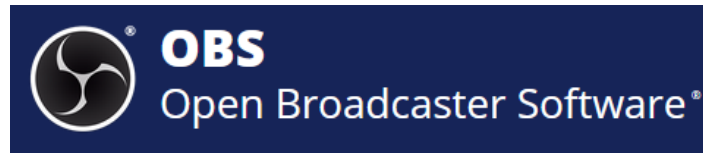




# AT THE EPICENTRE OF THE DIGITAL TRANSFORMATION OF INDUSTRY

2020, November 30 – December 4

## OBS STUDIO: TUTORIAL



### Introduction

OBS, which stands for Open Broadcaster Software, is an open source program widely used to stream broadcasts or to make local recordings of your PC screen (with the option of adding a webcam or other video sources). The software is available for Windows, macOS and Linux and is completely free.

### Installation

Download the program from the downloads section of the official website:

<https://obsproject.com/download>

Depending on your operating system, click on the corresponding icon and follow the instructions (for a typical installation based on the type of operating system you are using)



[Version available as of 24/07/2020:

**MS Windows** release of OBS Studio supports Windows 8, 8.1 and 10: Version: 25.0.8 - Released: April 26<sup>th</sup>

**MacOS** release of OBS Studio supports macOS 10.13 and newer: Version: 25.0.8 - Released: April 26<sup>th</sup>

*The Linux* release is officially available for Ubuntu 18.04 and newer. FFmpeg is required: Version: 25.0.8 - Released: April 26<sup>th</sup>]

[If you do not want to install the program, or you do not have the rights to install it on the computer you want to use, you can download the portable version at this address: [https://portableapps.com/apps/music\\_video/obs-studio-portable](https://portableapps.com/apps/music_video/obs-studio-portable)].

### Initial launch of OBS Studio

Once you have completed the installation of OBS, when you open the program for the first time you should be asked if you would like to proceed with the auto-configuration wizard. If you think it is appropriate to set up OBS in this way, click the Yes button and follow the steps shown on the screen. (This wizard will automatically test your system and try to find the best settings for your machine, for streaming, recording, bitrate, etc).

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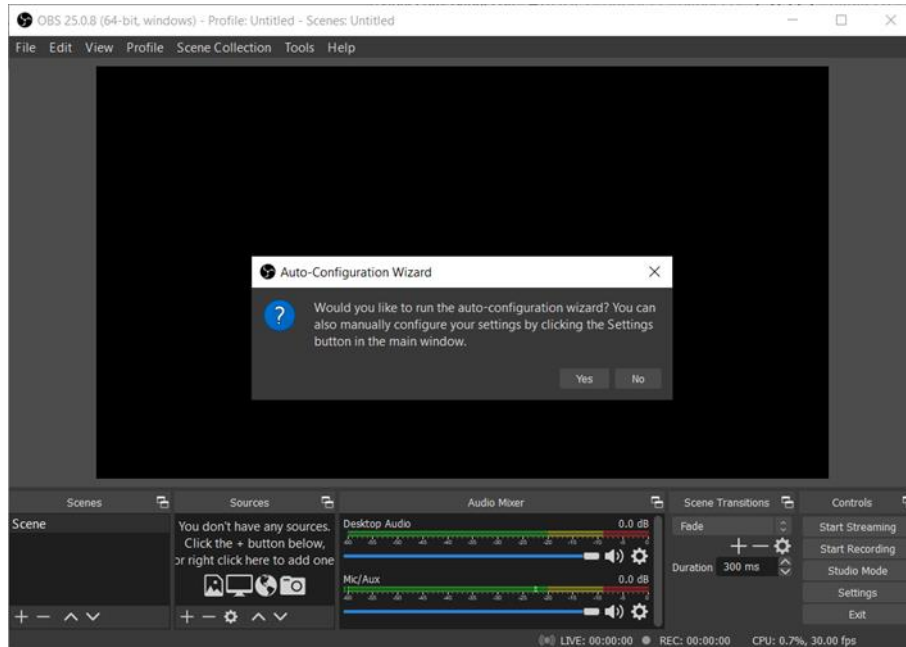
36<sup>th</sup> INTERNATIONAL CAE CONFERENCE AND EXHIBITION

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[www.caeconference.com](http://www.caeconference.com)

Next, you have to select whether to optimize the program for live broadcasts or recordings by placing a checkmark next to the appropriate item (in our case choose for recordings); then click the Next button twice in a row (to select the default resolution and FPS values). Once the settings have been defined, complete the automatic configuration process by clicking the Apply Settings button, and you are done.

