Proctoring Setup Guidelines

for

International Collegiate Programming Contest

India Preliminary Online contest

2025

Amritapuri | Chennai | Kanpur

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Introduction & Requirements

To ensure fair play and transparency during the ICPC Online Contest, all participants are required to record their **screen, webcam video, and microphone audio** throughout the **3-hour contest** using **OBS Studio**.

This document provides **step-by-step instructions** for installing, configuring, and testing OBS Studio to capture your desktop, webcam, and audio effectively.

Participants must **set up and test the recording system in advance**, preferably **multiple times**, including during the **two scheduled mock contests**, to confirm that everything works correctly.

Please note that **technical support will not be available during the actual contest**, so it is crucial that your setup is fully functional and verified beforehand

Purpose of Recording

The recording serves to maintain fairness and transparency throughout the contest. It ensures that all participants adhere to contest rules and provides a verifiable record of the contest session.

What Will Be Recorded

The following will be captured during the entire contest duration:

- Screen: Your entire primary monitor display including cursor movements
- Webcam: Live video feed from your integrated or external webcam
- Audio: Microphone input to capture any audio during the contest

Duration

The recording must run continuously for the full 3-hour contest duration without interruption. We recommend you start the recording 5 or 10 minutes before the contest starts.

If you finish the contest earlier, you may **stop the recording after you stop the contest**. Please note, once the contest is stopped you **can't** submit problems.

Storage Space & Hardware Requirements

- OS: Windows 10 / Windows 11 / Linux / macOS 11 (Big Sur) or later
- Processor: Intel i5-2500K / AMD Ryzen 1300X or higher (10th Gen Intel i3 or higher is also sufficient); Apple Silicon supported
- Memory (RAM): 8 GB or greater
- Graphics (GPU): DirectX 10.1 (Windows) / OpenGL 3.3 (macOS) or higher; Apple Silicon supported
- Storage Space: 4 GB free (for video recordings) or more
- Display: 1024 × 720 or higher
- Webcam: 720p HD
- Input Devices: Keyboard and Mouse
- Internet: Stable broadband connection

How to set up Recording

Find the detailed instructions to set up the recording based on the operating system that you are using.

- ✓ Windows
- ✓ Mac
- ✓ Linux

—----End of General Instructions—---

Setup Guide for Windows

1. Install OBS Studio

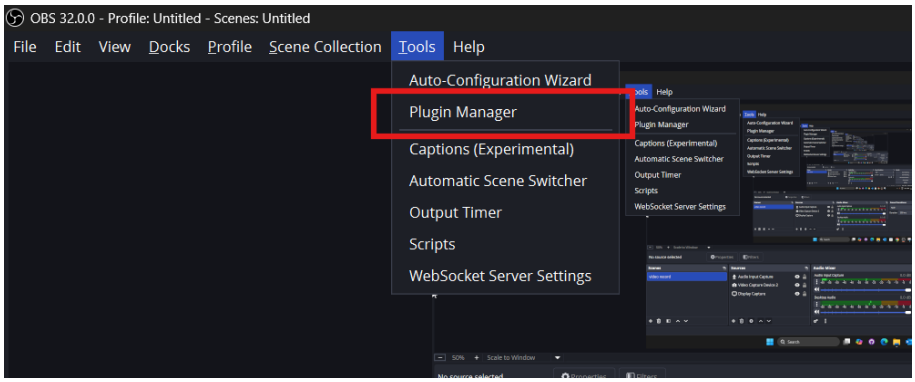
- Download and install OBS Studio (Open Broadcaster Software). Click Here to download OBS for Windows.
- Follow the on-screen instructions to complete the installation.

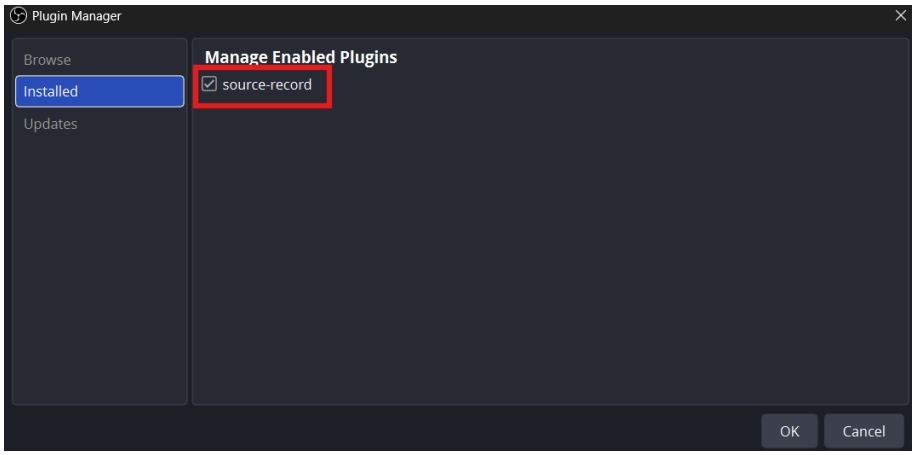
2. Install Python 3.12

- Visit the official Python website and download Python 3.12.0.
- Run the downloaded installer and IMPORTANT: Check the box "Add python.exe to PATH" at the bottom of the installer window before clicking "Install Now".
- Follow the on-screen instructions to complete the installation.

3. Install Source Record Plugin (for Dual Recording)

- Download the Source Record plugin for OBS. Click Here.
- Run the downloaded file.
- The installer will automatically configure the plugin with OBS. No manual configuration is required.
- In OBS, navigate to Tools → Plugin Manager. Locate Source Record in the list and enable it by checking the checkbox.





4. Install Required Python Package

- Open Command Prompt or PowerShell.
- Run the following command: pip install requests

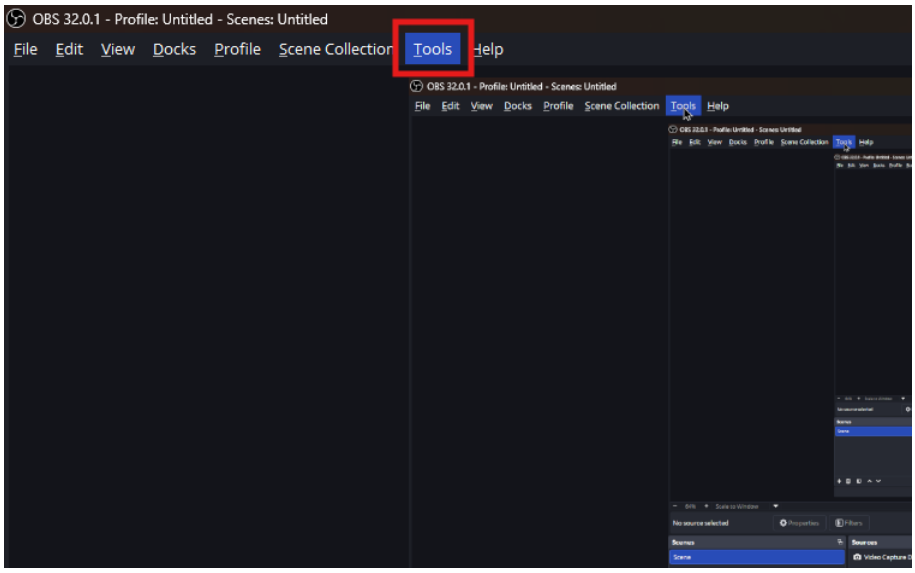
This installs the requests package required for the proctoring scripts.

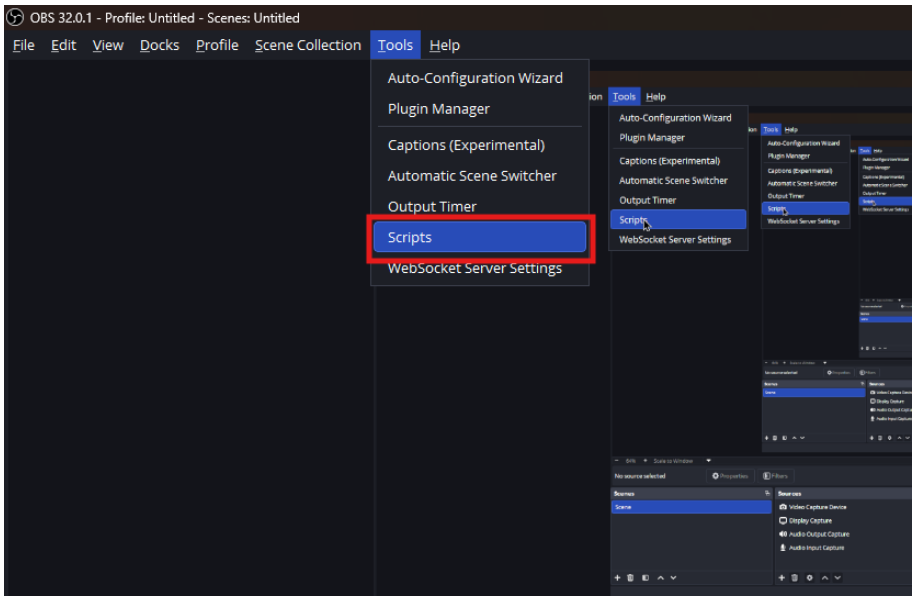
5. Configure OBS Scripts

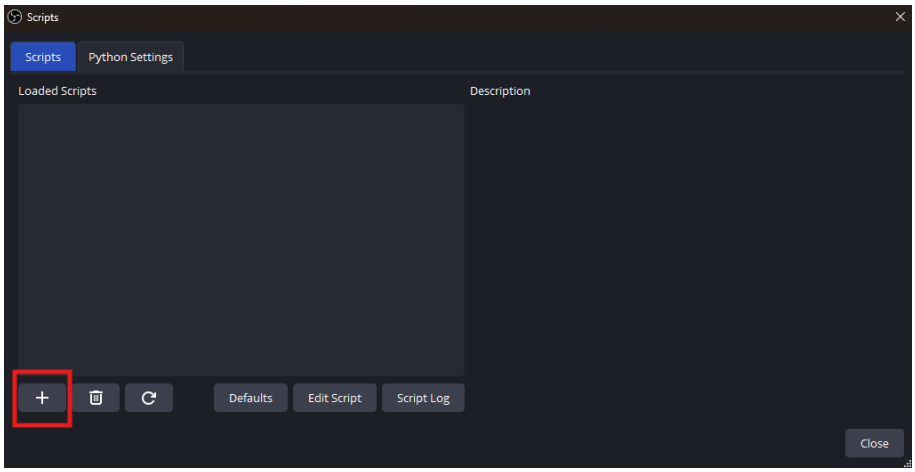
- A `script.py` file will be made available for download on the website (please keep checking https://indiaicpc.in/ and your respective regional sites for updates). This file will need to be configured within OBS.

Instructions:

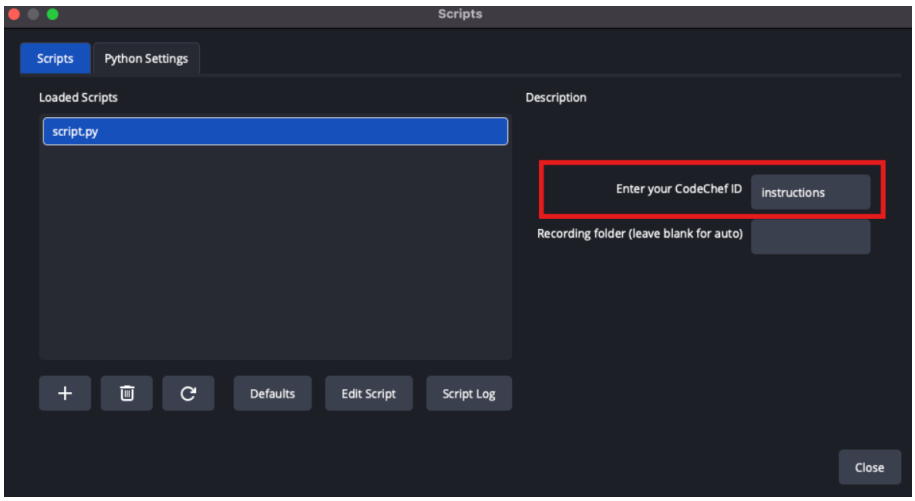
- Go to Tools → Scripts → Click on the + icon → Select the script.py file.



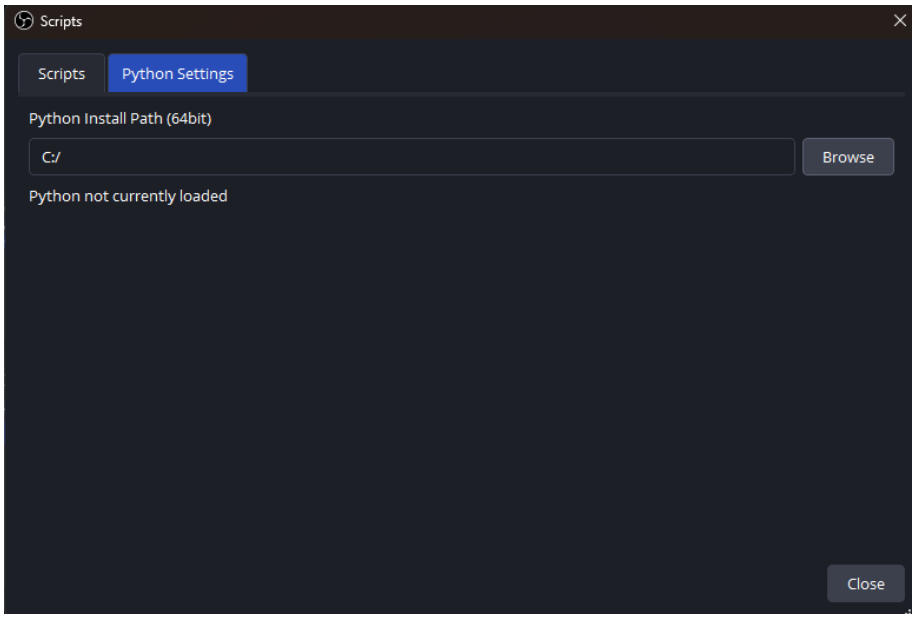




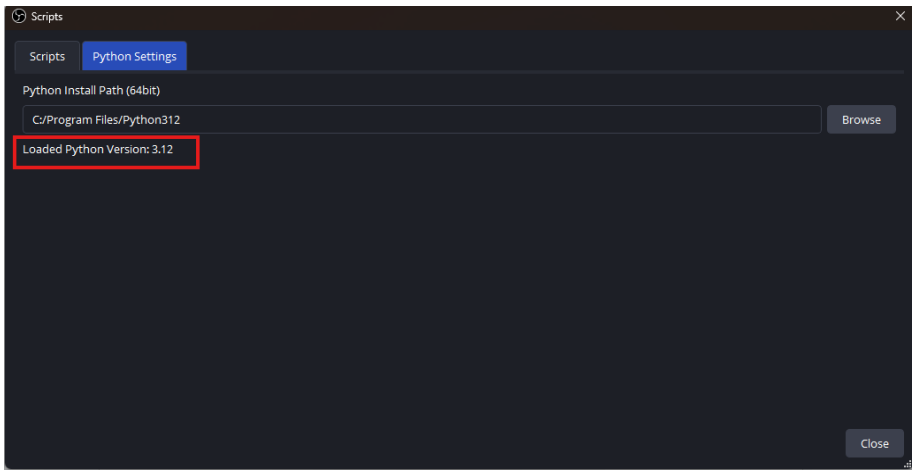
Enter your CodeChef ID



After this, navigate to Python Settings → Select the path where Python bin files are located.

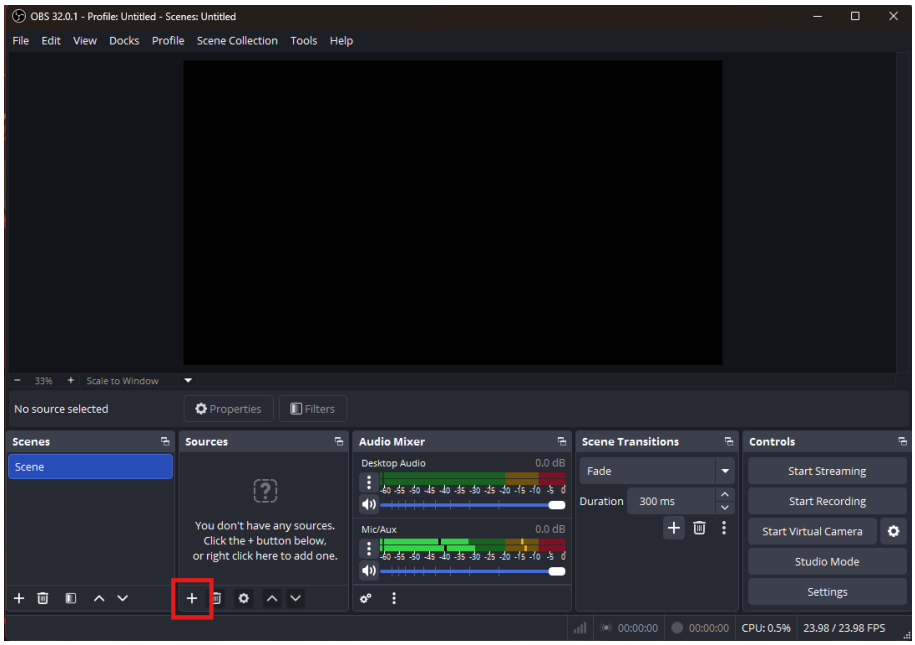


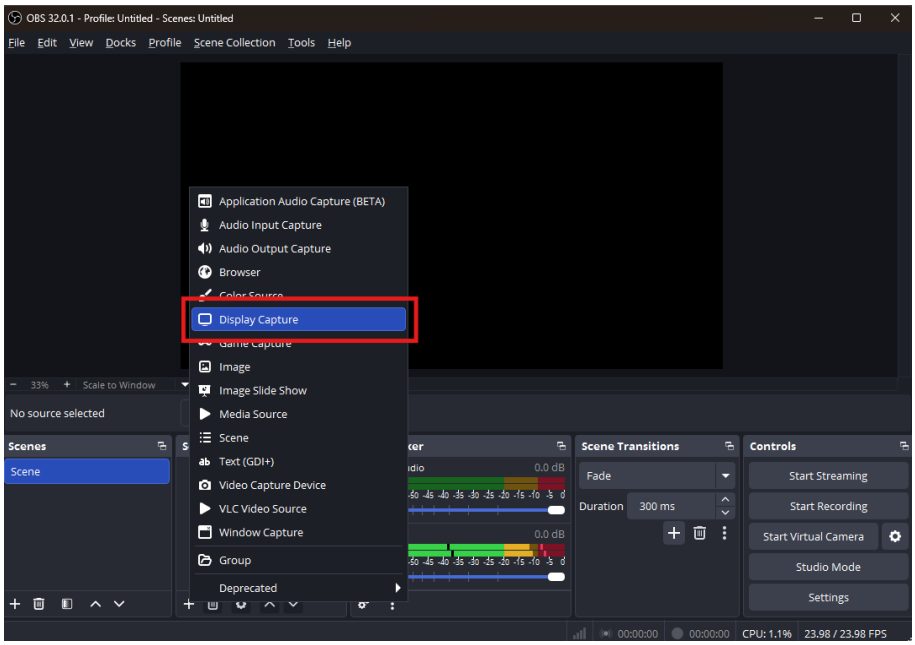
Restart OBS and ensure you see the "Loaded Python Version 3.12" message.

