OBS Studio for Tutorial Videos

Record good quality screencast videos with free software and no postproduction editing!

OBS Studio is free and provides excellent basic training video creation tools. It is a fairly complex tool, but a setup wizard in recent versions preconfigures OBS for your use.

It is a tool with many features, but we are setting it up for video recording instead of streaming and using it as a virtual camera for this tutorial.

Overview

In this tutorial, you will learn how to:

- 1. Use the Auto-Configuration Wizard to quickly optimize OBS for recording.
- 2. Set up Scenes (e.g., screen capture, webcam overlay, title slides).
- 3. Record a screencast with both audio and video in one go, minimizing the need for editing.
- 4. Switch Scenes on-the-fly to include different elements such as talking-head overlays, opening/closing slides, and screenonly views.
- 5. (Optional) Use the OBS Virtual Camera for live online demos.

Before You Begin

- 1. Hardware/Software Prerequisites:
 - 1. A Windows laptop with sufficient processing power.
 - 2. A headset with a microphone (recommended for clearer audio).
 - 3. A webcam (built-in or external).
- 2. Download OBS Studio from https://obsproject.com/^[1] if it's not already installed.
- 3. Location to Save Recordings: Decide (or create) a folder on your computer where you'll store your video files.
- 4. It is best to set your screen resolution to 1920 x 1080 so that scaling is unnecessary when saving the video.

SESSION 1 (1.5 Hours)

1. Introduction & Goals

- 1. What Is OBS Studio?
 - OBS (Open Broadcaster Software) is a free, open-source tool for recording and live streaming.
 - $\,\circ\,$ You'll be using it primarily to $record\ screencasts$ (your screen + your webcam) for quick software
 - demonstrations.
- 2. Your Goal for Today
 - By the end of this session, you should be able to do a basic recording that includes your computer screen, your voice, and optionally your webcam video in the corner—**no editing required**.

2. Installing & Running the Auto-Configuration Wizard

1. Installation Steps

- 1. Download the Installer: Go to https://obsproject.com/download^[2] and choose the Windows version.
- 2. Run the Installer: Double-click the .exe file and follow the on-screen prompts.
- 3. Launch OBS: Once installed, open OBS from your desktop or Start menu.

2. Auto-Configuration Wizard

• When you first run OBS, you should see a prompt to configure OBS automatically. If it doesn't appear, you can access it by going to **Tools > Auto-Configuration Wizard**.

• Selection: Choose Optimize just for recording, I will not be streaming.

S Auto-Configuration Wizard	X
Usage Information Specify what you want to use the progra	Im for
 Optimize for streaming, recording is second optimize just for recording, I will not be stand of the standard of the stand	ndary treaming
The auto-configuration wizard will determine the best settings based on your computer specs and internet speed.	
This can be run at any time by going to the Tools menu.	
	Back Next Cancel

 $\circ~$ Follow the wizard's steps to let OBS detect the best settings for your computer.

3. Confirm the Wizard's Results

- OBS will provide recommended settings (resolution, frame rate, etc.).
- Accept and **apply** these recommended settings.
- You'll see a summary of what was configured (often 1920×1080 at 30 FPS for most laptops, which is ideal for our purposes).

You're now done with the initial setup and ready to create Scenes.

3. Setting Up Scenes & Sources

Scenes & Sources Overview

- Scene: A layout of visual and audio elements. Examples:
 - Intro (title or image)
 - \circ Screen + Webcam
 - Camera Only
 - Outro (closing)
- Source: The actual media or device in a Scene (screen capture, webcam, image, text, etc.).

Step-by-Step: Creating Your First Scene

- 1. Scene Panel: At the lower-left of OBS, find the "Scenes" panel.
- 2. **Default Scene**: Rename if desired (e.g., "Screen + Camera") by right-clicking \rightarrow **Rename**.
- 3. Add Screen Capture:
 - 1. In "Sources," click + → select **Display Capture** (for entire screen) or **Window Capture** (for one application).
 - 2. Name it (e.g., "Screen Capture").
 - 3. Choose the specific display or window, then click **OK**.

