

Install VirtualBox Guest Addition for Cent OS

Here is how to install VirtualBox Guest Additions on Cent OS 7. For Ubuntu or Debian, refer to [here](#).

If you just insert the Guest Addition image and try to run the Linux installation script, you will probably end up with

```
# ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 5.1.22 Guest Additions for
Linux.....
VirtualBox Guest Additions installer
Removing installed version 5.1.22 of VirtualBox Guest
Additions...
Copying additional installer modules ...
Installing additional modules ...
vboxadd.sh: Starting the VirtualBox Guest Additions.
Failed to set up service vboxadd, please check the log file
/var/log/VBoxGuestAdditions.log for details.
```

The log file indicates

```
# cat /var/log/VBoxGuestAdditions.log

vboxadd.sh: failed: Look at /var/log/vboxadd-install.log to find
out what went wrong.
vboxadd.sh: failed: modprobe vboxguest failed.
```

Finally, the next log file reads

```
# cat /var/log/vboxadd-install.log
/tmp/vbox.0/Makefile.include.header:112: *** Error: unable to
find the sources of your current Linux kernel. Specify KERN_DIR=
<directory> and run Make again. Stop.
Creating user for the Guest Additions.
Creating udev rule for the Guest Additions kernel module.
```

Basically, you need to specify the kernel source directory. So, here is what you need to do.

First, you need to install dkms, but if you do, you are like to receive

```
# yum install dkms
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirror.oasis.onnetcorp.com
* extras: data.nicehosting.co.kr
* updates: data.nicehosting.co.kr
No package dkms available.
Error: Nothing to do
```

To install this, the easiest way is to install EPEL repo.

```
# yum install epel-release -y
```

After installing EPEL, try installing dkms again:

```
# yum install dkms -y
```

Next, install headers and sources

```
# yum install kernel-devel -y
```

You can now locate your kernel sources. In my case, I get

```
# ls /usr/src/kernels
3.10.0-514.26.2.el7.x86_64  3.10.0-514.26.2.el7.x86_64.debug
```

Export the environment variable with the first directory. Make sure to replace it the correct version for your system as it may differ from mine.

```
# export KERN_DIR=/usr/src/kernels/3.10.0-514.26.2.el7.x86_64
```

Finally, you are ready to install VirtualBox Guest Additions.

```
# ./VBoxLinuxAdditions.run
Verifying archive integrity... All good.
Uncompressing VirtualBox 5.1.22 Guest Additions for
Linux.....
VirtualBox Guest Additions installer
Removing installed version 5.1.22 of VirtualBox Guest
Additions...
Copying additional installer modules ...
Installing additional modules ...
vboxadd.sh: Starting the VirtualBox Guest Additions.
```

By the way, if you are running commands with sudo, you need to make sure to run with -E option:

```
$ sudo -E ./VBoxLinuxAdditions.sh
```

Otherwise, your sudo command will shadow KERN_DIR environment variable that was exported from the user.