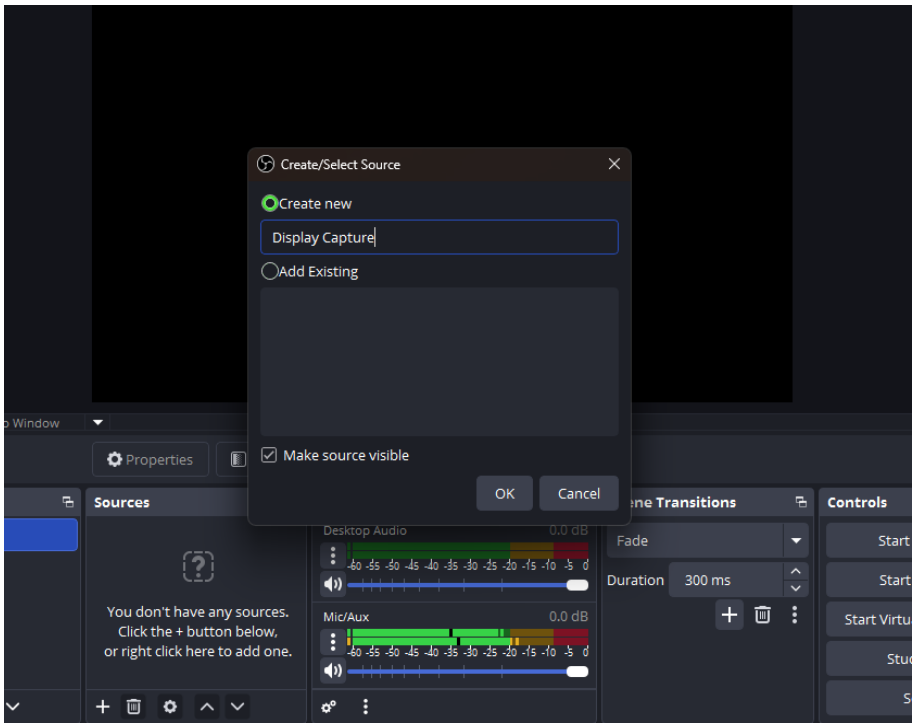


6. OBS Recording Configuration

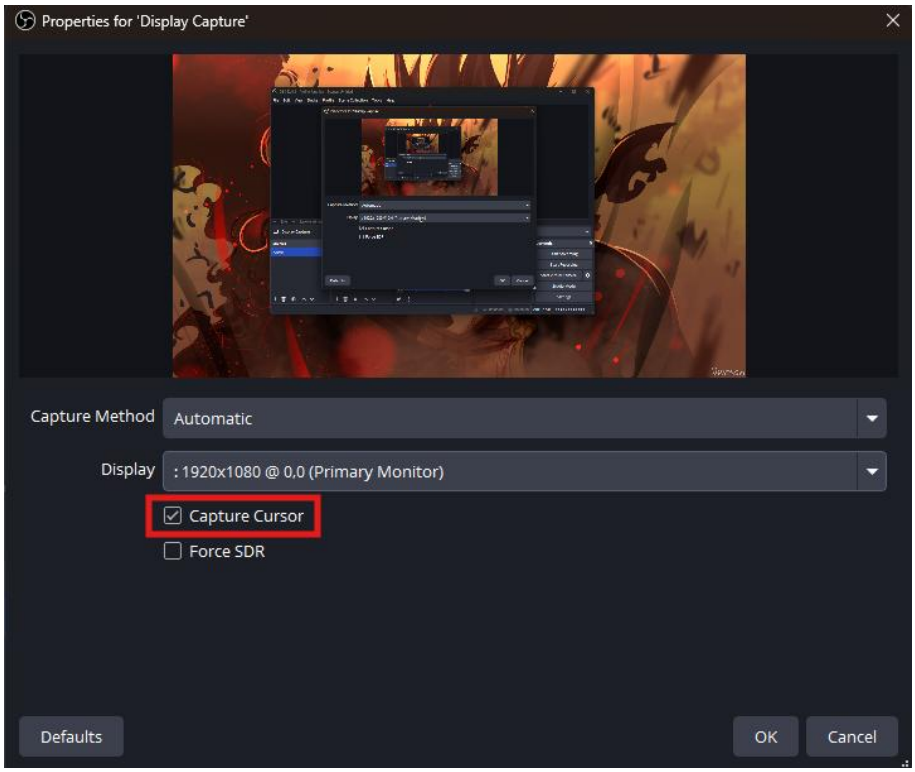
- Screen Recording


OBS 32.0.1 - Profile: Untitled - Scenes: Untitled
File Edit View Docks Profile Scene Collection Tools Help
No source selected
Properties
Filters
Scenes
Scene
Sources
You don't have any sources.
Click the + button below,
or right click here to add one.
Audio Mixer
Desktop Audio
Mic/Aux
Scene Transitions
Fade
Duration
300 ms
Controls
Start Streaming
Start Recording
Start Virtual Camera
Studio Mode
Settings
CPU: 0.5%
23.98 / 23.98 FPS

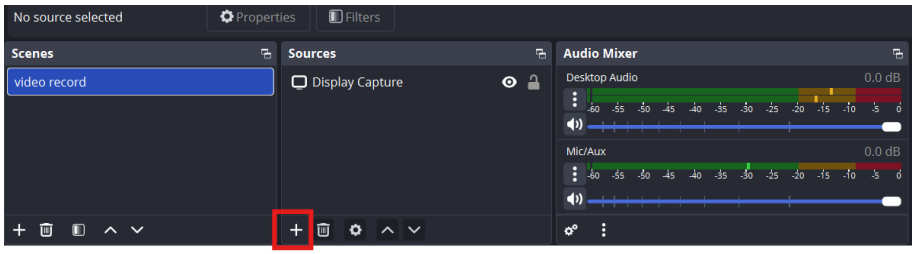

OBS 32.0.1 - Profile: Untitled - Scenes: Untitled
File Edit View Docks Profile Scene Collection Tools Help
Application Audio Capture (BETA)
Audio Input Capture
Audio Output Capture
Browser
Display Capture
Image
Image Slide Show
Media Source
Scene
Text (GDI+)
Video Capture Device
VLC Video Source
Window Capture
Group
Deprecated
No source selected
Scenes
Scene
Scene Transitions
Fade
Duration
300 ms
Controls
Start Streaming
Start Recording
Start Virtual Camera
Studio Mode
Settings
CPU: 1.1%
23.98 / 23.98 FPS

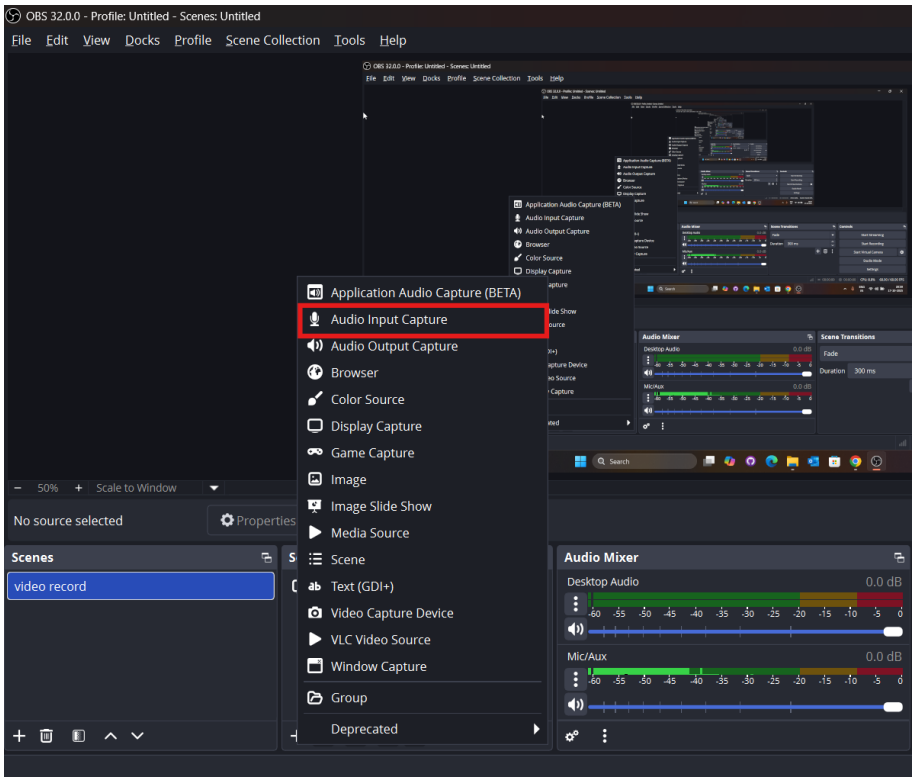


Select your primary monitor and ensure that Capture Cursor is checked.

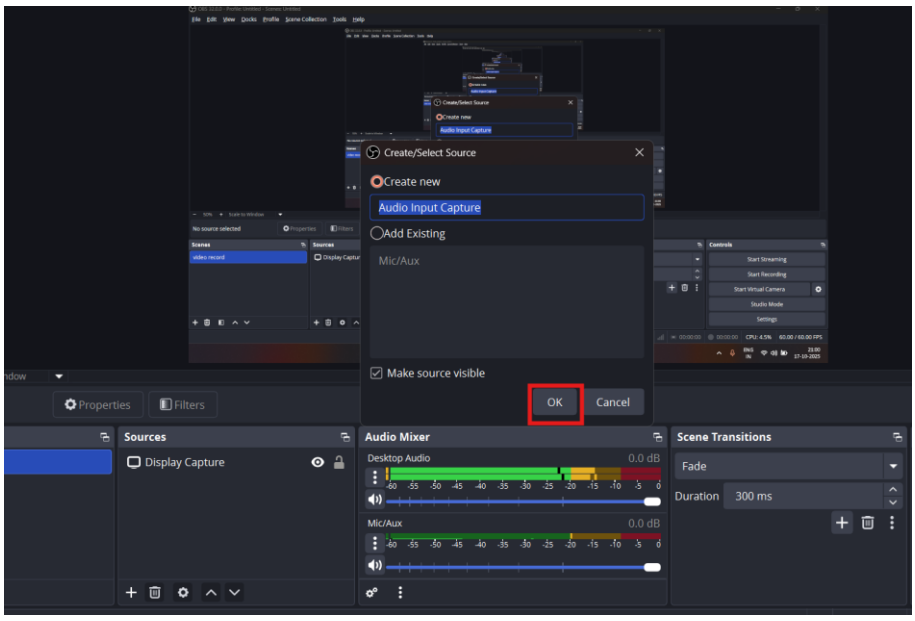


- Audio Capture

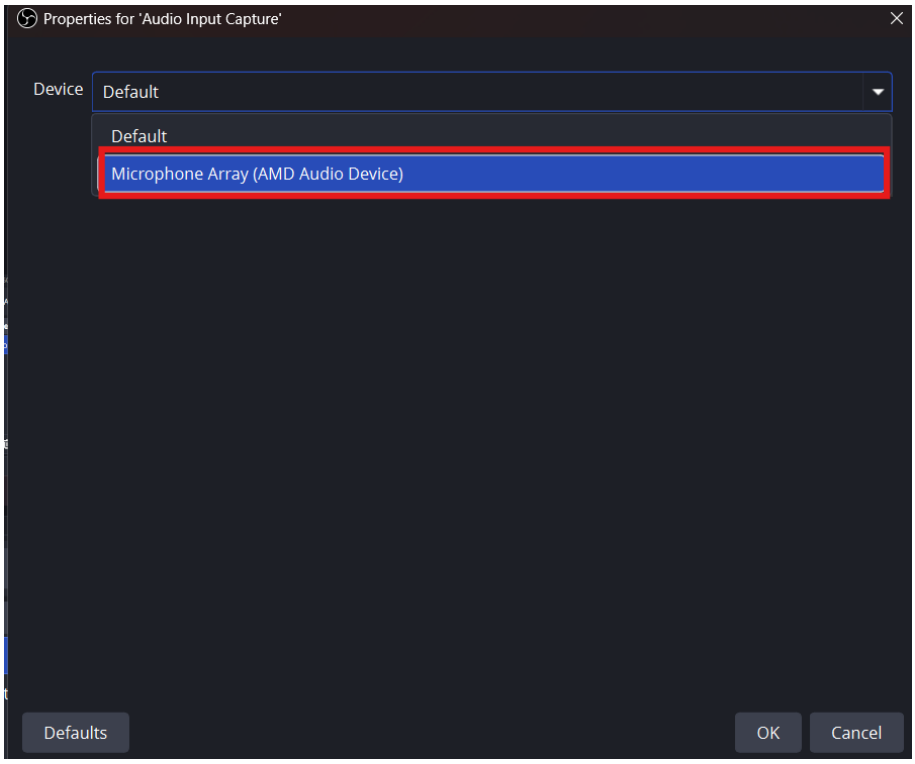

No source selected
Properties
Filters
Scenes
video record
Sources
Display Capture
Audio Mixer
Desktop Audio
0.0 dB
Mic/Aux
0.0 dB


OBS 32.0.0 - Profile: Untitled - Scenes: Untitled
File Edit View Docks Profile Scene Collection Tools Help
Application Audio Capture (BETA)
Audio Input Capture
Audio Output Capture
Browser
Color Source
Display Capture
Game Capture
Image
Image Slide Show
Media Source
Scene
Text (GDI+)
Video Capture Device
VLC Video Source
Window Capture
Group
Deprecated
No source selected
Properties
Scenes
video record
Audio Mixer
Desktop Audio
0.0 dB
Mic/Aux
0.0 dB

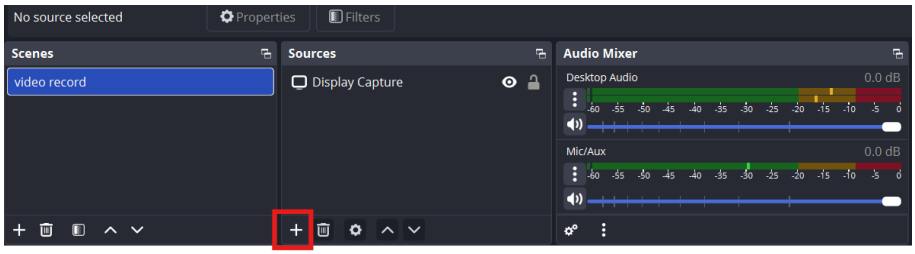
Click on "OK".

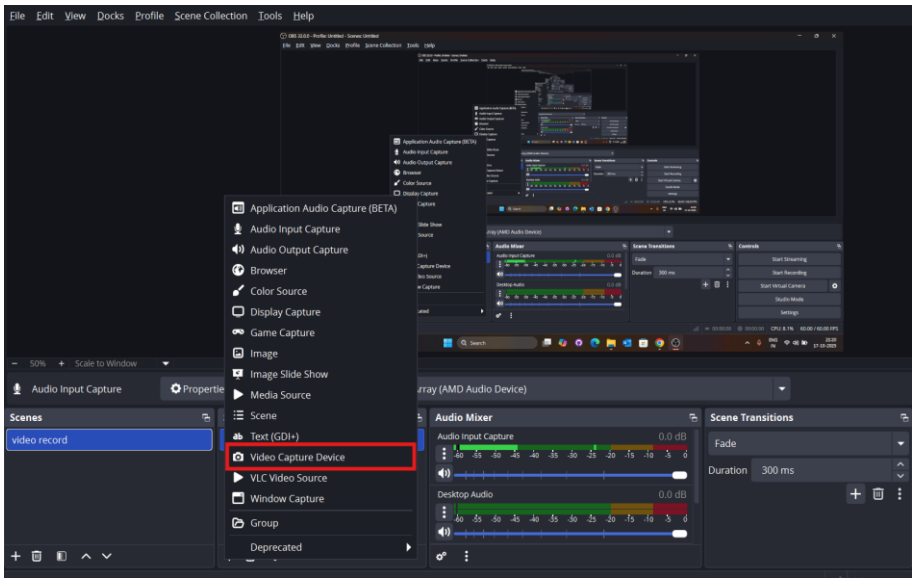

Create/Select Source
Create new
Audio Input Capture
Add Existing
Mic/Aux
Make source visible
OK
Cancel
Properties
Filters
Sources
Display Capture
Audio Mixer
Desktop Audio
0.0 dB
Mic/Aux
0.0 dB
Scene Transitions
Fade
Duration
300 ms

Choose Microphone Array and click OK.

