

Transform video with ffmpeg command line tool

Criteria:

- ease of use
- free to use
- easy to install on Linux / Windows / Mac

Installing ffmpeg

It is only few steps to install *ffmpeg* and it takes minutes. The preferred way is by using conda for *Windows*, *Linux* and *Mac*.

Conda

The **easiest way** to install *ffmpeg* is by using *conda*. Install it globally, not inside any specific environment. Run following command in *Terminal* (or *Anaconda Prompt*):

conda install -c conda-forge ffmpeg

To verify:

ffmpeg -version

PyPI

Another way to install *ffmpeg* is by using *pip*. Activate your *Python v3* environment and run following command in *Terminal* (or *Anaconda Prompt*):

```
pip3 install ffmpeg
or:
pip install ffmpeg

To verify:
ffmpeg -version
```

Other commands to install ffmpeg are listed below.

Linux

ffmpeg is very popular application that is available in most Linux distribution. Activate your Python v3 environment and run following commands in Terminal:

Installing on Ubuntu and its derivatives, on Debian

```
sudo apt-get update
sudo apt-get install ffmpeg
To verify:
ffmpeg -version
```

Installing on Fedora

```
sudo dnf install ffmpeg
To verify:
ffmpeg -version
```

Installing on Arch

```
sudo pacman -S ffmpeg
To verify:
ffmpeg -version
```

Windows

Follow next few steps on how to install ffmpeg on Windows.

- Go to https://ffmpeg.zeranoe.com/builds/ and press *Download Build* button, but don't forget to choose your version of Windows before (32-bit or 64-bit).
- Extract zip file into new folder with name FFmpeg into the Disc (C:)
- Now, we need to enable ffmpeg in the command line. To do so:
 - o in the File Explorer right click on This PC and open Advanced system settings; choose Environment Variables;
 - o double click on *Path* variable:
 - o click *New* and type in *C:\FFmpeg\bin* into the text field and click *Ok*.

To verify, open Command Prompt in administrator mode and type in:

```
ffmpeg -version
```

Mac

Follow next few steps on how to install *ffmpeg* on Mac. The easiest way to install *ffmpeg* on Mac is with Homebrew.

If you don't have Homebrew installed, use following command in *Terminal* (zoom in and copy-paste):

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Once Homebrew is installed type in *Terminal* following:

```
brew install ffmpeg
```

To verify:

ffmpeg -version

Command to transform video into set of images

It is very easy to extract images from video file by *ffmpeg* and following command:

```
ffmpeg -i filename -vf fps=4 image-%d.jpeg
```

Where,

- filename is the name of video file
- fps=4 is a number of images to get from every one second of video
- **image-%d.jpeg** is a template for images' names; the names will start from *image-1.jpg*, *image-2.jpg*, *image-3.jpg* and so on

- o if we use **image-%2d.jpeg**, then we will see names like *image-01.jpg*, *image-02.jpg*, *image-03.jpg* and so on
- o if we use **image-%3d.jpeg**, then we will see names like *image-001.jpg*, *image-002.jpg*, *image-003.jpg* and so on

Useful Links

Check out additional links with official and other useful resources for installing and using ffmpeg command line tool:

- [1] FFmpeq official resource with full description
- [2] <u>PyPi package</u> python package to install *ffmpeg* with *pip*
- [3] <u>Download ffmpeg</u> officially recommended packages and executable files for installation on Linux, Windows and Mac
- [4] <u>ffmpeq Documentation</u> *ffmpeg* documentation of usage