MyScreenRecorder

To capture your desktop screen and audio devices.

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Introduction

1 Context

Under Windows, I could not (or did) find simple free software to make screenshots and audio as video. Very useful for tutorials for example.

There are some free but the recording time is limited or there is a watermark inserted at the beginning and end of the recording. Others generate uncompressed (very large) avi files with a size limit of 2 GB.

Under Linux, I know at least 2:

- RecordMyDesktop => http://recordmydesktop.sourceforge.net/downloads.php

- SimpleScreenRecorder => https://www.maartenbaert.be/simplescreenrecorder/

Although my software can run under Linux, I will focus instead on its use on Windows. I provide all the operating modes and scripts to make it work also under Linux, without details.

2 Software architecture

Important: I will describe an installation of **myscreenrecorder** under the directory of your choice :

C:\opt\myscreenrecorder

D:\opt\myscreenrecorder

If we respect the names described below, we will not have to touch the launch scripts.

2.1 ffmpeg

This is the heart of the myscreenrecorder tool, the ffmpeg video processing framework is also capable of capturing screen and audio, but online commands can become very complex.

For the Windows version, it is necessary to take the static binary version (ie including all the libraries) => The download site is here => https://ffmpeg.zeranoe.com/builds/win64/static/ffmpeg-latest-win64-static.zip

Note that with Linux, it is better to use the ffmpeg package specific to your distribution. I had problems with the static version.

Unzip under **\opt** (under C: or D: as appropriate); the directory must be called **\opt\ffmpeg-latest-win64-static**

2.2 openjdk11

I'm using openjdk 11.0.2 for this version of **myscreenrecorder** to download here => https://download.java.net/java/GA/jdk11/9/GPL/openjdk-11.0.2_windows-x64_bin.zip

Unzip under **\opt** (under C: or D: as appropriate); the directory must be called **\opt\jdk-11.0.2**

2.3 openJFX11

I'm using openJFX-SDK 11.0.2 for this version of **myscreenrecorder** to download here => http://gluonhq.com/download/javafx-11-0-2-sdk-windows/

Unzip under **\opt** (under C: or D: as appropriate); the directory must be called **\opt\javafx-sdk-11.0.2**

2.4 myscreenrecorder

This is the current application which is a **ffmpeg** graphic front end for recording the screen and possibly audio through a microphone or through the speakers used (headphones or pc specific).

In addition to the software already mentioned, I also use a library (provided with the github package) interface JNI **JnativeHook** available here => https://github.com/kwhat/jnativehook/releases/download/2.1.0/jnativehook-2.1.0.zip