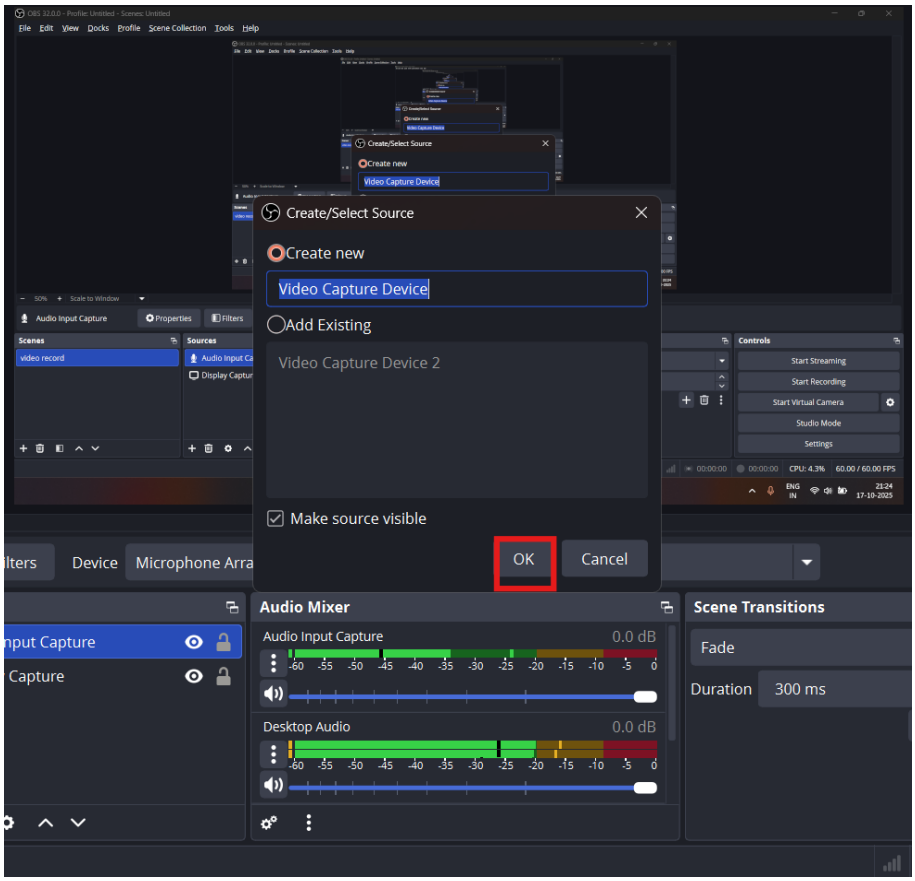


- Video Recording

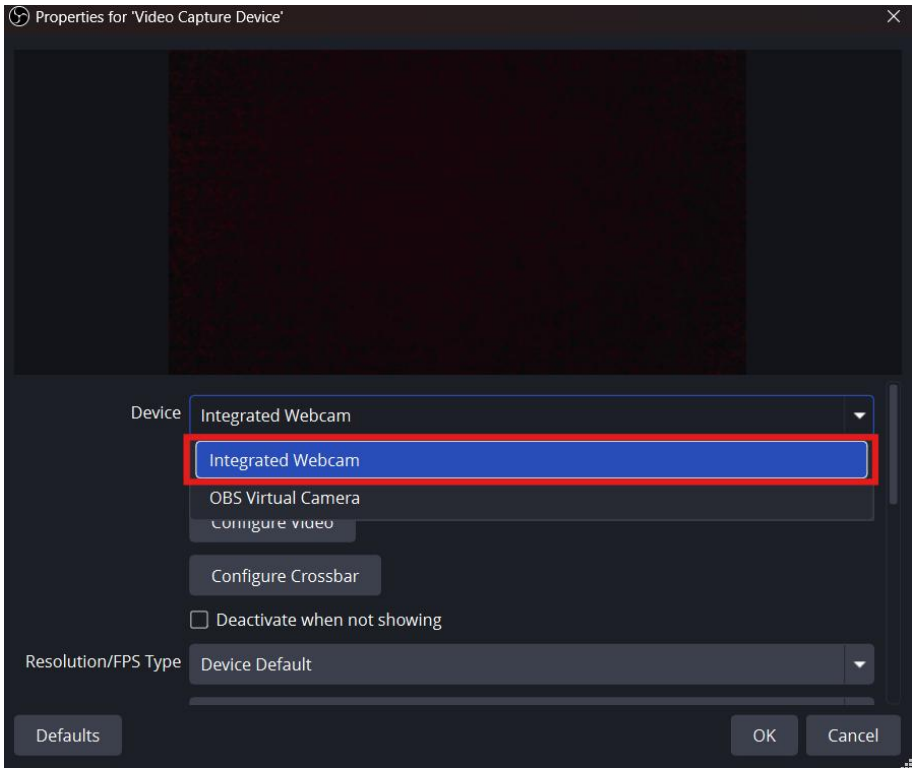




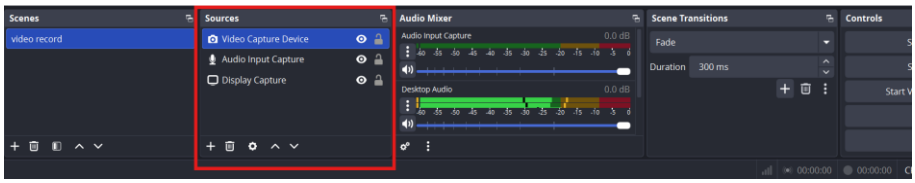
Click on "OK".



Select "Integrated Webcam" and click "OK".

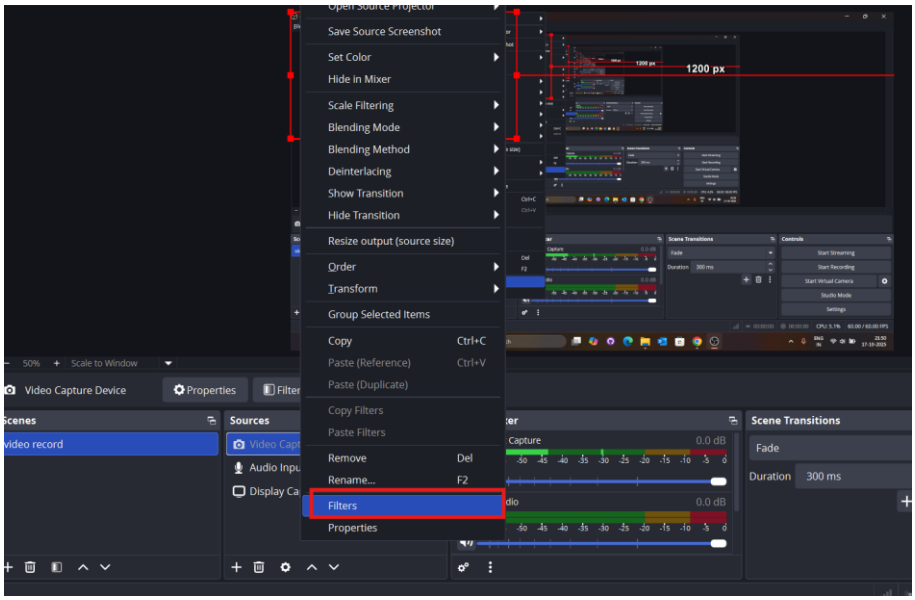


After completing the above three steps, you will see them in the Sources section.

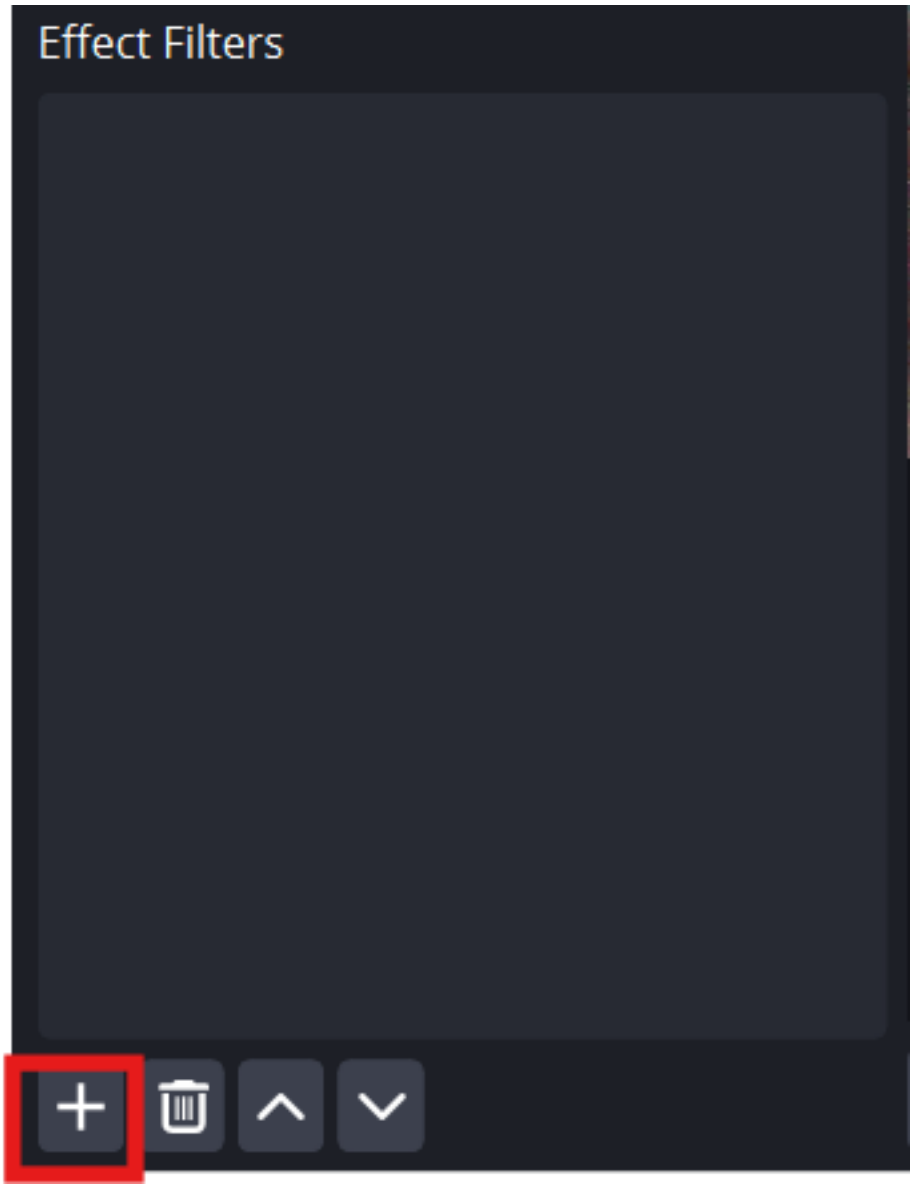


7. Source Record Video Recording Configuration

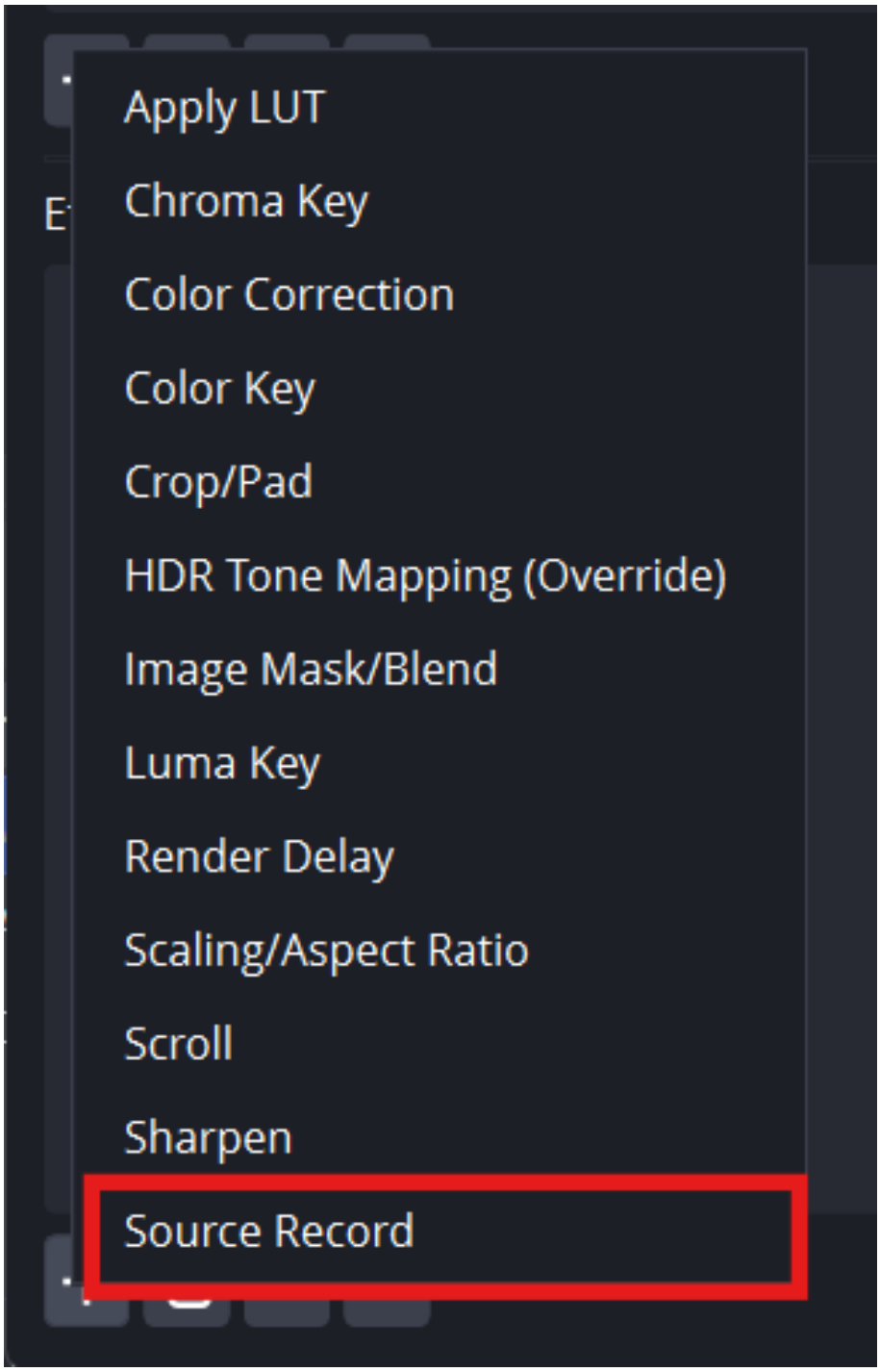
- Right-click on Video Capture Device and select Filters.



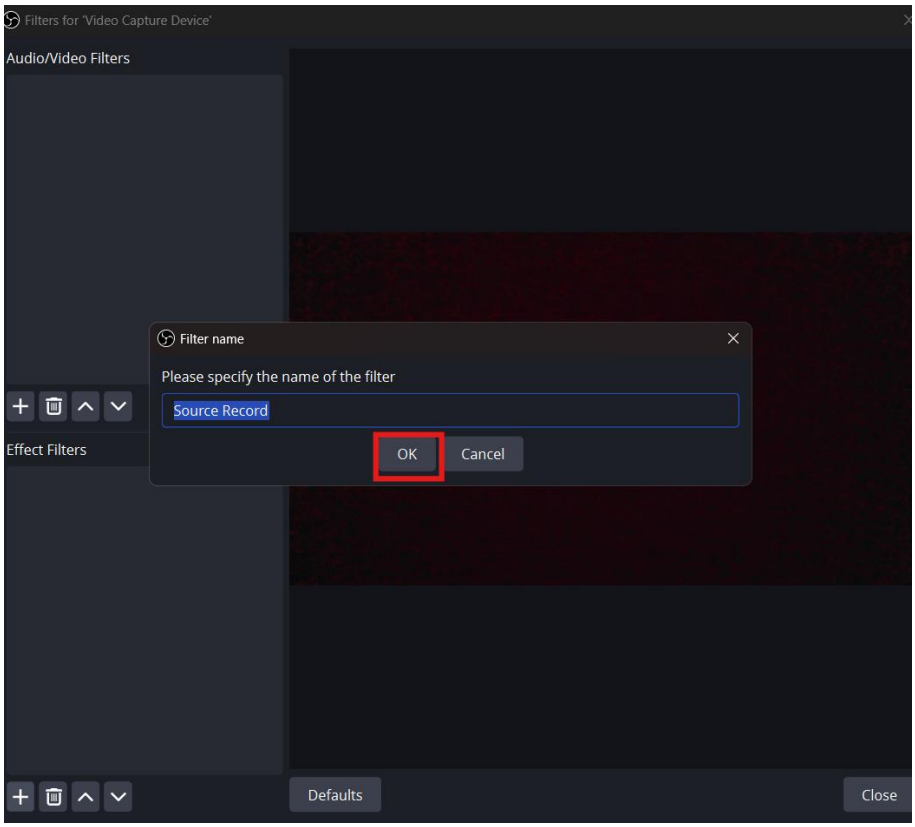
- In the Effect Filters section, click on the + icon.