We recommend manually setting the audio and video parameters of OBS, in order to achieve optimal performance based on the quality of your Internet connection and screen.



### How to configure OBS to record (screen)

To configure OBS to record: go to the File > Settings menu, click on the Output tab and set the Output mode drop-down menu to Advanced.

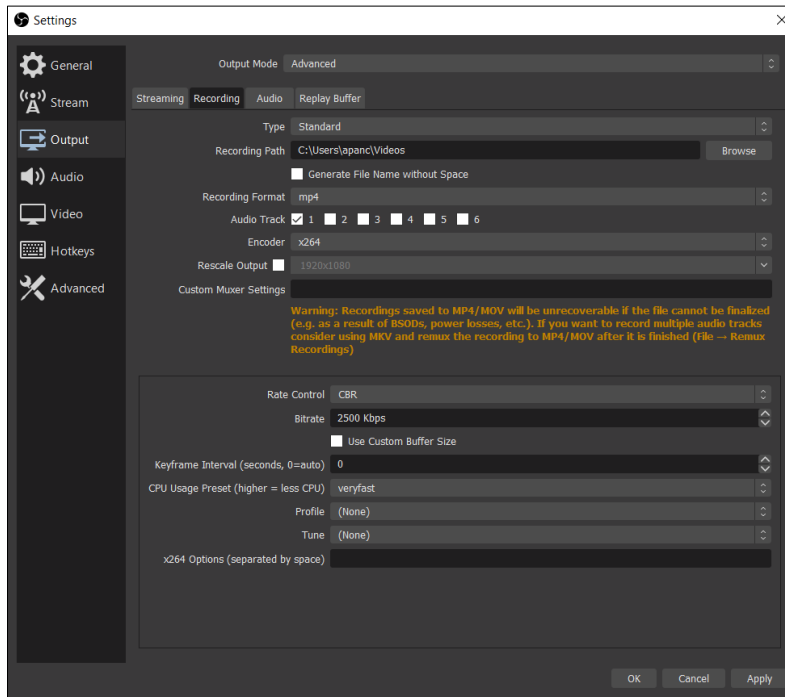
Now, click on the Recording section (just below), set the Type drop-down menu to Standard and, in the Recording path text field, specify the folder in which you want to save the videos made with OBS.

Next, choose the recording format using the drop-down menu. Select the mp4 format, a file type that can be viewed by a large number of devices (including smartphones and tablets).

Almost done. From the Encode drop-down menu, select the x264 value and, if you want to record video at a lower resolution than the one used on your monitor, put a check mark next to Rescale output and select the scale value you think is most appropriate from the drop-down menu immediately adjacent.

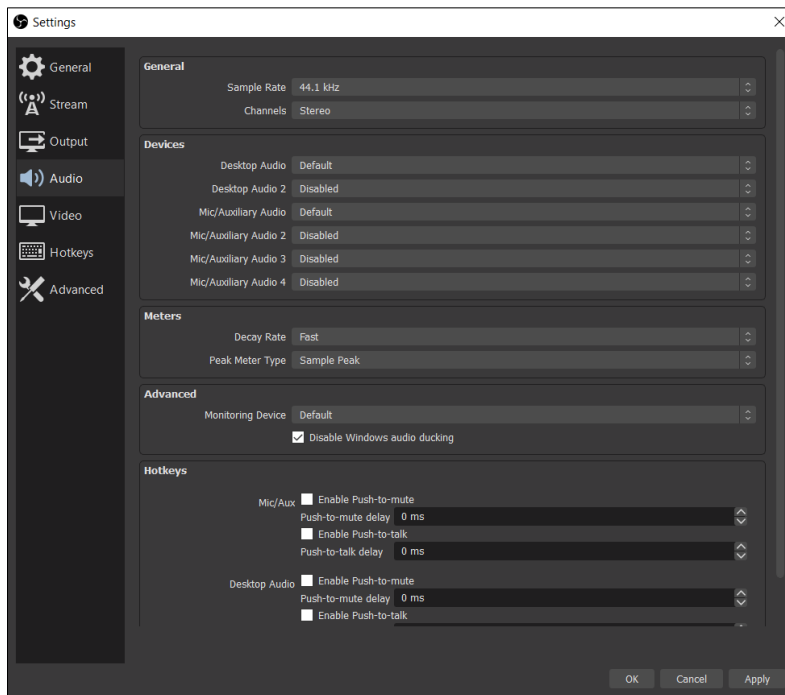
Finally, set the frequency control type to CBR and specify the bitrate to be used for recording within the Bitrate field: a higher value will allow you to use higher resolutions with frame rates of up to 60 fps, but will result in a larger file size (we advise against using very high bitrates, because the resulting file may be enormous). To achieve an ideal 1080p video resolution at 30 fps, set the bitrate to 4,000 kbps or higher.