INSTALLATION

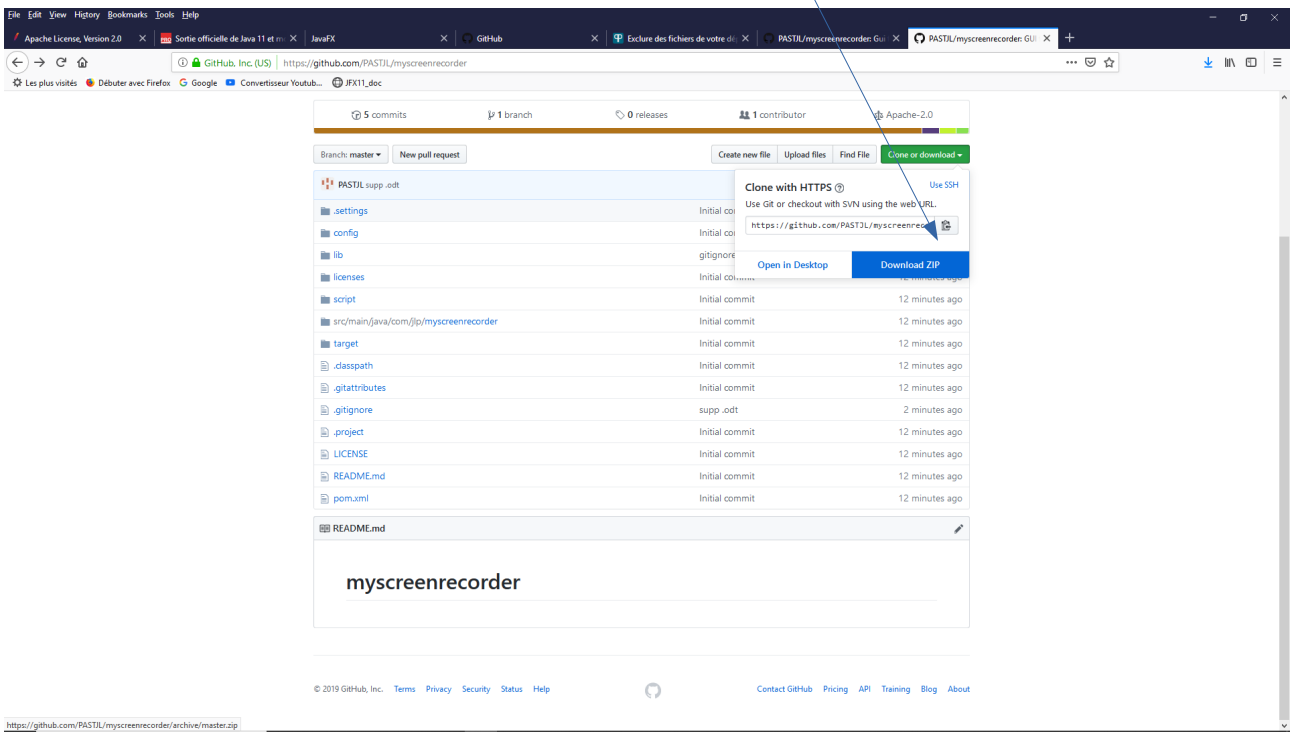
3 Procedure

It is assumed that **ffmpeg, openjdk** and **openjfx** have been installed according to paragraph 2 above under the directory (**C:** ou **D:**) **\opt**

3.1 Download Github archive

Go to the site Github to retrieve the zip archive of the project :

https://github.com/PASTJL/myscreenrecorder



3.2 Creation of application folder and extraction

Create a directory (**C:** ou **D:)\opt\myscreenrecorder**

Extract from downloaded zip file (**myscreenrecorder-master.zip**) the directories :

- **lib**
- **script**
- **config**

- **licences**
- **manuals**

  into the directory (**C:** or **D:**)**\opt\myscreenrecorder**

Create a shortcut on the desktop of the file :

(**C:** or **D:**)**\opt\myscreenrecorder\script\myscreenrecorder.cmd**

and associate the icon (**C:** or **D:**)**\opt\myscreenrecorder\script\myscreenrecorder.ico**

3.3 Creation of directory for video output

Create a directory (**C:** or **D:**)**\opt\screenRecordVideos**

3.4 Configuration of audio devices

This is the most delicate part of the installation.

In my case in addition to the microphone and speakers built into the pc, I use a headset with microphone.

There are therefore several possible interfaces, but only one must remain active during the recording.

To prevent errors, make a backup copy of the file **\opt\myscreenrecorder\config\ config.properties**

With a text editor (notepad, wordpad ...) open the file **\opt\myscreenrecorder\config\ config.properties**

```
# .\ffmpeg -list_devices true -f dshow -i dummy
#  choose the alternative name to avoid accent problems and Don't forget to escape anti slash if present in the name of the device
#USB 2
#win_devmicroCasque="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{C3C6F4F9-FAE9-41BF-A18A-6A90BB262BEA}"

#USB1
# Debut des lignes à modifier
win_devmicroCasque="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{0764C06E-1C55-44E7-B6F1-0D138DEA352A}"

win_devspeakerpc="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{4B0B786F-15F0-4233-818D-FFC7077ACDED}"
win_devmicropc="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{A53D5F12-6864-4A6C-B6E1-D21EC139A79B}"
# You must determine what is the alsa audio header input for me hw:2,0 and the same for the native speakers
lin_devmicroCasque="hw:2,0"
lin_devspeakerpc="TODO"
win_list_audio=None;microCasque;speakerpc;micropc;
lin_list_audio=None;microCasque;

#Fin des lignes à modifier
```