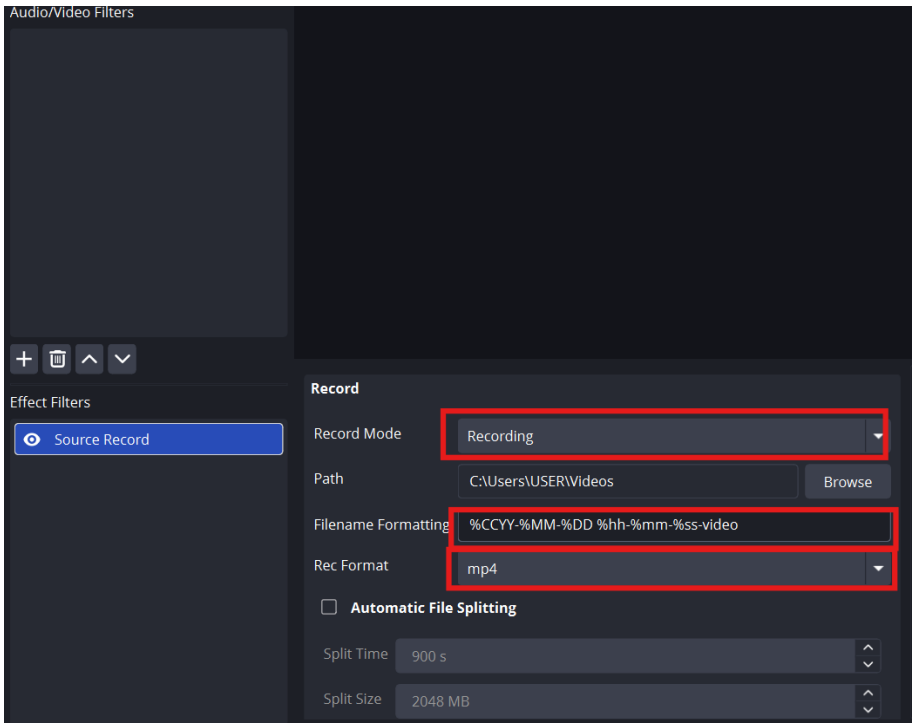
- Select Source Record.

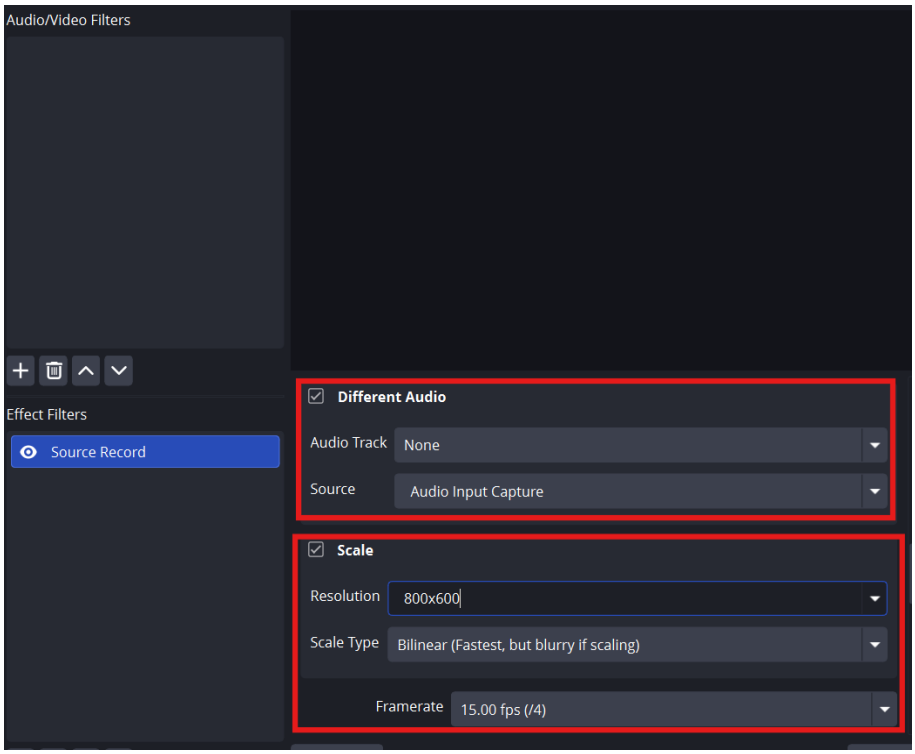

Apply LUT
Chroma Key
Color Correction
Color Key
Crop/Pad
HDR Tone Mapping (Override)
Image Mask/Blend
Luma Key
Render Delay
Scaling/Aspect Ratio
Scroll
Sharpen
Source Record

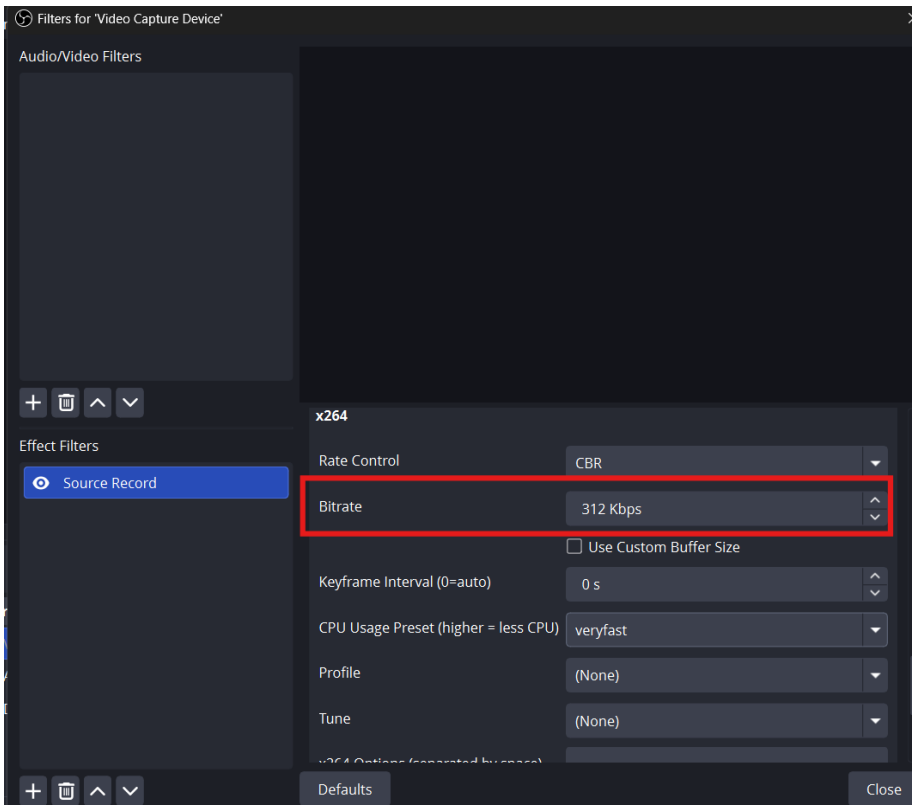
- Click on "OK".

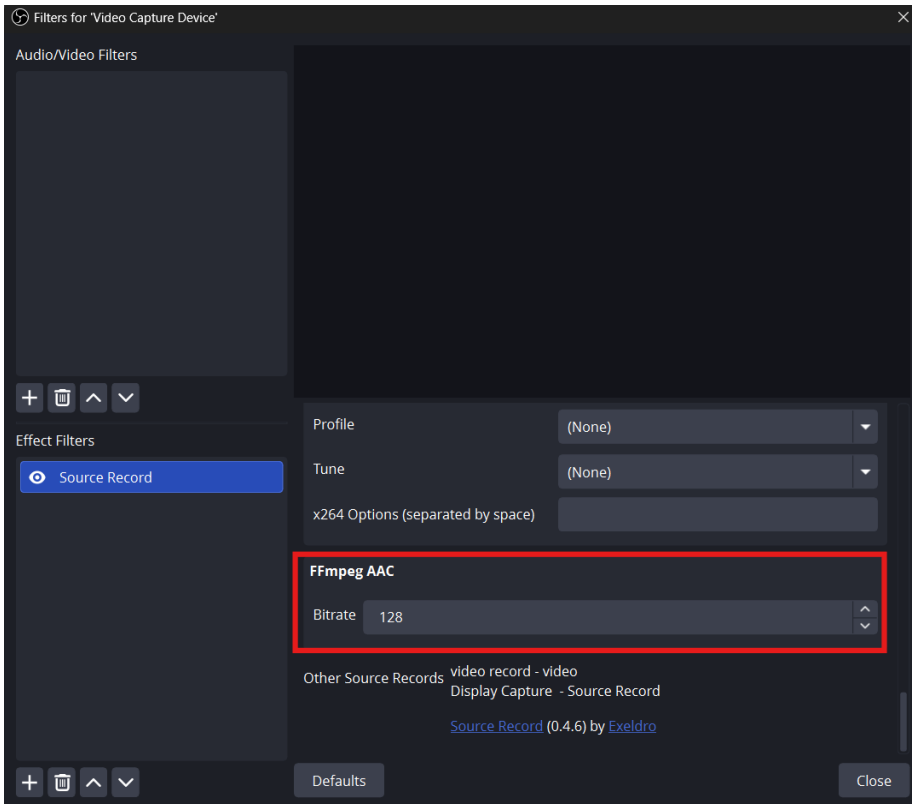


- Double-click Source Record and then copy and configure the following settings carefully:



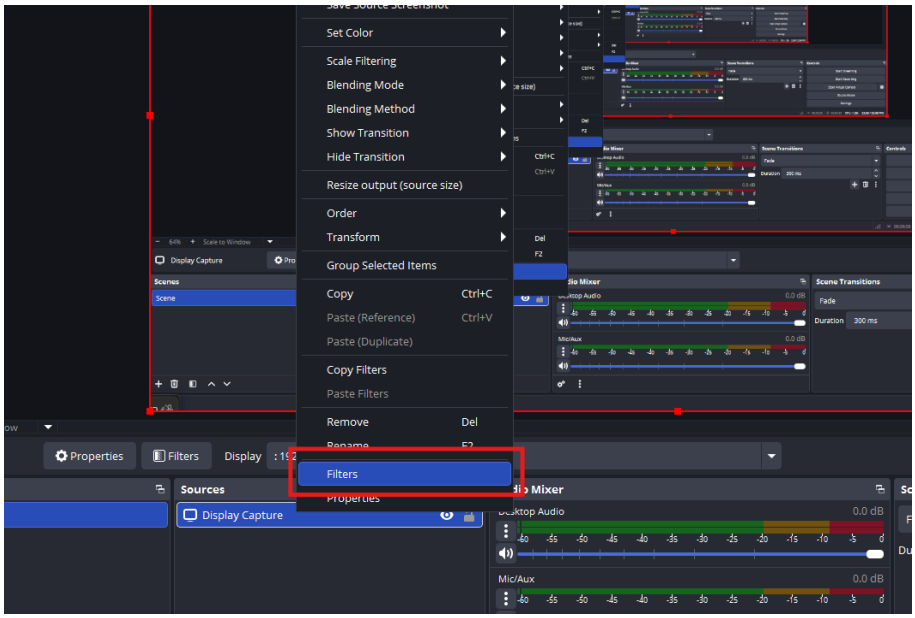

Audio/Video Filters
Effect Filters
Source Record
Different Audio
Audio Track
None
Source
Audio Input Capture
Scale
Resolution
800x600
Scale Type
Bilinear (Fastest, but blurry if scaling)
Framerate
15.00 fps (/4)


Filters for 'Video Capture Device'
Audio/Video Filters
Effect Filters
Source Record
x264
Rate Control
CBR
Bitrate
312 Kbps
Use Custom Buffer Size
Keyframe Interval (0=auto)
0 s
CPU Usage Preset (higher = less CPU)
veryfast
Profile
(None)
Tune
(None)
Defaults
Close

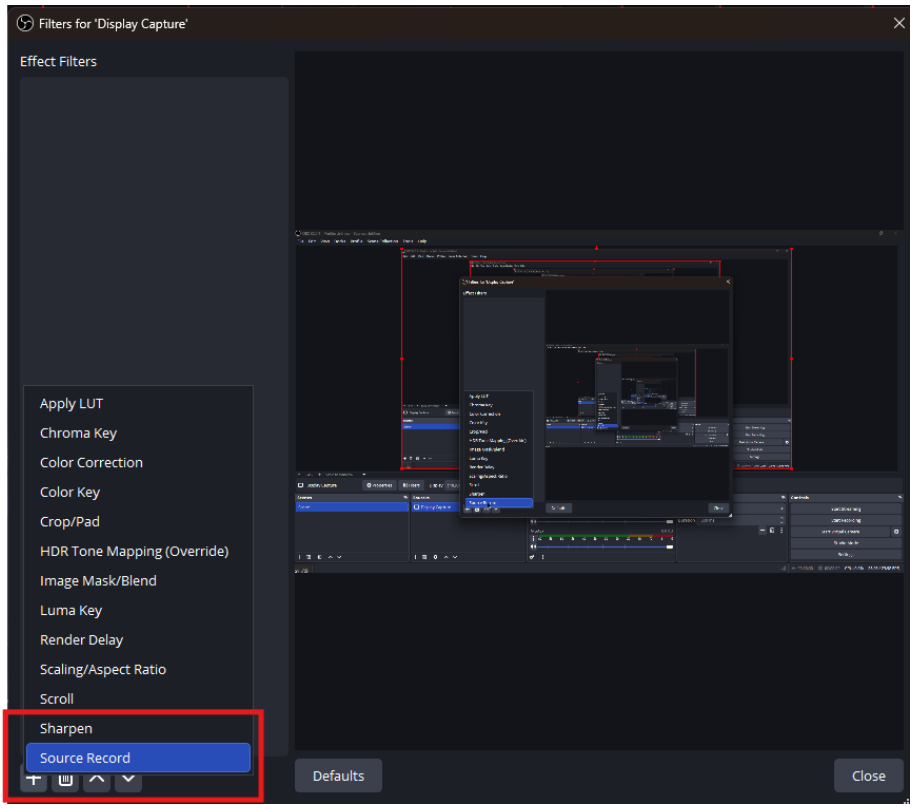


8. Source Record Screen Recording Configuration

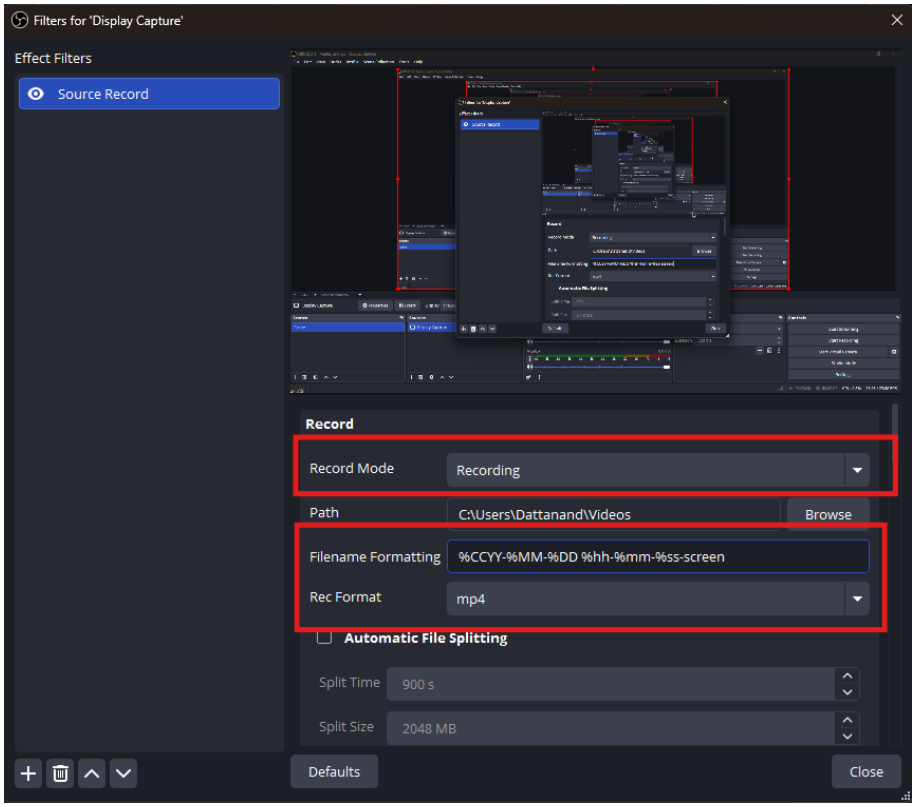
- Right-click on Display Capture and select Filters.

