How To: Remove Old Kernels in CentOS

For dedicated servers and virtual machines that you keep upgrading in-place, you will eventually reach the situation where there's a number of old kernel packages installed. That's because when you're updating OS packages and get new kernel installed, the old ones are not auto-removed — allowing you to fall back if there are issues with the latest kernel.

How To List Old Kernels in CentOS/Red Hat Linux

rpm -q command comes to the resque! just run it for the kernel packages:

```
root@centos:~ # rpm -q kernel
kernel-3.10.0-327.28.3.el7.x86_64
kernel-3.10.0-327.36.3.el7.x86_64
kernel-3.10.0-693.21.1.el7.x86_64
kernel-3.10.0-957.5.1.el7.x86_64
```

You can use the uname command to verify the current kernel you're running:

```
root@centos:~ # uname -a
Linux centos.ts.fm 3.10.0-957.5.1.el7.x86_64 #1 SMP Fri Feb 1 14:54:57 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux
```

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There's actually a special command for doing this, but it's probably not installed by default. It's part of the **yum-utils** package that you may have to install like this first:

root@centos:~ # **yum install yum-utils**

Now that it's installed, we'll use the **package-cleanup command.** It takes the number of most recent kernels that you want to keep. So if you want to keep just the currently used kernel, the number should be 1. I recommend you keep 2 kernels — current and the one before it, so the count should be 2.

Just to be super sure, the **package-cleanup -oldkernels** command will ask you if you're positive about removing the listed kernel packages before progressing:

```
root@centos:~ # package-cleanup --oldkernels --count=2
Loaded plugins: fastestmirror, langpacks
--> Running transaction check
---> Package kernel.x86_64 0:3.10.0-327.28.3.el7 will be erased
---> Package kernel.x86_64 0:3.10.0-327.36.3.el7 will be erased
--> Finished Dependency Resolution
epel/x86_64/metalink | 22 kB 00:00:00

Dependencies Resolved

===============================================================
=
Package Arch Version Repository Size
===============================================================
=
Removing:
kernel x86_64 3.10.0-327.28.3.el7 @centos-updates 136 M
kernel x86_64 3.10.0-327.36.3.el7 @updates 136 M
```

```
Transaction Summary
================================================================
=
Remove 2 Packages

Installed size: 272 M
Is this ok [y/N]: y
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Erasing : kernel.x86_64 1/2
Erasing : kernel.x86_64 2/2
Verifying : kernel-3.10.0-327.36.3.el7.x86_64 1/2
Verifying : kernel-3.10.0-327.28.3.el7.x86_64 2/2

Removed:
kernel.x86_64   0:3.10.0-327.28.3.el7   kernel.x86_64
0:3.10.0-327.36.3.el7

Complete!
```

… and yes, don't worry to be left without any Linux kernels! I checked, and specifying count=0 will not result in the package-cleanup killing your operating system:

```
root@centos:~ # package-cleanup --oldkernels --count=0
Loaded plugins: fastestmirror, langpacks
Error should keep at least 1 kernel!
```

That's it for today. Hope you enjoyed the article!

See Also

- [yum command](#)
- [yum — list and install software groups](#)
- [How To: fix corrupted yum database](#)
- [How To: use yum behind proxy](#)