Example of settings:

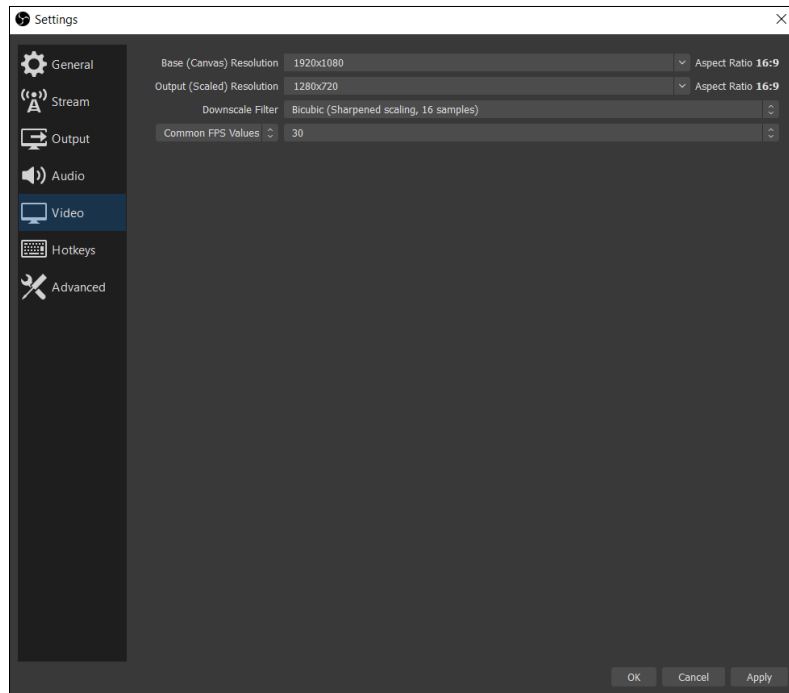


## How to configure OBS to record (audio)

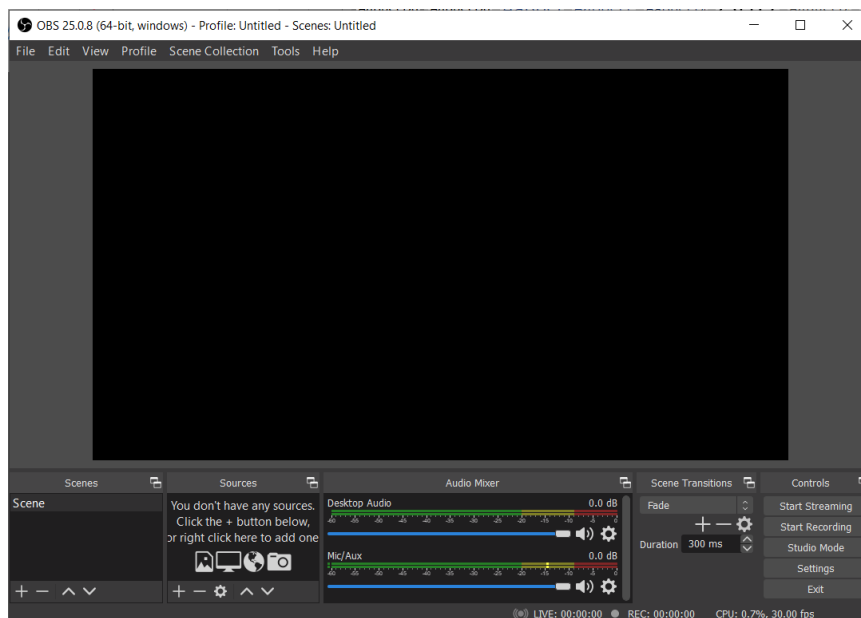
If you also want to record audio (e.g. sounds played back by the system), go to the Audio tab and set Desktop Audio to Default; if you are interested in recording your own voice, do the same on the Audio Microphone/Auxiliary Devices drop-down menu.