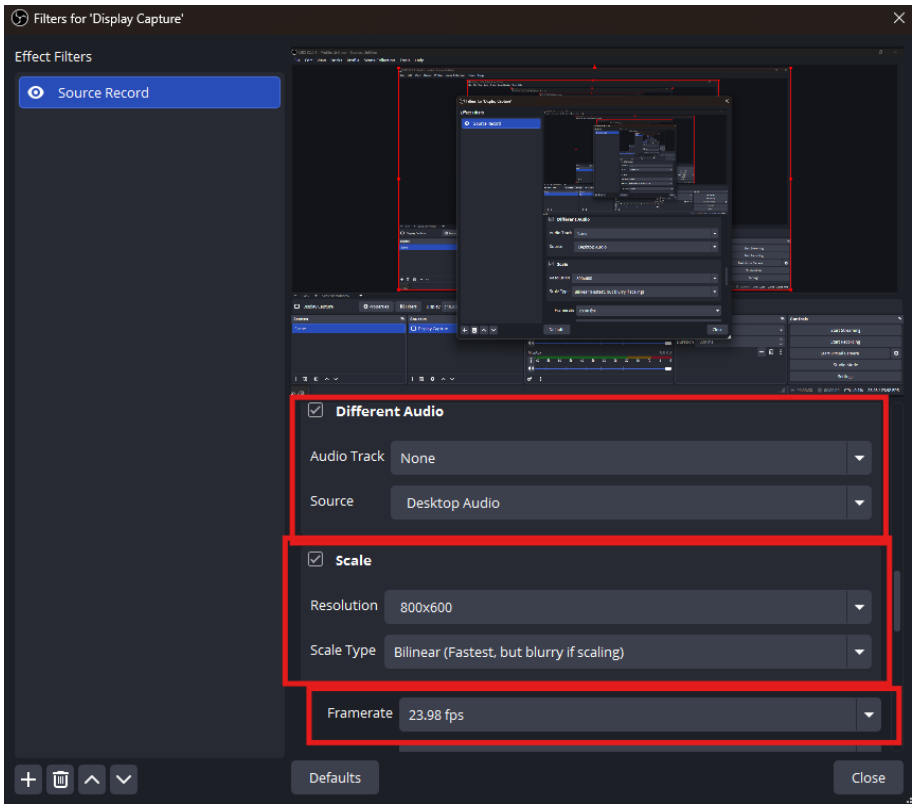


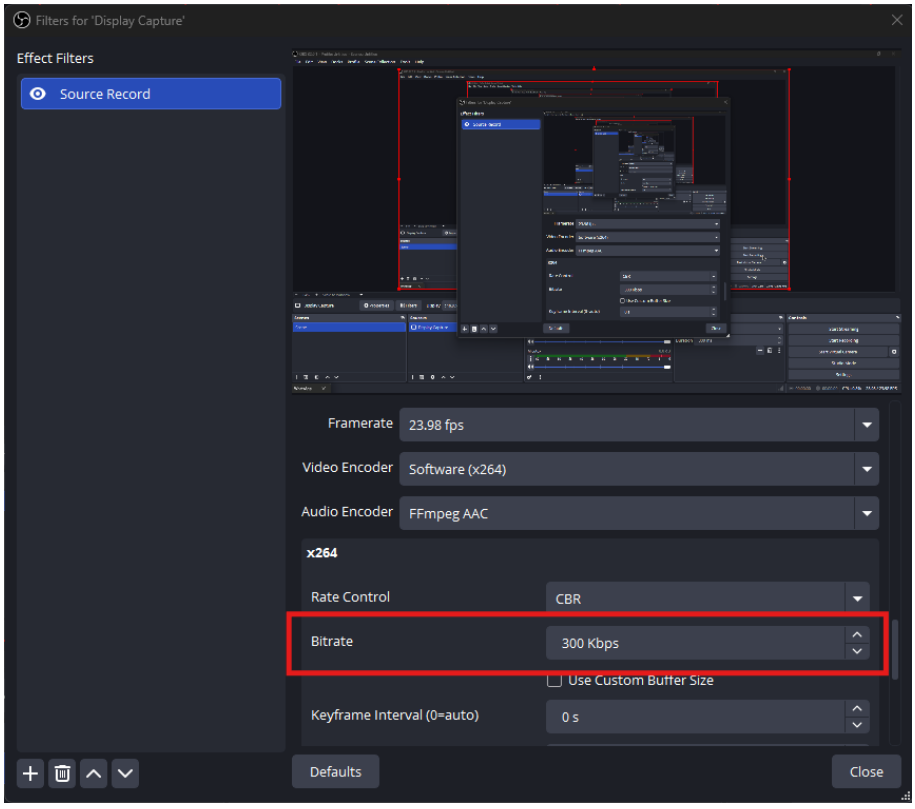
- Click on the + icon and select Source Record.

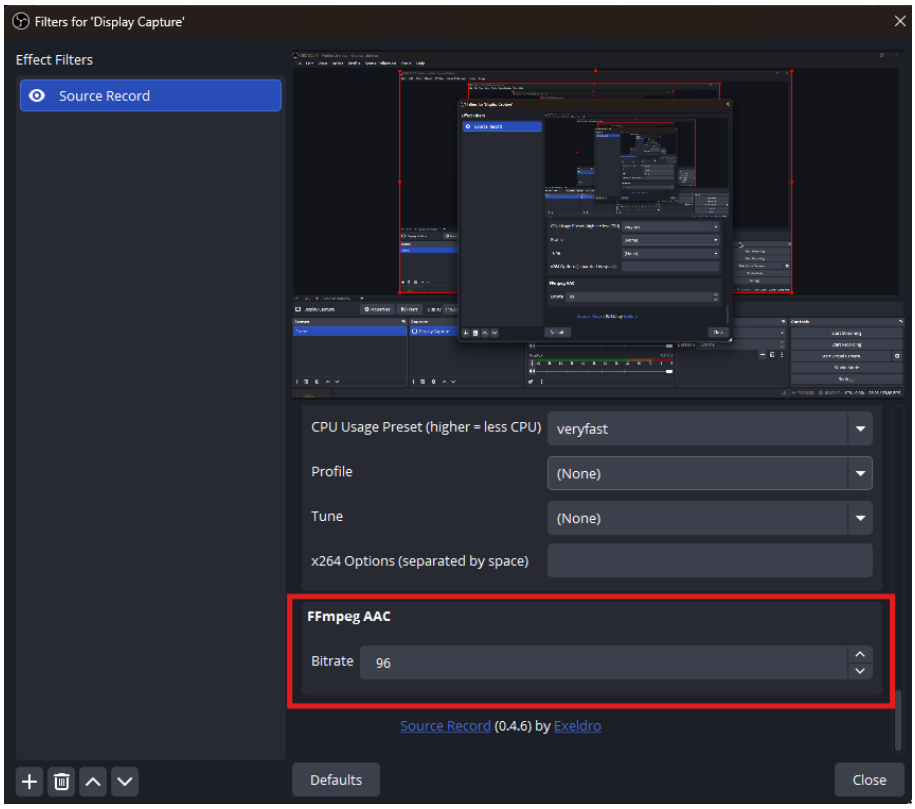


- Configure the following settings carefully:




Filters for 'Display Capture'
Effect Filters
Source Record
Different Audio
Audio Track
None
Source
Desktop Audio
Scale
Resolution
800x600
Scale Type
Bilinear (Fastest, but blurry if scaling)
Framerate
23.98 fps
Defaults
Close


Filters for 'Display Capture'
Effect Filters
Source Record
Framerate
23.98 fps
Video Encoder
Software (x264)
Audio Encoder
FFmpeg AAC
x264
Rate Control
CBR
Bitrate
300 Kbps
Use Custom Buffer Size
Keyframe Interval (0=auto)
0 s
Defaults
Close


Filters for 'Display Capture'
Effect Filters
Source Record
CPU Usage Preset (higher = less CPU)
veryfast
Profile
(None)
Tune
(None)
x264 Options (separated by space)
FFmpeg AAC
Bitrate
96
Source Record (0.4.6) by Exeldro
Defaults
Close

Setup Guide for macOS

1. Install OBS Studio

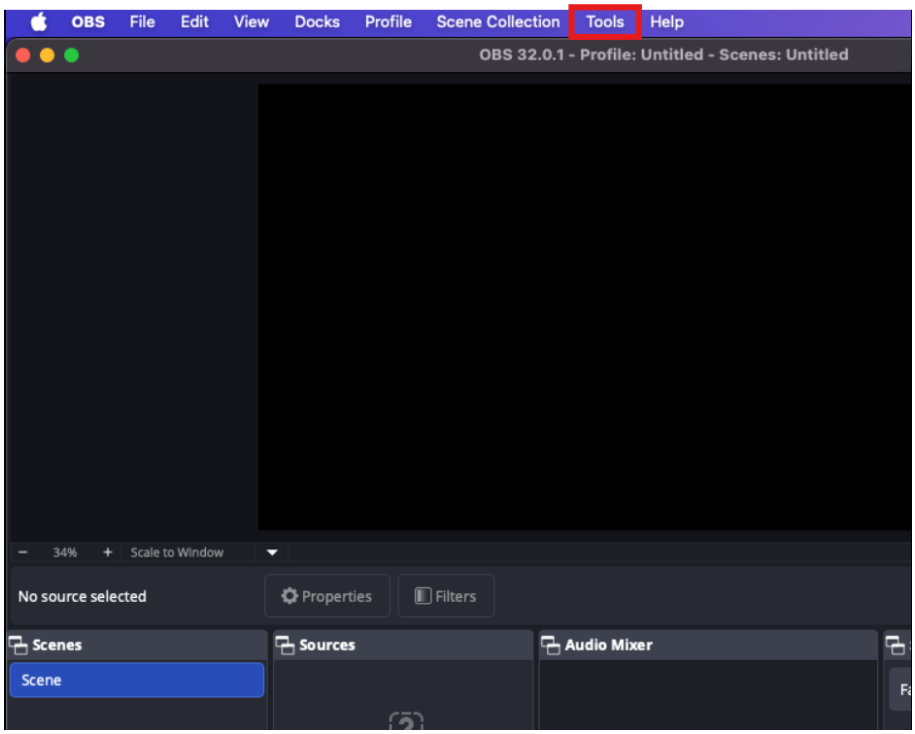
- Download and install OBS Studio (Open Broadcaster Software). Click Here to download OBS for macOS.
- Follow the on-screen instructions to complete the installation.

2. Install Python 3.12

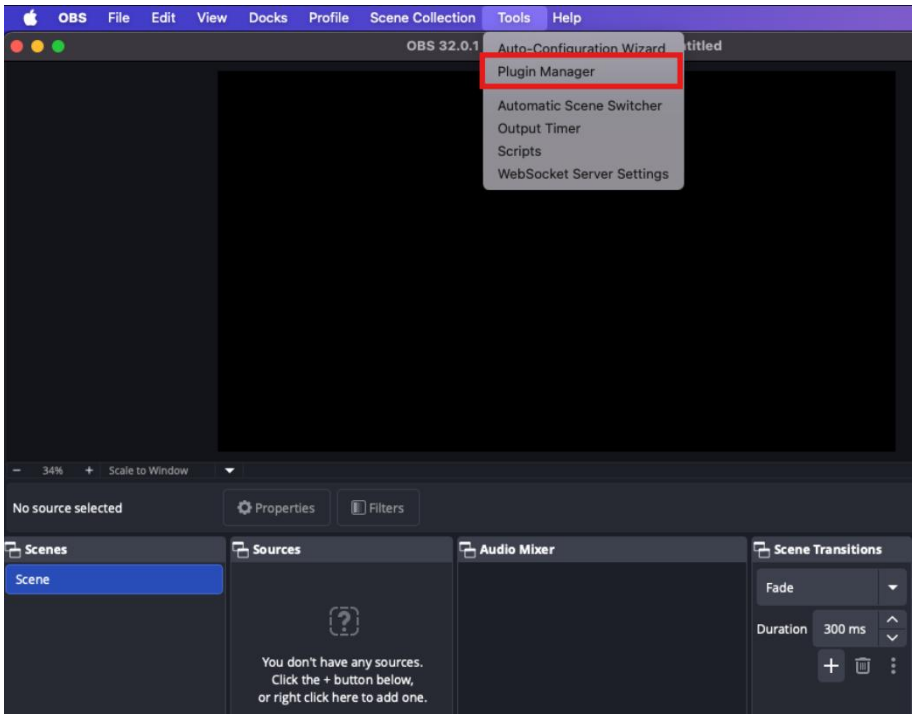
- Visit the official Python website and download Python 3.12.0.
- Follow the on-screen instructions to complete the installation.

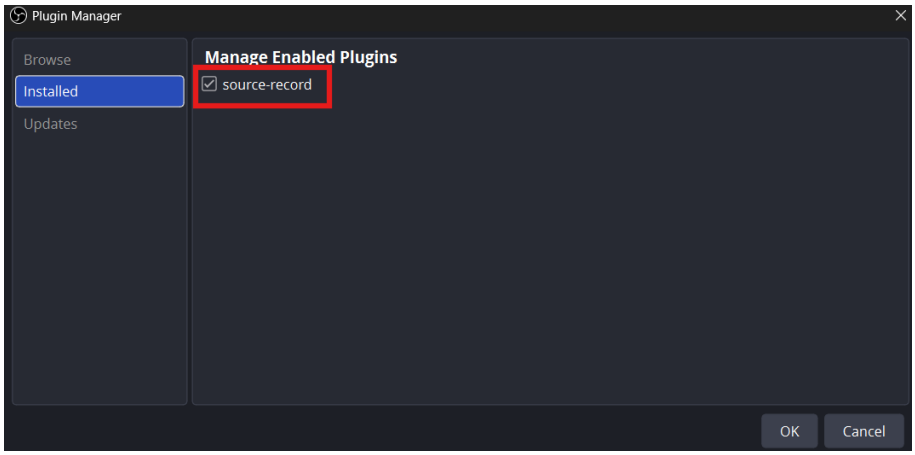
3. Install Source Record Plugin (for Dual Recording)

- Download the Source Record plugin for OBS. Click Here.
- Run the downloaded file.
- The installer will automatically configure the plugin with OBS. No manual configuration is required.
- In OBS, navigate to Tools → Plugin Manager. Locate Source Record in the list and enable it by checking the checkbox.



- Restart OBS after enabling Source Record from Manage Enabled Plugins.





4. Install Required Python Package

- Open Terminal or iTerm.
- Run the following command: pip install requests

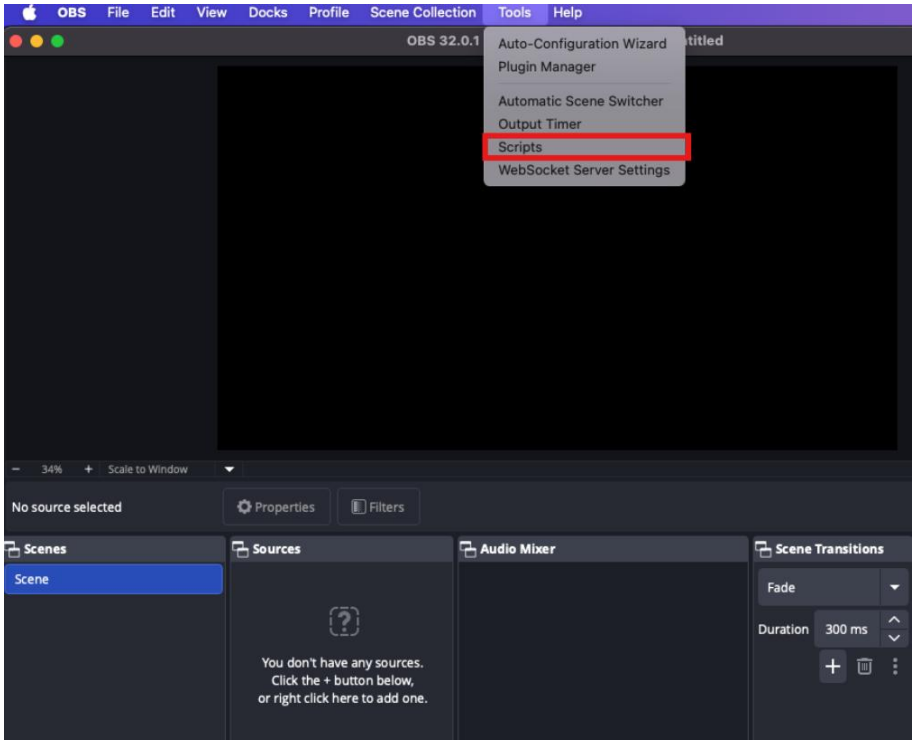
This installs the requests package required for the proctoring scripts.

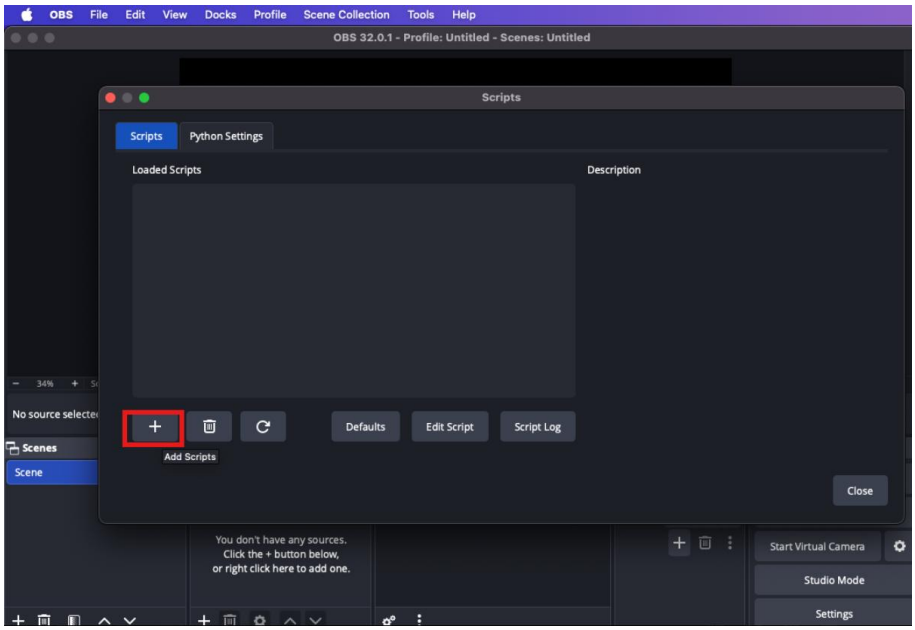
5. Configure OBS Scripts

- A `script.py` file will be made available for download on the website (please keep checking https://indiaicpc.in/ and your respective regional sites for updates). This file will need to be configured within OBS.

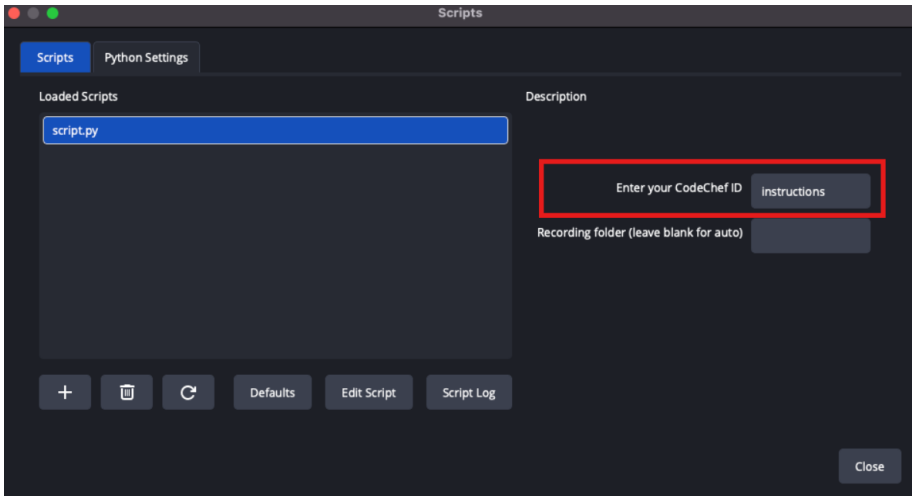
Instructions:

- Go to Tools → Scripts → Click on the + icon → Select the script.py file.

