

How to compile FFmpeg on CentOS, Fedora or RHEL

Author : Dan Nanni

Categories : [Audio](#), [CentOS](#), [Fedora](#), [Video](#)

Tagged as : [ffmpeg](#)

Question: How can I compile and build FFmpeg on CentOS, Fedora or RHEL?

If you want to use FFmpeg on RPM-based Linux, you can install [pre-built FFmpeg package](#) by using `yum` package manager after enabling additional third-party repositories. However, the version of FFmpeg included in such repositories is typically outdated. If you want to try FFmpeg's bleeding edge features, you probably want to build FFmpeg yourself from its source.

Here is **how to compile FFmpeg on CentOS, Fedora or RHEL**.

On CentOS, enable [RPM Fusion](#) and [EPEL](#) repositories first. On Fedora, enable [RPM Fusion](#) first.

Go ahead and install all the packages required to build FFmpeg as follows. Note that depending on which libraries you want to enable, you may need to install additional packages.

```
$ sudo yum install gcc-c++ make yasm pkgconfig libXext-devel libXfixes-devel x264-devel zlib-devel
```

Next, download FFmpeg code, and compile it as follows.

```
$ wget http://ffmpeg.org/releases/ffmpeg-2.3.3.tar.bz2
$ tar xvfj ffmpeg-2.3.3.tar.bz2
$ cd ffmpeg-2.3.3
$ ./configure --enable-shared --enable-nonfree --enable-gpl --enable-decoder=aac --enable-libx264 --enable-demuxer=mov --enable-x11grab --enable-zlib --enable-protocol=http --enable-filter=aformat --enable-filter=volume --enable-filter=aresample
$ make
```

Finally, install FFmpeg on your system.

```
$ sudo make install
```

Verify the installation by running `ffmpeg` command without any option.

Ask Xmodulo

Find answers to commonly asked Linux questions

<http://ask.xmodulo.com>

```
[dev@centos ~]$  
[dev@centos ~]$ ffmpeg  
ffmpeg version N-64297-g4d3072a Copyright (c) 2000-2014 the FFmpeg developers  
built on Jun 28 2014 12:36:16 with gcc 4.4.7 (GCC) 20120313 (Red Hat 4.4.7-4)  
configuration: --enable-nonfree --enable-gpl --enable-libx264 --enable-x11grab --enable-zlib  
libavutil      52. 90.101 / 52. 90.101  
libavcodec     55. 68.100 / 55. 68.100  
libavformat    55. 44.100 / 55. 44.100  
libavdevice    55. 13.101 / 55. 13.101  
libavfilter     4.  9.100 /  4.  9.100  
libswscale     2.  6.100 /  2.  6.100  
libswresample  0. 19.100 /  0. 19.100  
libpostproc   52.  3.100 / 52.  3.100  
Hyper fast Audio and Video encoder  
usage: ffmpeg [options] [[infile options] -i infile]... {[outfile options] outfile}...  
  
Use -h to get full help or, even better, run 'man ffmpeg'  
[dev@centos ~]$
```

Troubleshooting during FFmpeg Installation

1. If you encounter the following error, install `yasm` package. Note that on CentOS, you first need to [set up EPEL repository](#) before.

```
yasm/nasm not found or too old
```

Use `yum` package manager to install the package as follows.

```
$ sudo yum install yasm
```

2. If you encounter the error below, install `x264` development package. You need to enable [RPM Fusion](#) repository first.

```
ERROR: libx264 not found
```

Use `yum` command to install the necessary package as follows.

```
$ sudo yum install x264-devel
```

3. If you get the error below, install `libXext` development package with `yum` command.

```
ERROR: Xext not found
```

Ask Xmodulo

Find answers to commonly asked Linux questions

<http://ask.xmodulo.com>

```
$ sudo yum install libXext-devel
```

4. If you get the error below, install libXfixes development package with `yum` command.

```
ERROR: Xfixes not found
```

```
$ sudo yum install libXfixes-devel
```