To finish, click on the Video tab, set the Scaling Filter drop-down menu to Bicubic or Lanczos (depending on the scaling value you applied), set the value of the common FPS in the appropriate field and, when you are done, click on the Apply button to confirm the settings you've just specified.



Once you've completed this step, you can add the video sources to be recorded by clicking on the [+] button located at the bottom of the Sources pane and, when you're done, click on the Start Recording button to start capturing content. To stop recording, click the Stop recording button.



## How to configure the microphone for OBS

To configure your microphone for OBS to capture its audio when recording/broadcasting content, follow these simple steps.

Firstly, check that the microphone is properly connected to your computer. Next, ensure that the microphone volume is high enough on the main OBS screen: locate the Audio Mixer pane (located at the bottom) and check the Microphone/Auxiliary Devices indicator.

To confirm that it is active, verify that the speaker icon, located just below it, is not colored red and followed by an X; if it is, then click on it to enable audio capture from the microphone again. After that, turn up the capture volume to the necessary level by moving the cursor located to the right of the volume icon.

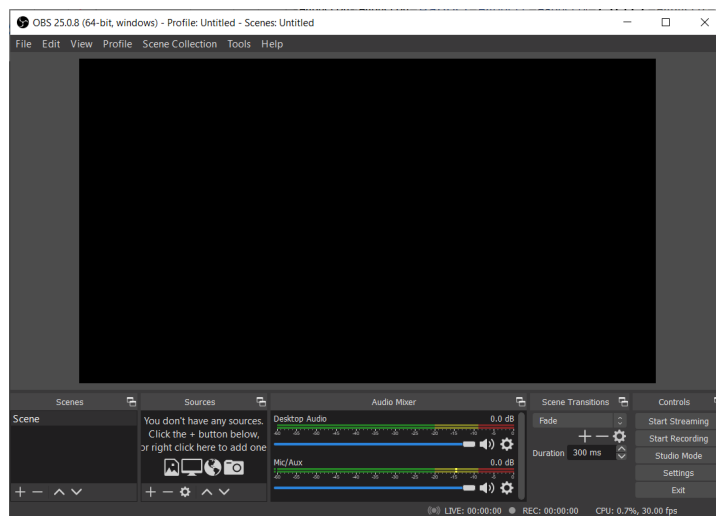
Once this is done, try speaking and check that the frequency lines move up and down according to the sound of your voice.

Should the above steps not produce the desired effect, please try changing the advanced audio settings of the program: to do this, go to the File > Settings menu, click on the Audio tab and, in the Devices section, find the Audio Microphone/Auxiliary Devices drop-down menu.

Once you find it, click on it, and set it to Default, or indicate the name of the sound card the microphone connects to, and then click the Apply button to confirm the changes. From this point onwards, you should also be able to broadcast/record audio from the microphone without any problems.