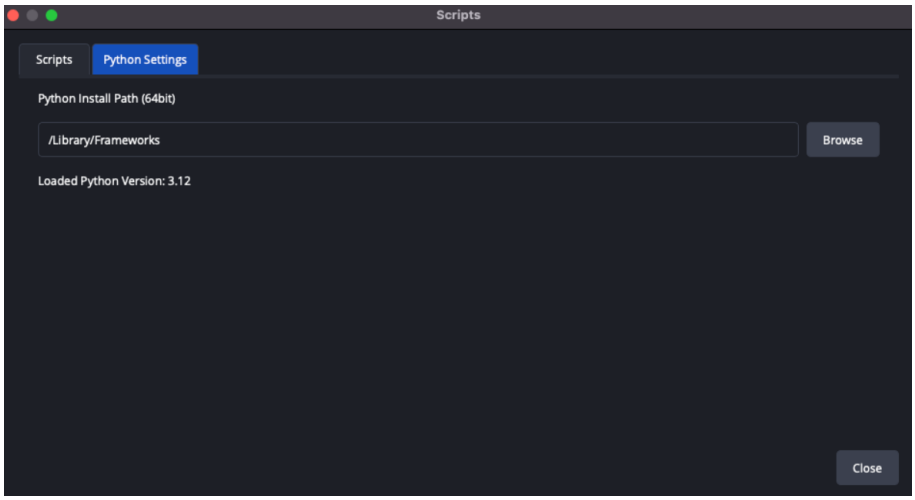




Enter your CodeChef ID



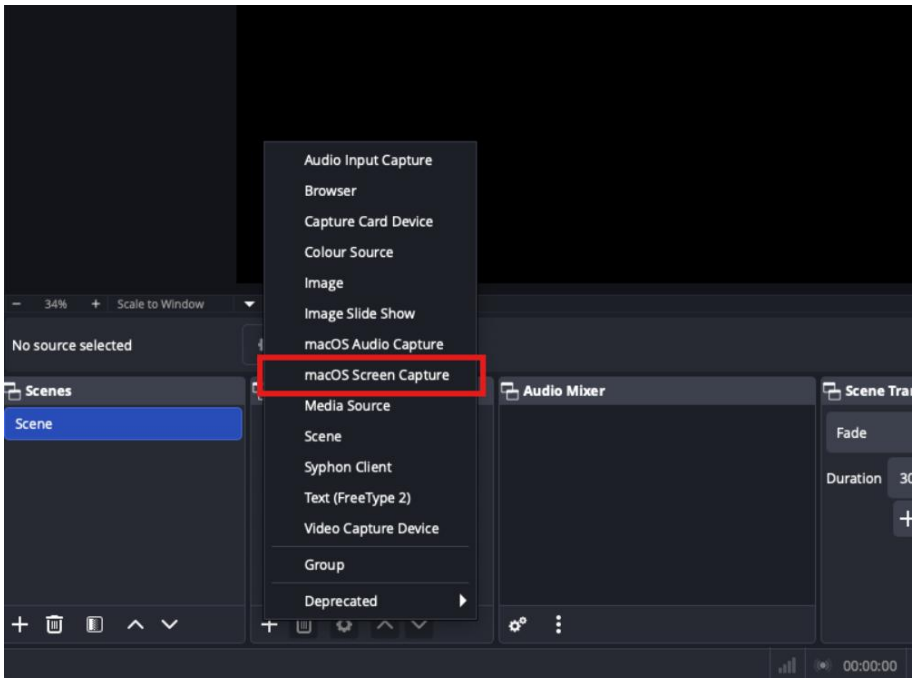
After this, navigate to Python Settings → Select the path where Python bin files are located.

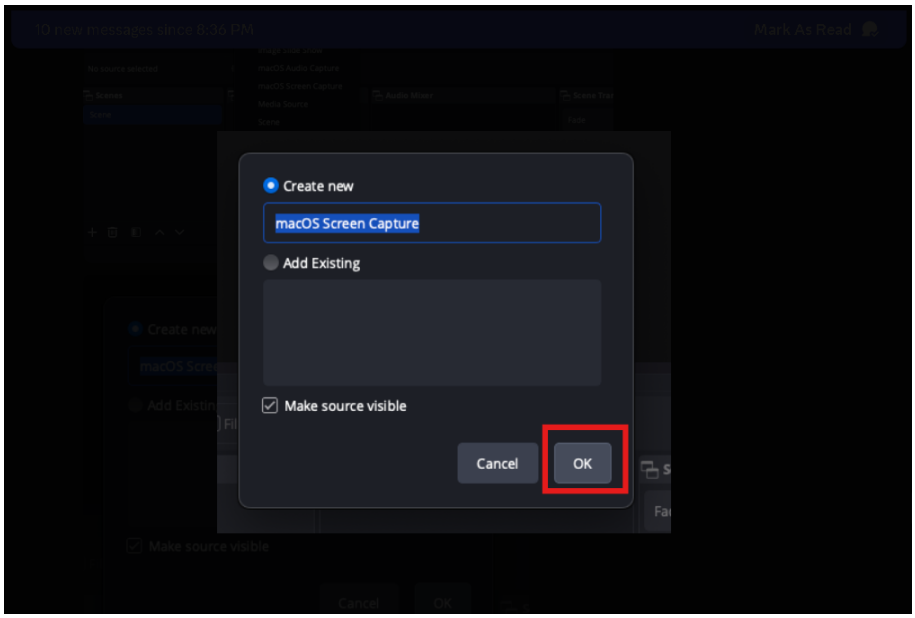


Restart OBS and ensure you see the "Loaded Python Version 3.12" message.

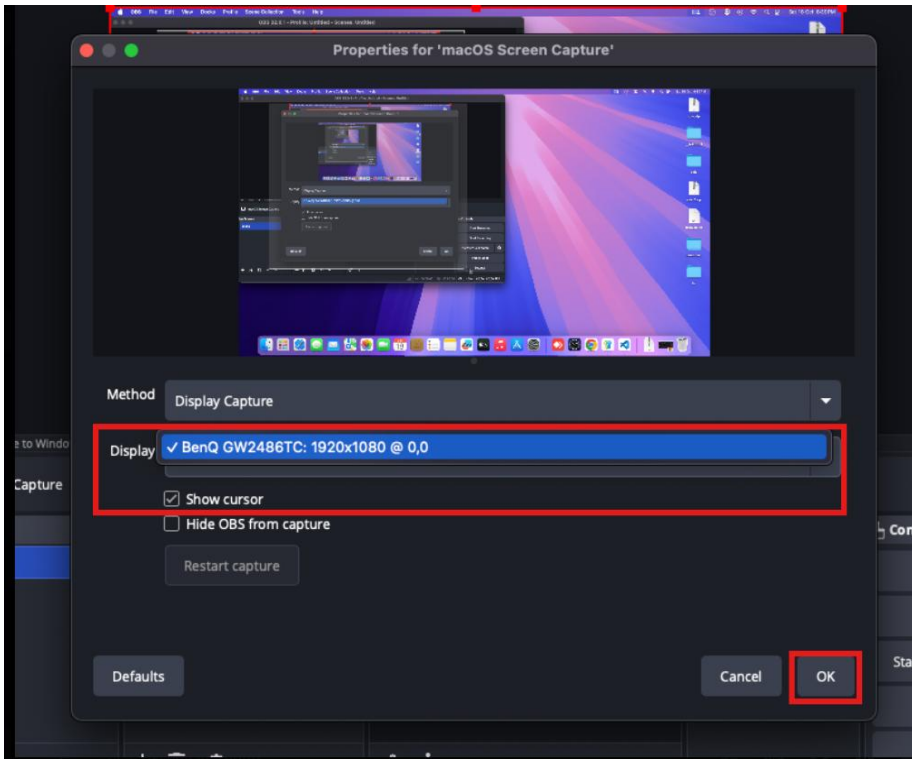
6. OBS Configuration

- Screen Recording/Capture

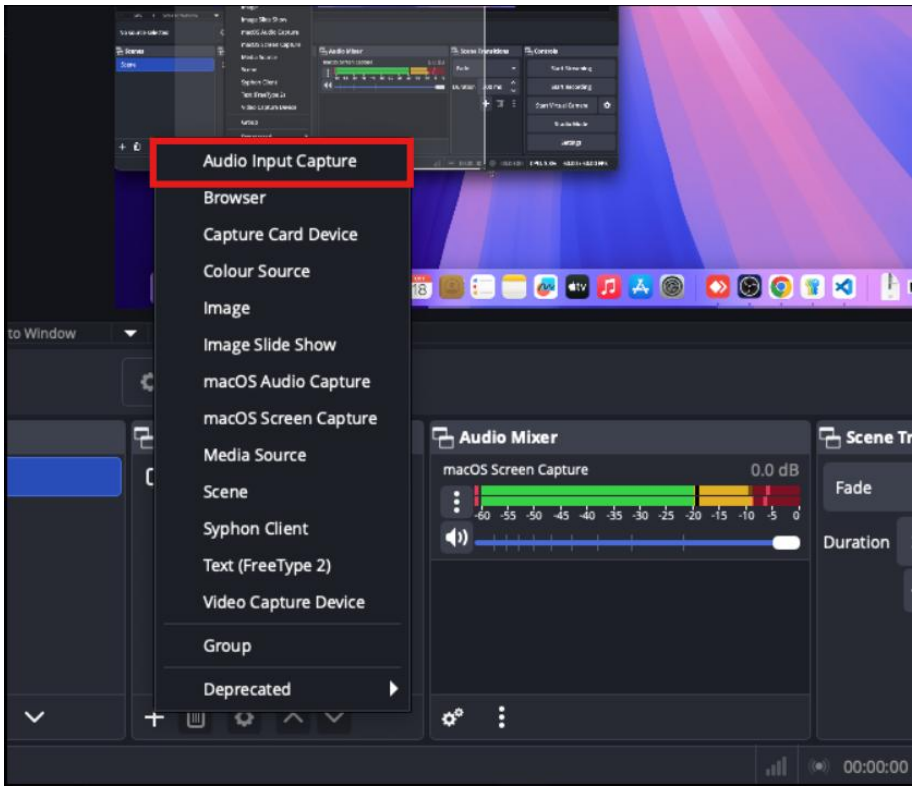


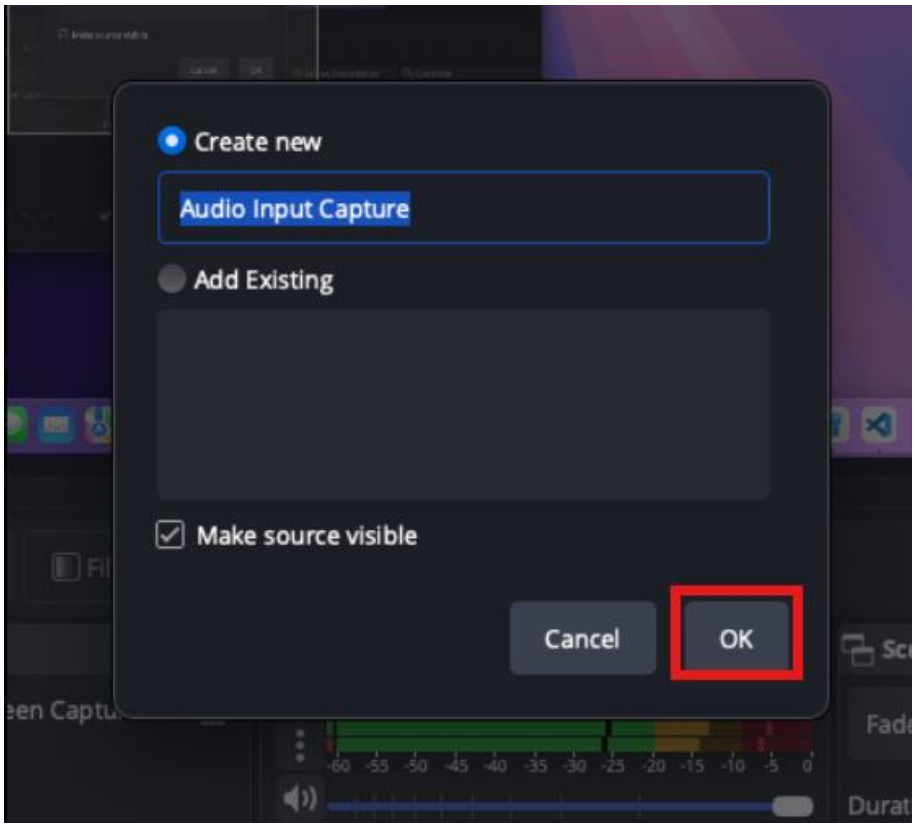


Select your display and ensure that the “Show cursor” is checked.

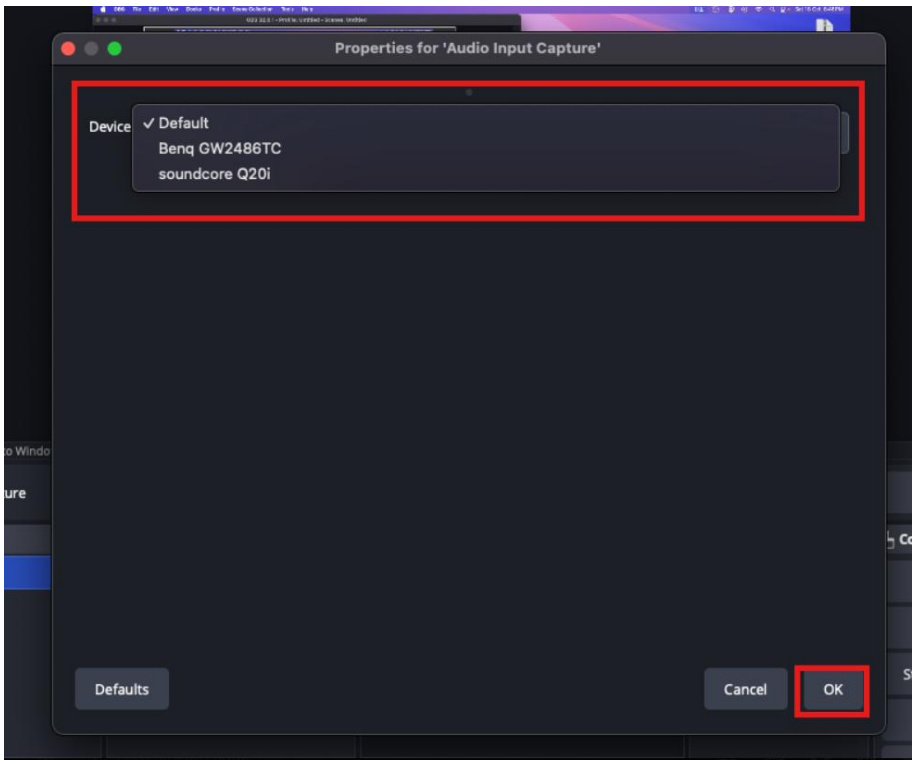


- Audio Capture

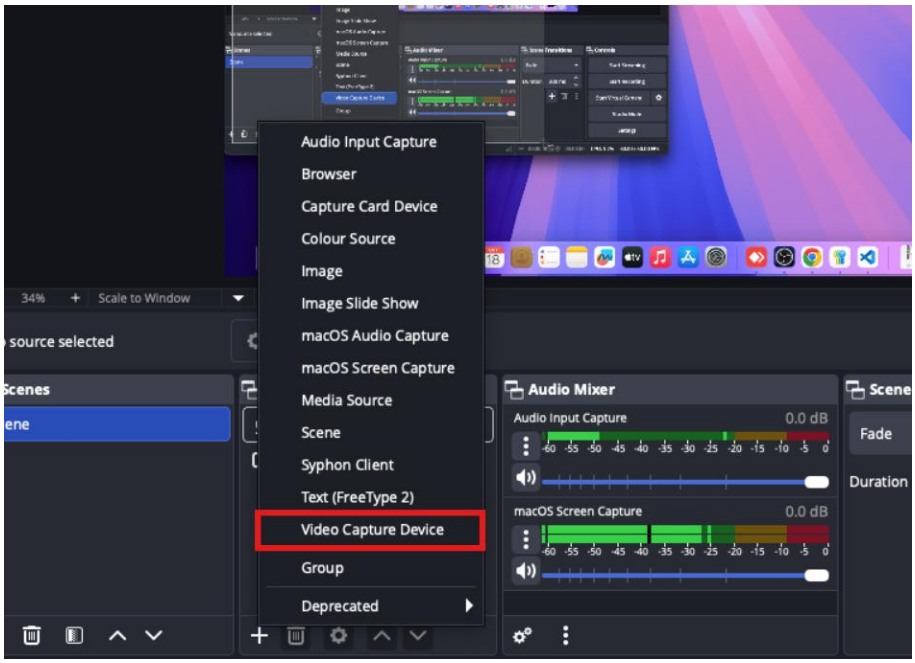


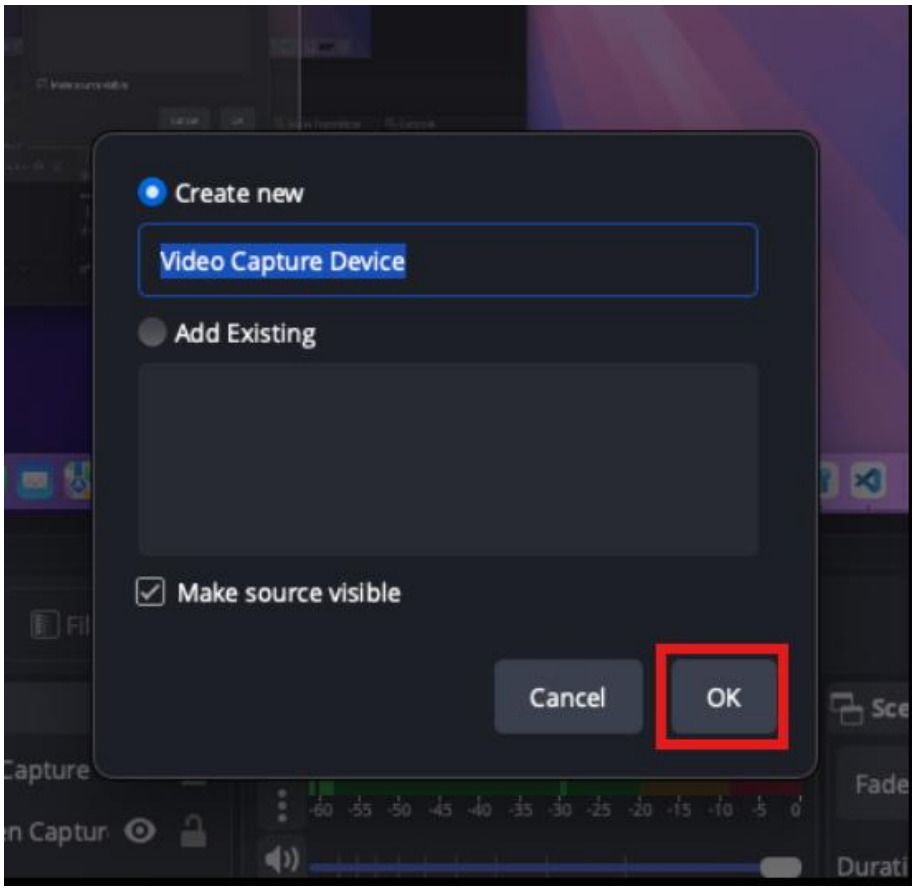


Add your input audio device.

