

Oracle VirtualBox is a powerful x86 and AMD64/Intel64 virtualization product for enterprise as well as home use. VirtualBox is a general-purpose full virtualizer for x86 hardware. Targeted at server, desktop and embedded use, it is now the only professional-quality virtualization solution that is also Open Source Software.



VirtualBox supports a large number of guest operating systems:

- Windows 3.x
- Windows NT 4.0
- Windows 2000
- Windows XP
- Windows Server 2003
- Windows Server 2008
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- DOS
- Linux (2.4, 2.6, 3.0, 3.2, 3.4, 3.10, 3.16, 3.18, 4.1, 4.4, 4.7, 4.8)
- Solaris
- OpenSolaris
- OpenBSD

This guide shows **howto install VirtualBox 5.1 (currently 5.1.12) on Fedora 25/24/23/22, CentOS 7.3/6.8/5.11, Red Hat (RHEL) 7.3/6.8/5.11**. This guide uses Virtual Box own yum repositories.

Note: Fedora 21/20/19/18 users can install VirtualBox 5.0, Fedora 17 users can install VirtualBox 4.3 and Fedora 16 users can install VirtualBox 4.2.

Bash

```
su -  
## OR ##  
sudo -i
```

Bash

```
cd /etc/yum.repos.d/  
  
## Fedora 25/24/23/22/21/20/19/18/17/16 users  
wget http://download.virtualbox.org/virtualbox/rpm/fedora/virtualbox.repo  
  
## CentOS 7.3/6.8/5.11 and Red Hat (RHEL) 7.3/6.8/5.11 users  
wget http://download.virtualbox.org/virtualbox/rpm/rhel/virtualbox.repo
```

Update packages

Bash

```
## Fedora 25/24/23/22 ##  
dnf update  
  
## Fedora 21/20/19/18/17/16 and CentOS/RHEL 7/6/5 ##  
yum update
```

Check that that you are running latest installed kernel version

Output of following commands version numbers should match:

```
rpm -qa kernel |sort -V |tail -n 1
```

```
uname -r
```

Bash

Note: If you got kernel update or run older kernel than newest installed then reboot:

```
reboot
```

Bash

CentOS 7/6/5 and Red Hat (RHEL) 7/6/5 needs EPEL repository, install it with following command:

Bash

```
## CentOS 7 and RHEL 7 ##
```

```
rpm -Uvh http://dl.fedoraproject.org/pub/epel/7/x86_64/e/epel-release-7-8.noarch.rpm
```

```
## CentOS 6 and RHEL 6 ##
```

```
rpm -Uvh http://dl.fedoraproject.org/pub/epel/6/i386/epel-release-6-8.noarch.rpm
```

```
## CentOS 5 and RHEL 5 ##
```

```
rpm -Uvh http://dl.fedoraproject.org/pub/epel/5/i386/epel-release-5-4.noarch.rpm
```

Bash

```
## Fedora 25/24/23/22 ##
```

```
dnf install binutils gcc make patch libgomp glibc-headers glibc-devel kernel-headers kernel-devel dkms
```

```
## Fedora 21/20/19/18/17/16 and CentOS/RHEL 7/6/5 ##
```

```
yum install binutils gcc make patch libgomp glibc-headers glibc-devel kernel-headers kernel-devel dkms
```

```
## PAE kernel users install ##
```

```
## Fedora 24/23/22 ##
```

```
dnf install binutils gcc make patch libgomp glibc-headers glibc-devel kernel-headers kernel-PAE-devel dkms
```

```
## Fedora 21/20/19/18/17/16 and CentOS/RHEL 7/6/5 ##
```

```
yum install binutils gcc make patch libgomp glibc-headers glibc-devel kernel-headers kernel-PAE-devel dkms
```

Bash

```
## Fedora 25/24/23/22 ##  
dnf install VirtualBox-5.1
```

```
## Fedora 21/20/19/18/17/16/15/14 and CentOS/RHEL 7/6/5 ##  
yum install VirtualBox-5.1
```

Note:

This command create automatically vboxusers group and VirtualBox user must be member of that group.

This command also build needed kernel modules.

Package is **VirtualBox-5.1** not VirtualBox.

Rebuild kernel modules with following command:

Bash

```
## Fedora 25/24/23/22/21/20/19 and CentOS/RHEL 7 ##  
/usr/lib/virtualbox/vboxdrv.sh setup  
  
## Fedora 18/17/16 and CentOS/RHEL 6/5 ##  
/etc/init.d/vboxdrv setup  
## OR ##  
service vboxdrv setup
```

Replace **user_name** with your own user name or some another real user name.

```
usermod -a -G vboxusers user_name
```

Bash

Use launcher from menu or simply run:

```
VirtualBox
```

Bash

If you have problems with KERN_DIR parameter or your kernel directory is not automatically detected then set KERN_DIR environment variable manually, using following method:

```
## Current running kernel on Fedora ##
```

Bash

```
KERN_DIR=/usr/src/kernels/`uname -r`

## Current running kernel on CentOS and Red Hat (RHEL) ##
KERN_DIR=/usr/src/kernels/`uname -r`-`uname -m`

## Fedora example ##
KERN_DIR=/usr/src/kernels/2.6.33.5-124.fc13.i686

## CentOS and Red Hat (RHEL) example ##
KERN_DIR=/usr/src/kernels/2.6.18-194.11.1.el5-x86_64

## Export KERN_DIR ##
export KERN_DIR
```