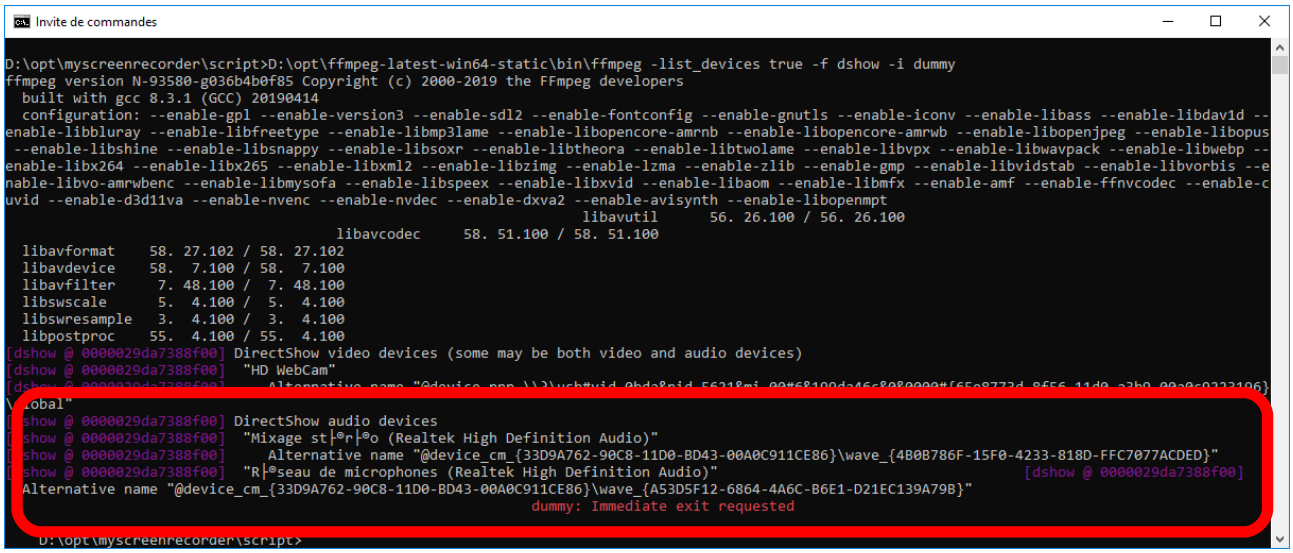
The lines to be edited are highlighted in yellow, we are only interested in the Windows part.

3.4.1 Microphone case and built-in speakers

In this case, it will be necessary to find the values **win_devspeakerpc** et **win_devmicropc** .

For that, go to the directory **\opt\myscreenrecorder\script**

Launch .**searchAudioDevices.cmd** we get this type of output:



Note for Linux, the command to launch is arecord -l, and the interface is of type hw: 1,0 (1 and 0 to adapt according to the rank of the card and device , see https://trac.ffmpeg.org/wiki/Capture/ALSA)

What will interest us are the audio interfaces circled in red:

In our case we will have to fill the value of the **alternative name to avoid accented character problems.**

Speakers:

win_devspeakerpc="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{4B0B786F-15F0-4233-818D-FFC7077ACDED}"

Important, in our case, it will double the anti-slash before wave (and possibly elsewhere if it is present) otherwise the interface is not recognized.

PC microphone:

win_devmicropc="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{A53D5F12-6864-4A6C-B6E1-D21EC139A79B}"

Important, in our case, it will double the anti-slash before wave (and possibly elsewhere if it is present) otherwise the interface is not recognized.