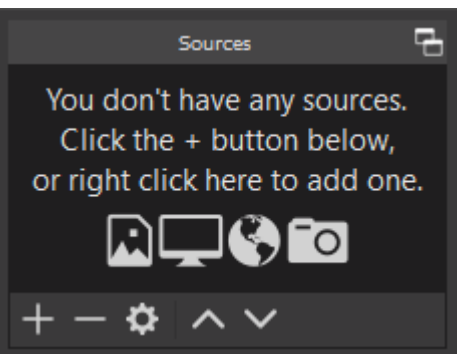




## Let us create our first scene

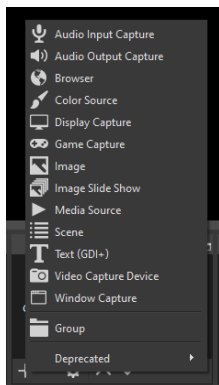
Once the program is open (see picture above) the first step is to create a scene, or rather, the set in which you will record your videos. To create the "film set" you have to create an ad hoc scene. Follow these short steps:



In the top menu click on Scene Collection, and then click on New; (when you open the program, you are already in an empty scene). In the input box that appears, name your scene (use a simple name, since it is only a reference). If you want to create more scenes or film sets in the future, then you will have to create different names for your scenes.

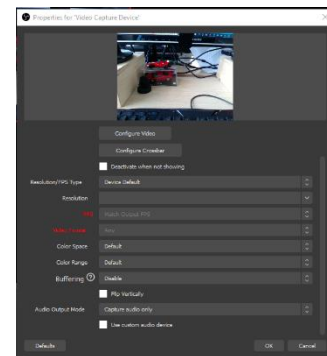
Now it is time to add the elements to your scene. Click on the [+] in the Sources section.

		Let us look at the button functions:
	+	adds items
	-	deletes selected items
	^	moves the source level up the list
	v	moves the source level down the list



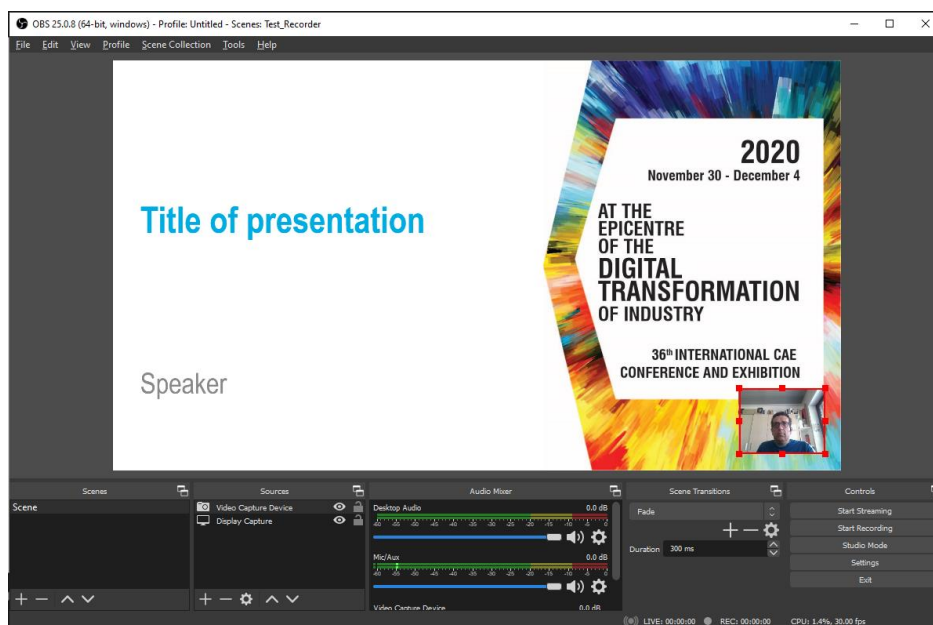
To create a proper scene, you need two elements: the webcam and the screen (the desktop).

Click on Video Capture Device. You can change the name of the device by simply setting it to webcam instead of Video Capture Device. Once this is done, the webcam settings pane will appear; leave all the parameters unchanged for now, except for one: set the Buffering parameter to Disable, so that your webcam does not jerk, and the video is smoother.



After clicking OK, resize and move the webcam pane so that it does not overlap the text of the PowerPoint you want to record.

Next, click on + in Sources section and add Display capture, so you have a precise overview of your desktop. Adjust the settings for the windows that appear, remembering to move the various items (in the Sources section) up or down to display them as you wish to see them.



For further tips or troubleshooting, visit: <https://obsproject.com/wiki/OBS-Studio-Quickstart>

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