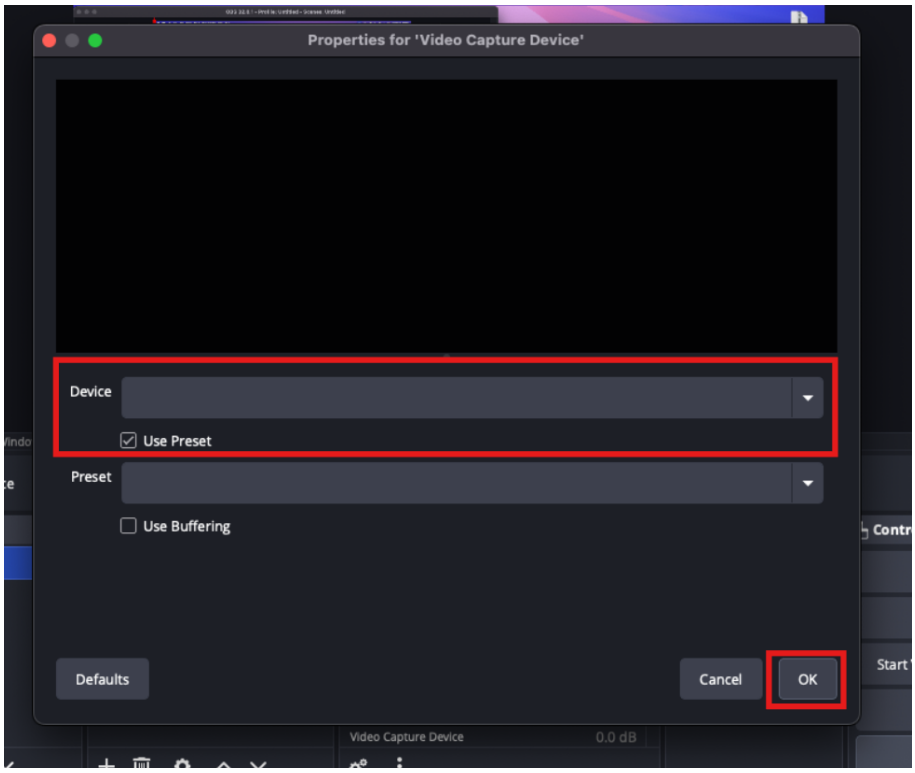


- Video Capture



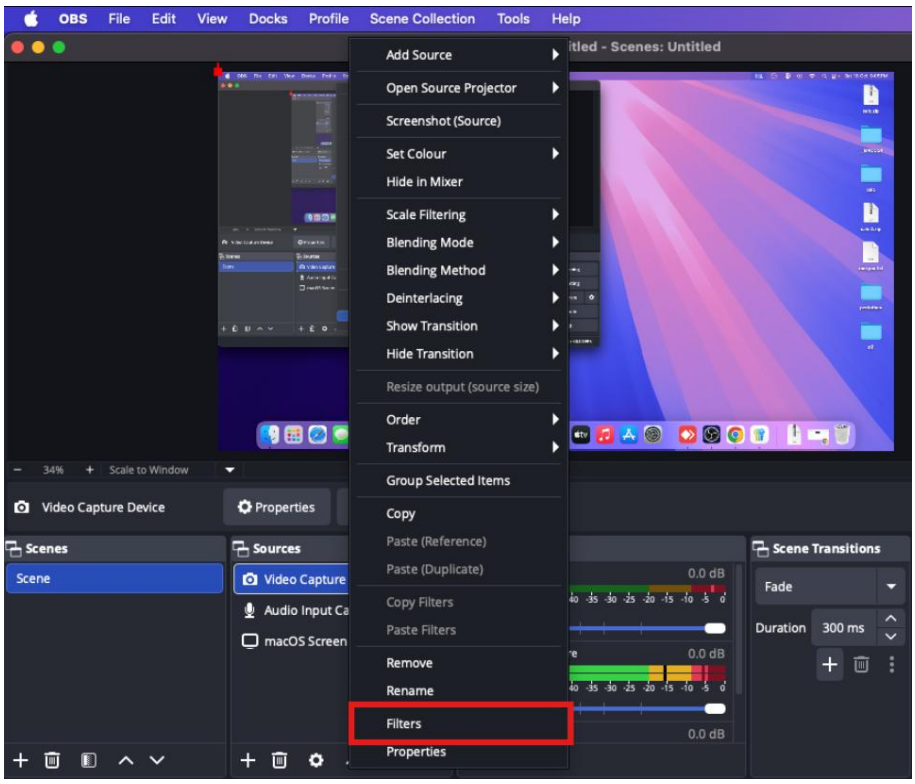


Choose your webcam.

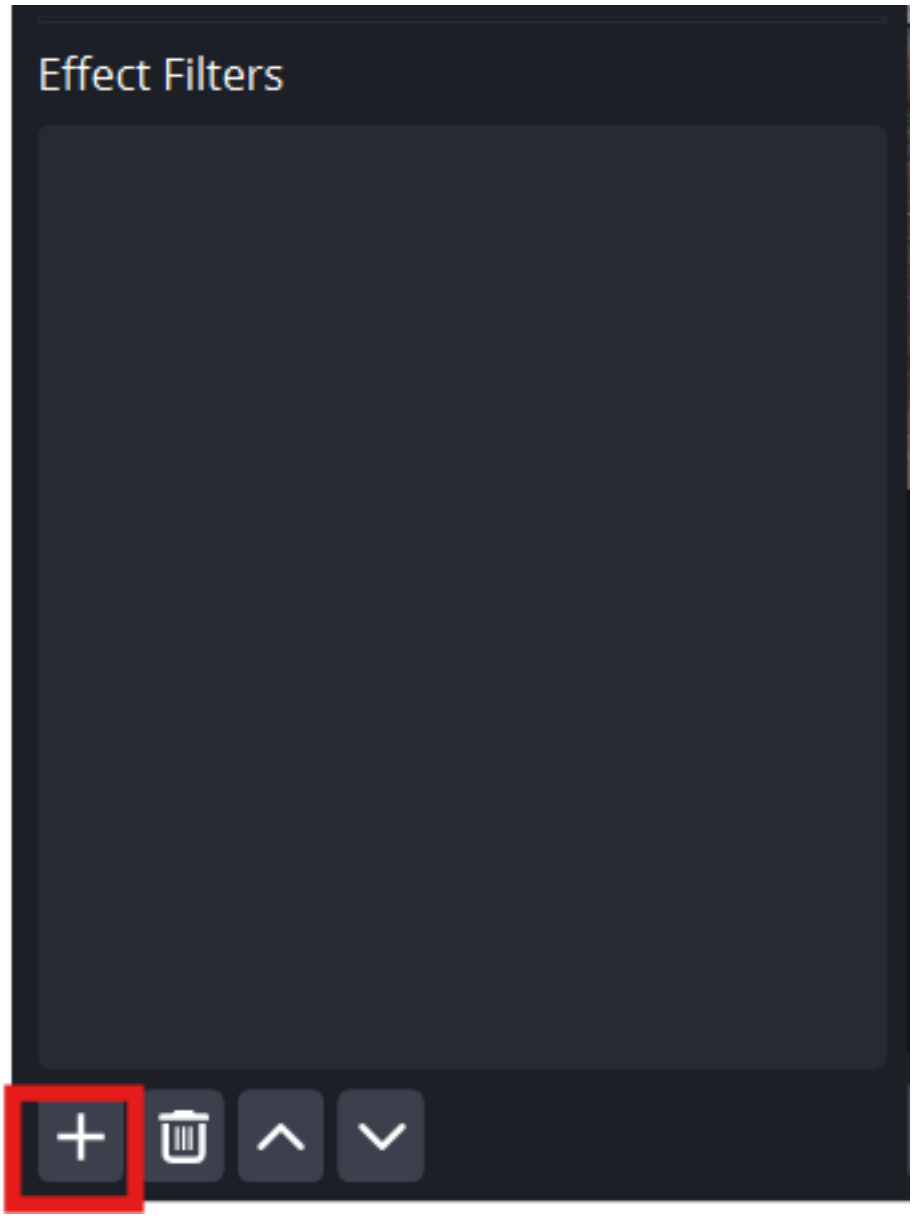


7. Source Record Video Recording Configuration

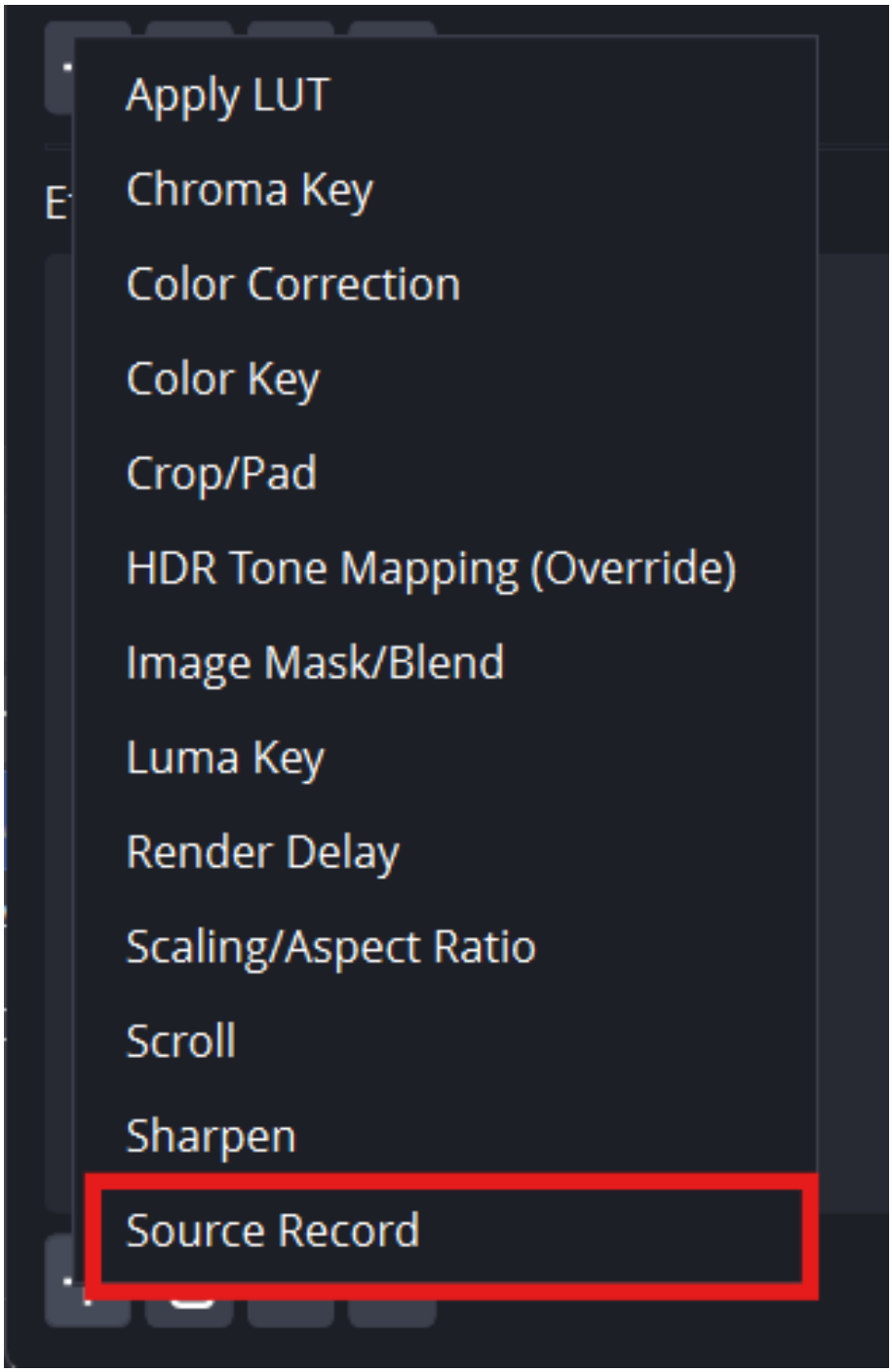
- Right-click on Video Capture Device and select Filters.



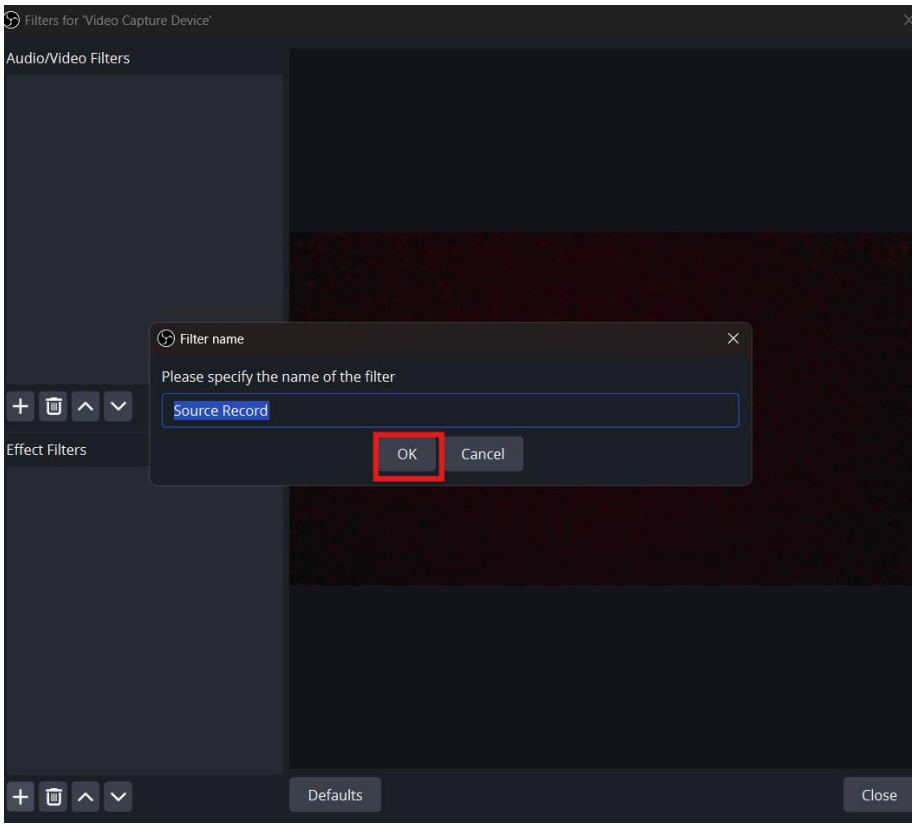
- In the Effect Filters section, click on the + icon.



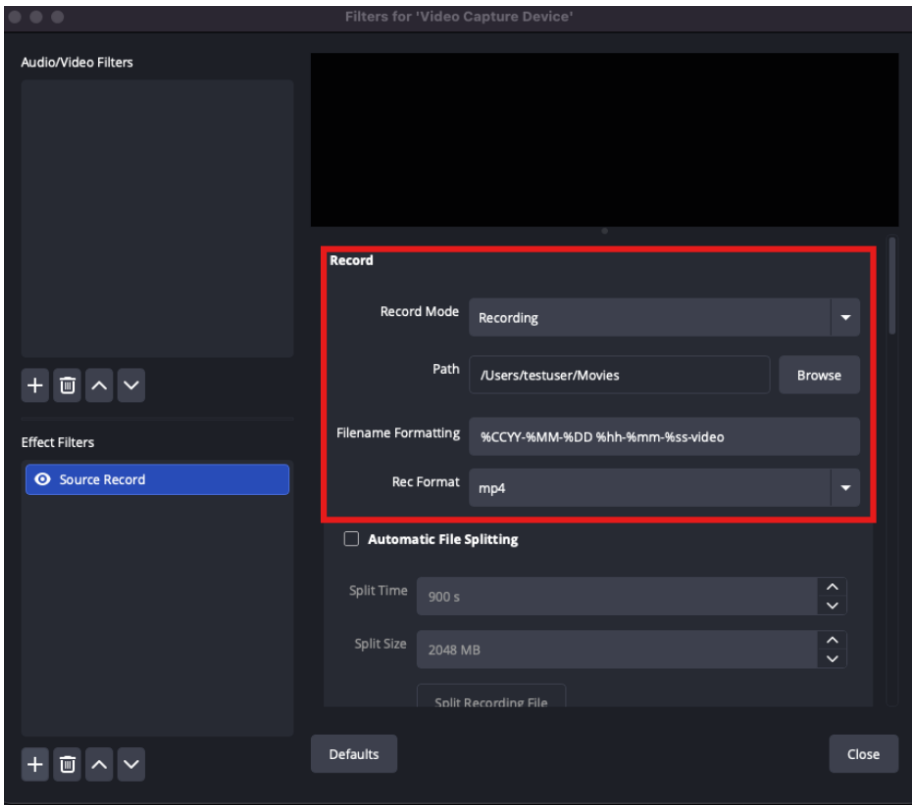
- Select Source Record.