And then the list of audio devices must be:

win_list_audio=None;speakerpc;micropc;

Save the modified file \opt\myscreenrecorder\config\config.properties

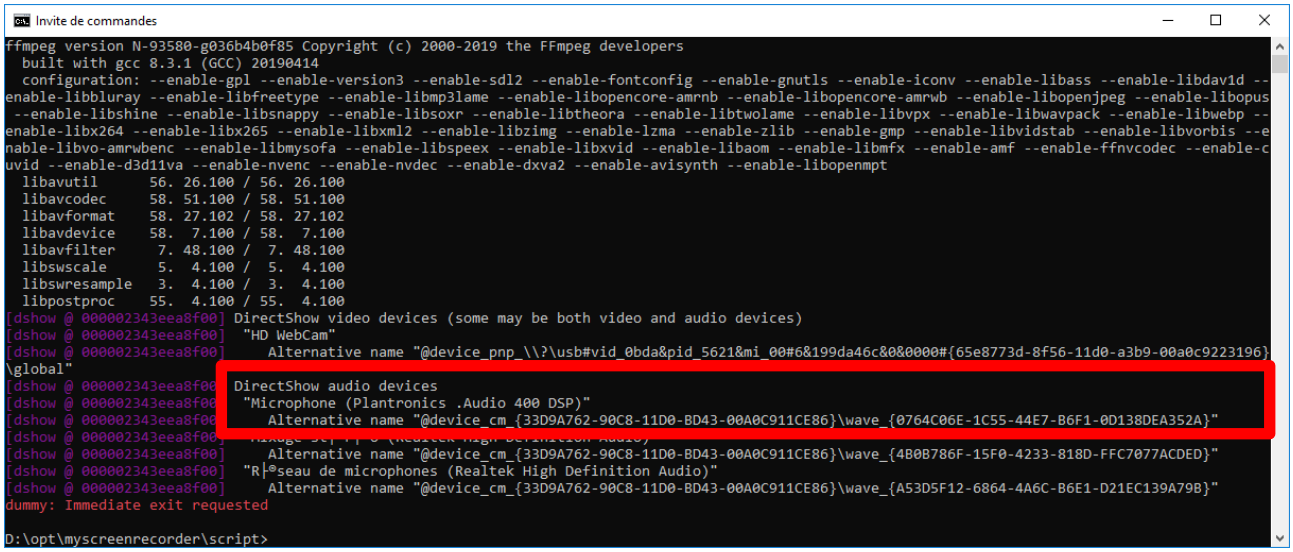
3.4.2 Headset microphone case

If you need a micro USB headset, we will take care to always take the same USB output.

We plug in our micro USB headset, and proceed as described in paragraph 3.5.1.

The output of the command : .**searchAudioDevices.cmd**

is then :



For my Plantronics headset microphone, the microphone is identified and must be set :

win_devmicrocasque="@device_cm_{33D9A762-90C8-11D0-BD43-00A0C911CE86}\\wave_{0764C06E-1C55-44E7-B6F1-0D138DEA352A}"

Important, in our case, it will double the anti-slash before wave (and possibly elsewhere if it is present) otherwise the interface is not recognized.

And then the list of audio devices must be:

win_list_audio=None;microcasque;speakerpc;micropc;

Save the modified file **\opt\myscreenrecorder\config\config.properties**

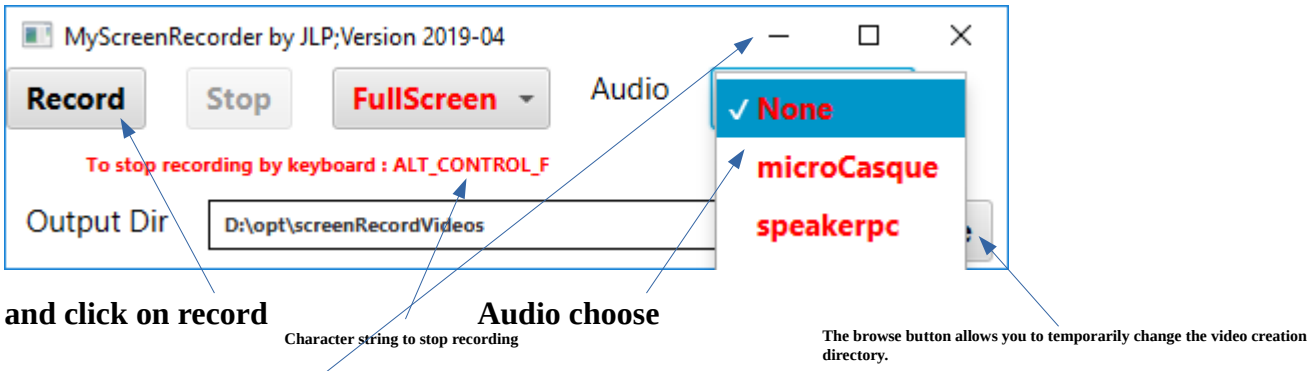
And “voilà” **myscreenrecorder** is ready to run.

