Oct 2006 14:32:52 GMT

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Hi,

Yet another mail. The official openvz kernel RPMs are named in such a way that it causes problems. Tools like yum and apt make a special case about kernel RPM files because multiple of these can be installed next to each other.

Because OpenVZ name their kernel ovzkernel, this is not possible. Can we change the name of the OpenVZ kernel package from:

```
ovzkernel-2.6.9-023stab030.1-smp  
to:  
kernel-smp-2.6.9-42.0.3.ovz.1
```

This would make it more clear to people what it is based on and would make apt and yum work with those kernels by default.

Kind regards,

-- dag wieers, dag@wieers.com, http://dag.wieers.com/ --
[all I want is a warm bed and a kind word and unlimited power]

Subject: Re: OpenVZ kernel RPM name

Posted by [Kirill Kolyshkin](#) on Mon, 16 Oct 2006 23:03:23 GMT

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I thought that (at least) yum detects "install-only" packages by their 'provides', not by name. I might be wrong with that though...here's a relevant section of /usr/lib/yum-plugins/installonlyn.py (yum-2.6.1):

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for instpkg in conf.installonlypkgs:  
    for m in mems:  
        if (m.name == instpkg or instpkg in m.po.getProvidesNames()) \  
            and m.ts_state in ('i', 'u'):
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I'm not yum expert but it seems that 'instpkg in m.po.getProvidesNames()' is the piece of code which helps in this scenario.

We name our kernel packages as 'ovzkernel...' just because we don't want to mess with usual non-openvz kernels. OpenVZ and non-OpenVZ kernel should not be treated uniformly, otherwise yum will "upgrade" OpenVZ 2.6.16-basedkernel with stock 2.6.18 -- which is a wrong thing to do. Well, the fact that vzctl depends on something that ovzkernel provides might help, but I'm not sure.

So, if yum can handle this, we'd rather not change the ovzkernel package name. I'm not sure about apt though.

On 10/16/06, Dag Wieers <dag@wieers.com> wrote:

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Subject: Re: OpenVZ kernel RPM name

Posted by [Dag Wieers](#) on Mon, 23 Oct 2006 08:36:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Tue, 17 Oct 2006, Kirill Kolyshkin wrote:

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It's possible, still I don't see why you would deviate from the standard name. The functionality is most likely introduced to consider kernel-smp and kernel-bigmem as an alternative to kernel.

Nevertheless, this doesn't work for apt. kernel-ovz might work, but the proper way to tag a package is in the version or release tags. Not the package-name.

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People should restrict what packages they use from what repository they have enabled and/or exceptions. Having ovzkernel will not prevent additional kernel packages to be updated and potentially replacing the ovz kernel in grub. Especially when like in our case, we like to have the stock kernel available for disaster recovery, troubleshooting or vendor-support.

So I don't see the purpose of renaming the ovz kernel package to ovzkernel. Users still need to check what kernel is in place and verify before rebooting. If anything, it gives a false sense of security or causes more confusing.

Especially when documentation and forums refer to the following command to list the available kernels:

```

rpm -q kernel
or rpm -qa 'kernel-*'

```

Proper standards should try to reduce the amount of 'expert' information.
Needing to know that the openvz kernel is called ovzkernel is useless
information by any means.

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Subject: Re: [Users] OpenVZ kernel RPM name
Posted by [kir](#) on Wed, 08 Nov 2006 18:17:20 GMT
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Dag, all,

As you might be aware we have switched to name our kernel rpm just
'kernel' in the latest devel release.

Apparently, it broke the yum update procedure. New kernel is not
recognized by yum, even if it provides vzkernel. I have tried with a
kernel package which also 'Provides: ovzkernel = 2.6.18-ovz028test002'
but that doesn't change the situation. I will now try with 'Obsoletes:
ovzkernel' but this solution is rough since it will probably uninstall
the previous kernel (depends on yum version perhaps).

I have also try "new install" scenario on my FC5 system, it works but
with a bad side effect:

Dependencies Resolved

```
=====
=====
Package           Arch    Version      Repository    Size
=====
Installing:
vzctl             i386    3.0.12-1     openvz        114 k
vzquota           i386    3.0.9-1      openvz         47 k
Removing:
kernel            i686    2.6.18-1.2200.fc5
installed         39 M
Installing for dependencies:
kernel            i686    2.6.18-ovz028test002.1
openvz-kernel-devel 11 M
```

I.e. it tries to remove the latest FC5 kernel :-\ Too bad, I don't want
that...

