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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:

> On Wed, 8 Nov 2006, Kir Kolyshkin wrote:

>

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>> Dag Wieers wrote:

>>

>>> On Tue, 17 Oct 2006, Kirill Kolyshkin wrote:

>>>

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

>>>>

>>>>

>>>>> 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.

>>>>>

>>>>>

>>>> I though 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):

>>>>

>>>>   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'):

>>>>

>>>> I'm not yum expert but it seems that 'instpkg in m.po.getProvidesNames()' is the piece of code which helps in this scenario.

>>>>

>>>>

>>> 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.  
>>>  
>>>  
>>>  
>>>> 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.  
>>>>  
>>>>  
>>> 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.  
>>>  
>> 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
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>> 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?

>>  
 >  
 > 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.  
 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?

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