Good use …

User Guide

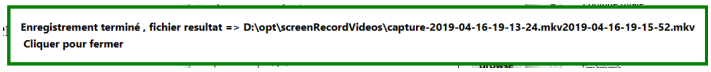
4 Full screen recording

Click on the desktop icon myscreenrecorder then choose your audio output or None



then reduce the window .

To stop, either type in the end-of-record character sequence, or re-call the window in the taskbar and click stop .



The popup shows you the location of the file results that can be seen in our favorite video software (Windows Media Player, VLC, ...).

If you want to change the video output directory permanently, you have to change the outputDir variable in the script **\opt\myscreenrecorder\script\myscreenrecorder.cmd**

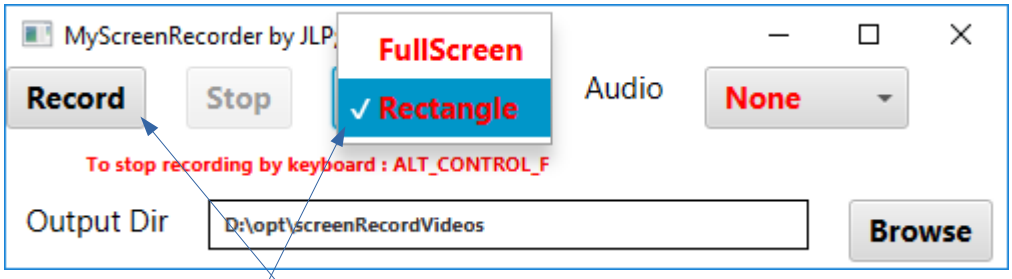
Change the highlighted line to yellow.

```
if exist D:\opt\ (set Disk=D) ELSE (set Disk=C)
Set PROJECT_HOME=%Disk%:\opt\myscreenrecorder
Set outputDir=%Disk%:\opt\screenRecordVideos
Set JAVA_HOME=%Disk%:\opt\jdk-11.0.2
Set JFX_HOME=%Disk%:\opt\javafx-sdk-11.0.2
Set pathffmpeg=%Disk%:\opt\ffmpeg-latest-win64-static
Set CLASSPATH=%PROJECT_HOME%\lib\jnativehook-2.1.0.jar;
```

The video can then be reworked in video editing software such as OpenShot, ShotCut or Kdenlive or other commercial software.

5 Recording rectangular area

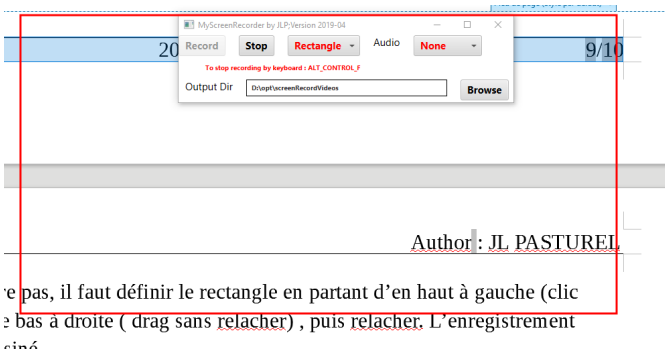
This requires an additional drawing operation of the rectangle to be recorded by drag and drop.



We choose the rectangle, and then as above we can choose the audio interface.

And then we click on record.

The recording does not start, it is necessary to define the rectangle starting from top on the left (left click without releasing) towards the bottom on the right (drag without releasing), then release. The recording starts on the drawn rectangle.



At the end of the recording, it is also indicated the location of the result file.