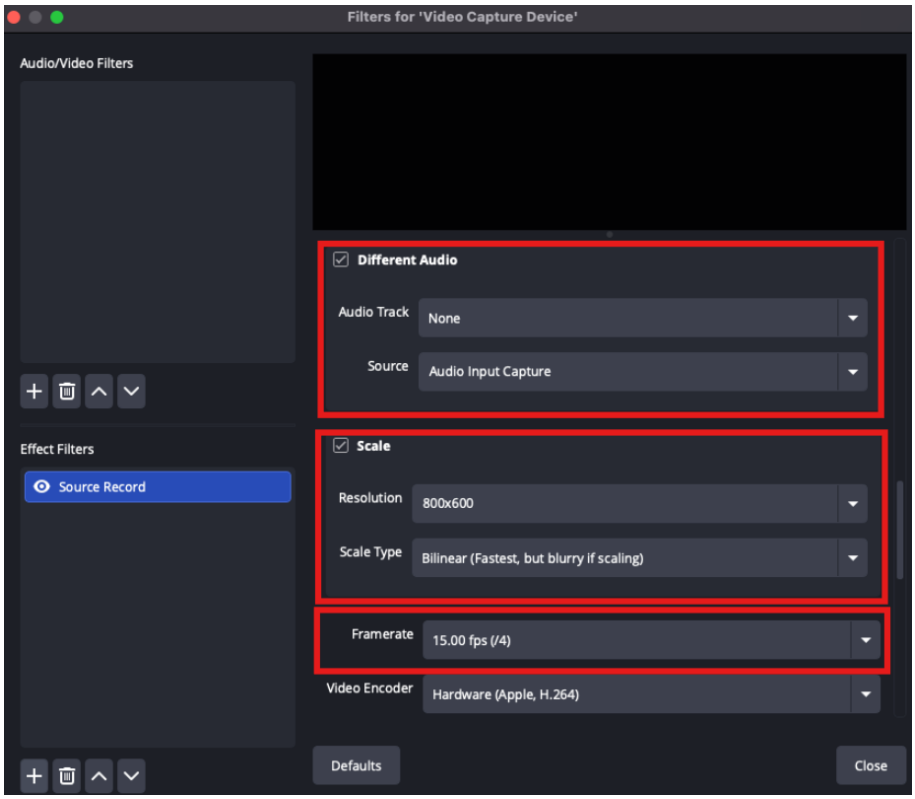

Apply LUT
Chroma Key
Color Correction
Color Key
Crop/Pad
HDR Tone Mapping (Override)
Image Mask/Blend
Luma Key
Render Delay
Scaling/Aspect Ratio
Scroll
Sharpen
Source Record

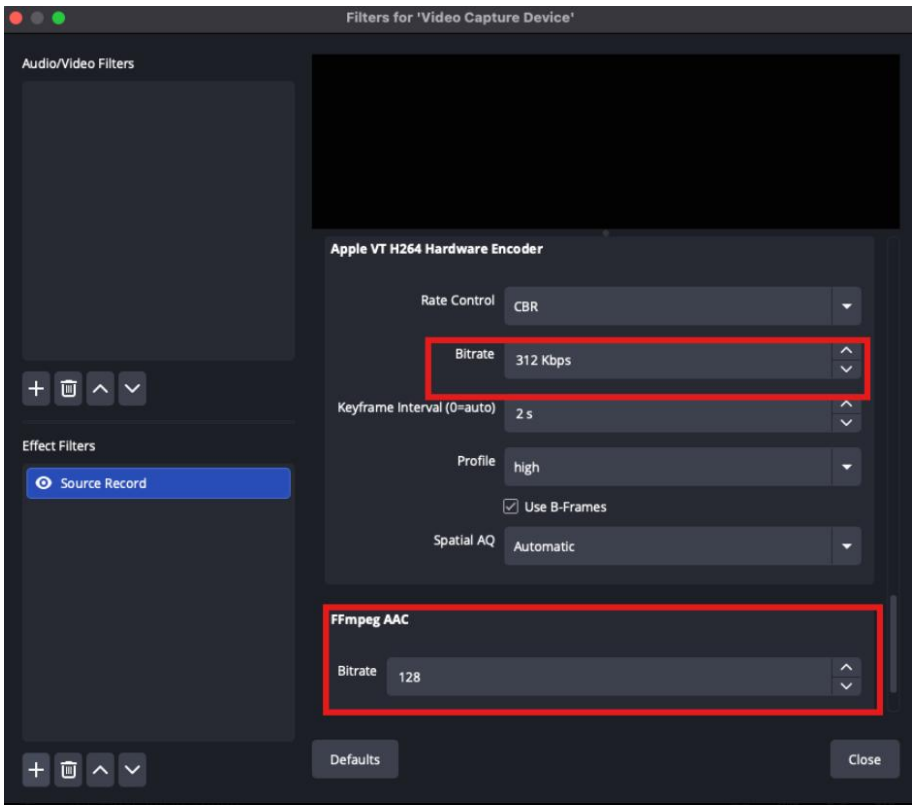
- Click on "OK".



- Double-click Source Record and configure the following settings:

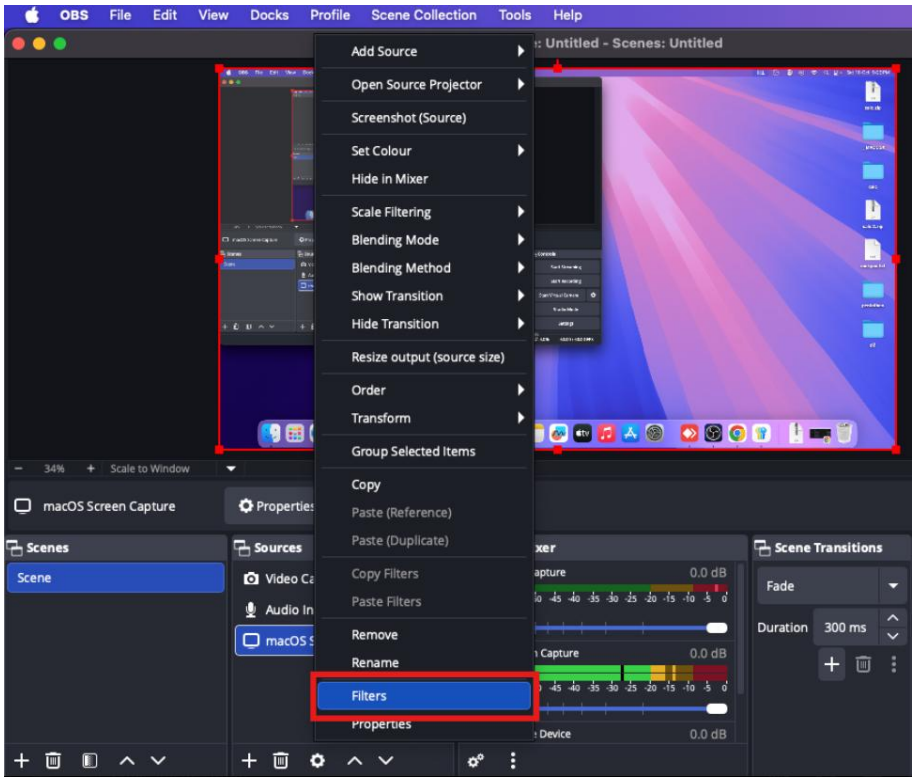




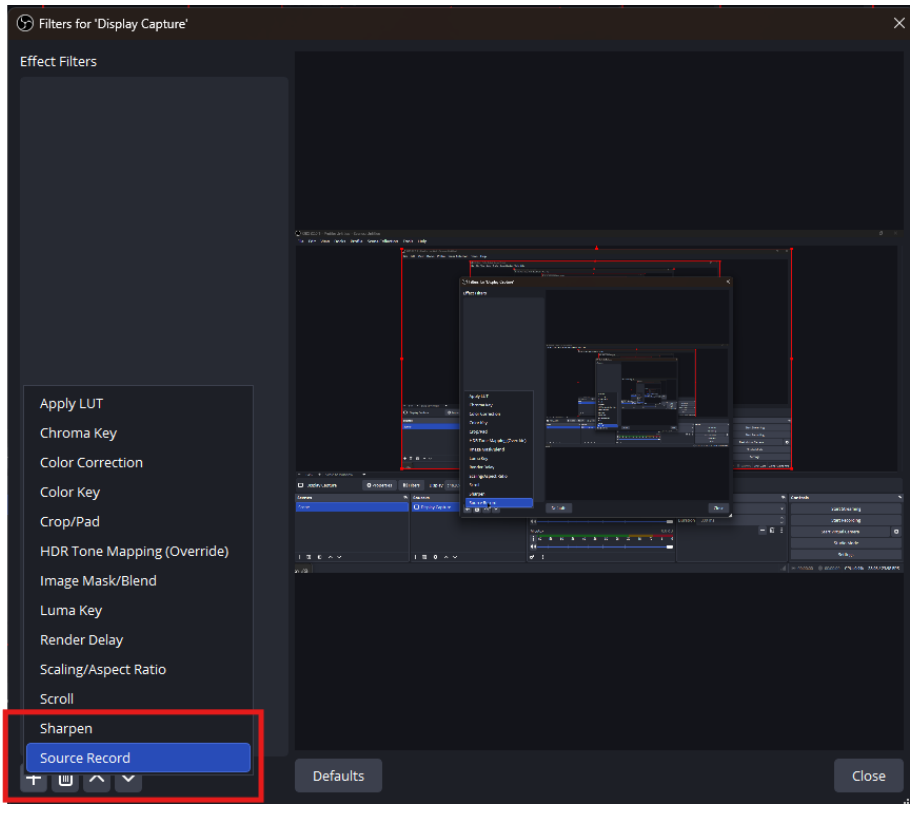


8. Source Record Screen Recording Configuration

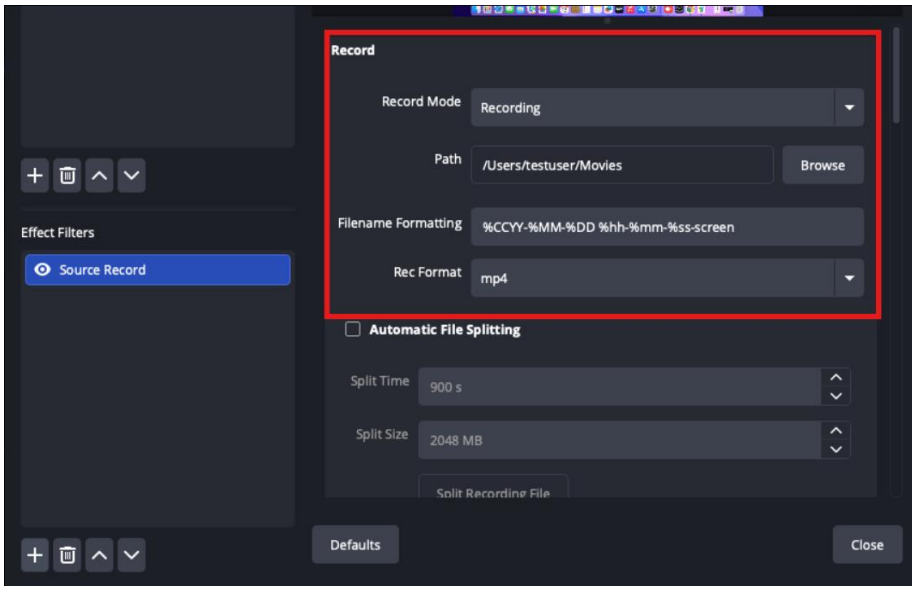
- Right-click on Display Capture and select Filters.

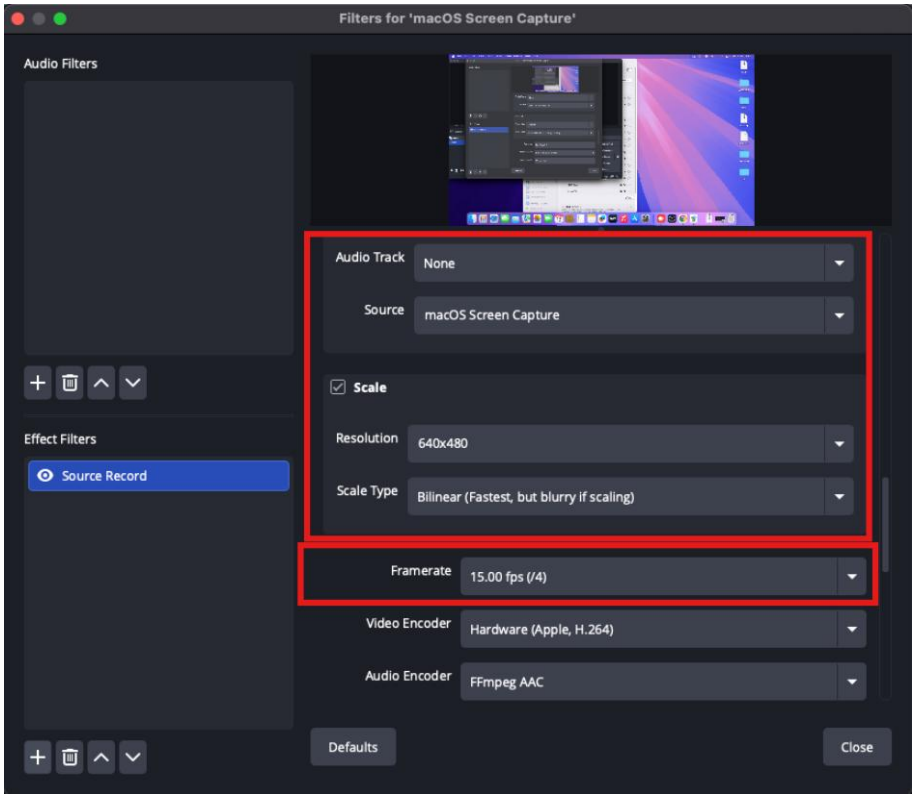


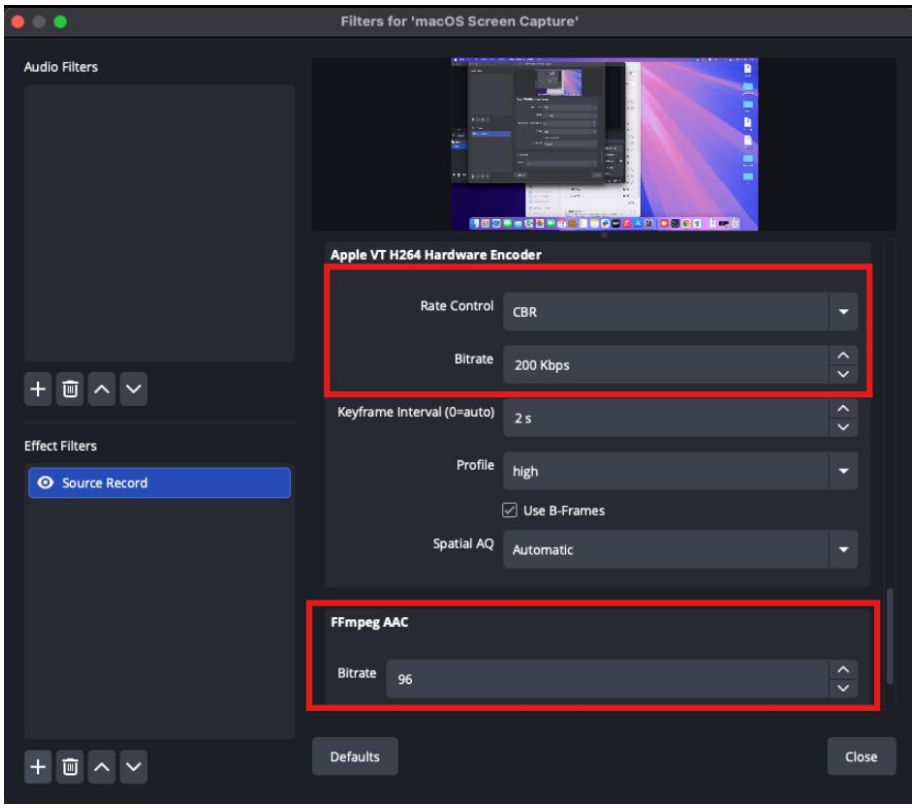
- Click on the + icon and select Source Record.



- Configure the following settings carefully:






Filters for 'macOS Screen Capture'
Audio Filters
Effect Filters
Source Record
Apple VT H264 Hardware Encoder
Rate Control
CBR
Bitrate
200 Kbps
Keyframe Interval (0=auto)
2 s
Profile
high
Use B-Frames
Spatial AQ
Automatic
FFmpeg AAC
Bitrate
96
Defaults
Close

Setup Guide for Linux

1. Install OBS Studio

- Download and install OBS Studio (Open Broadcaster Software). Click Here to download OBS for Linux.
- Follow the on-screen instructions to complete the installation.

2. Install Python 3.12

- Python is usually pre-installed on Linux. To check, open Terminal and run: python3 --version
- If not installed, install it using your package manager (e.g., sudo apt install python3).

3. Install Source Record Plugin (for Dual Recording)

Please refer to the macOS instructions (steps are similar).

4. Install Required Python Package

- Open Terminal.
- Run the following command: pip install requests

This installs the requests package required for the proctoring scripts.

5–8. Configure OBS Scripts and Recording Setup

Please refer to the macOS instructions (steps are similar).

Contact us if you face any issues.

—----End of Document—---