Perhaps somebody has a way to fix that?

Dag Wieers wrote:

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>
> _____
> Users mailing list
> Users@openvz.org
> https://openvz.org/mailman/listinfo/users
>
>

Subject: Re: Re: [Users] OpenVZ kernel RPM name
Posted by [Dag Wieers](#) on Sat, 11 Nov 2006 12:11:29 GMT
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On Wed, 8 Nov 2006, Kir Kolyshkin wrote:

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> =====
> =====
> Package           Arch      Version      Repository      Size
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----------	------	-------------------	-----------	------

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----------	------	------------------------	---------------------	--

> 11 M

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Might this be because your system is configured to hold not more than X number of kernels ? I see no reason why a new kernel would cause an old kernel to be removed if there's no obsolete statement, except if there's a LIFO mechanism to push old kernels out.

I'm interested to see the SPEC file and debug the problem.

Also I noticed that the ovz kernel had no internal changelog. I do understand that if it is based on the RHEL kernel, there is no real need to list the Red Hat changes. But having (fictitious) statements in the changelog like:

* Sun Nov 12 OpenVZ kernel developer 2

- Fixed a conditional kernel oops when <the shit hits the fan>
- Improved locking in the <ultra-glue whoosy bits>
- Fixed a security problem due to UBC counter overflow

* Sat Nov 11 OpenVZ Kernel developer 1

- Fixed bug M, BU Y and bug Z
- Removed CONFIG_ABC and CONFIG_DEF
- Based on RHEL4 kernel X.Y.Z

would give a better understanding what we have in our hands. Especially if the versioning is not related to the upstream kernel. If we need to apply an update (and reboot the server) we prefer to know what the change/impact is and how important the update is.

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Subject: Re: Re: [Users] OpenVZ kernel RPM changelog

Posted by [kir](#) on Mon, 20 Nov 2006 13:31:49 GMT

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> an update (and reboot the server) we prefer to know what the change/impact
> is and how important the update is.

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We could automatically fetch that stuff from GIT and put it into
%changelog, if that's really required. But for me it looks like a
duplication of information (which is already available from other
place). More to say, the changelog could be rather big, with 100s of
entries.

Perhaps we could use short-style changelog, like this (for 028test005
kernel):

- FUSE support.
- Critical scheduler bug fixes
- Miscellaneous bug and compilation fixes
- Code cleanups.

So, which solution would you prefer?

Subject: Re: Re: [Users] OpenVZ kernel RPM name

Posted by [kir](#) on Mon, 20 Nov 2006 14:01:07 GMT

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Dag Wieers wrote:

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>> Dag Wieers wrote:
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---------	------	---------	------------	------

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> kernel to be removed if there's no obsolete statement, except if there's a
> LIFO mechanism to push old kernels out.

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> I'm interested to see the SPEC file and debug the problem.

The major problem here comes from the fact that OpenVZ kernels are older
than the distro ones.

Problem 1: clean install of kernel from rpm using yum:

```
[kir@kir kernel]$ sudo rpm -ihv kernel-2.6.18-ovz028test003.1.i686.rpm
```

```
Preparing... #####
```

```
[100%]
```

```
package kernel-2.6.18-1.2200.fc5 (which is newer than  
kernel-2.6.18-ovz028test003.1) is already installed
```

Possible fixes: remove all distro kernels (including the one you are
running on), or use --oldpackage option to rpm.

Still it will not solve the next problem.

Problem 2: yum update:

```
$ sudo yum update
```

```
...
```

```
=====
=====
Package           Arch    Version      Repository    Size
=====
=====
Installing:
kernel            i686    2.6.18-1.2239.fc5
updates          15 M
Removing:
kernel            i686    2.6.18-ovz028test003.1
installed        28 M
kernel            i686    2.6.18-1.2200.fc5
installed        39 M
Removing for dependencies:
vzctl             i386    3.0.12-1     installed     321 k
vzpkg             noarch  2.7.0-18     installed     78 k
vzquota           i386    3.0.9-1      installed     140 k
vztmpl-fedora-core-5 i386    2.0-2        installed     199 k
vztmpl-mandriva-2006 i386    1.0-1        installed     200 k
```

Possible fix: disable kernel packages from all the repos but OpenVZ one.
Hard to do since you can not do it in your own .repo file.

To tell the truth, I'm a bit lost at this point. Can anybody suggest anything?