4. Add Webcam:

1. In "Sources," click $+ \rightarrow$ Video Capture Device.

- 2. Name it (e.g., "Webcam"), click **OK**.
- 3. In $\ensuremath{\textbf{Device}}$ dropdown, select your webcam.
- 4. Adjust resolution if needed, then **OK**.
- 5. Click and drag the webcam preview to position it. Resize by dragging the red bounding corners.

Additional Scenes

1. Camera Only Scene:

- 1. + in Scenes \rightarrow Name it "Camera Only."
- 2. In Sources \rightarrow + \rightarrow Video Capture Device \rightarrow choose webcam.
- 3. Confirm audio is active (Mic/Aux in the Audio Mixer).
- 2. Title or Closing Scene:
 - 1. + in Scenes \rightarrow Name it "Title" or "Intro."
 - 2. In Sources \rightarrow + \rightarrow **Text (GDI+)** or **Image** to display "Welcome!" or a logo.
 - 3. Repeat for an "Outro" scene if you want a closing image/slide.

4. Setting Up Hotkeys for Scene Switching

Hotkeys let you change Scenes without clicking in OBS, which is helpful when you're demonstrating software in full screen.

1. Access Hotkeys Settings

- In the top menu, go to **File > Settings** (or **Settings** in the Control panel).
- Select the **Hotkeys** tab on the left.
- 2. Assign a Key Combination for Each Scene
 - $\circ~$ You'll see each Scene listed, with fields labeled "Switch to Scene."
 - Click in the empty field next to "Switch to Scene (Scene Name)" and press your desired key combo (for example, **Ctrl+Alt+1** for "Intro," **Ctrl+Alt+2** for "Screen + Camera," etc.).
 - Make sure to pick combos you **won't** accidentally trigger during your screencast.

3. Save Your Hotkeys

- Click **Apply** or **OK** at the bottom of the Settings window.
- You can now switch Scenes in OBS simply by pressing your chosen key combos—**no need to switch windows**.

5. Using a Green Screen (Chroma Key)

If you have a green screen, you can remove or replace your background so that **only you** appear over your screencast.

1. Setting Up the Green Screen

- $\circ~$ Position the green screen behind you.
- $\circ~$ Ensure it is well-lit, avoiding shadows or wrinkles if possible.
- 2. Chroma Key in OBS
 - 1. Add/Select Webcam Source: In your Scene (e.g., "Screen + Camera"), click your Video Capture Device (webcam) in the Sources list.
 - 2. **Open Filters**: Right-click that source, then select **Filters**.
 - 3. Add Chroma Key: Under Effect Filters, click the + icon \rightarrow choose Chroma Key.
 - 4. Select Key Color Type: Usually "Green" is the default.
 - 5. Adjust Similarity & Smoothness: Move the sliders until your background disappears, and only you remain visible.
 - 6. **Close** the Filters window.
- 3. Positioning
 - $\circ~$ You can resize and reposition yourself in the Scene. You'll appear over your captured screen or background image.

6. Audio Checks & Quick Test Recording

- 1. Audio Mixer:
 - Check the Mic/Aux bar moves when you speak into your headset mic.
 - $\circ~$ Adjust the volume slider if too loud or soft.
- 2. Test Recording:
 - 1. Click Start Recording (bottom right in "Controls" panel).
 - 2. Use **your Hotkeys** to switch Scenes (try Intro \rightarrow Screen + Camera \rightarrow Camera Only).
 - 3. Stop recording after ~ 10 seconds.
 - 4. Find your file in the Recording Path and play it back to check both video and audio.

SESSION 2 (1 Hour)

1. Building a Short Tutorial Video

Now you'll make a **real tutorial**. The objective is a single, polished screencast requiring **no post-processing**.

- 1. **Plan Your Task** (5 minutes):
 - Pick a **small software demonstration** (e.g., "How to enable a setting in Keyman").
 - $\circ~$ Outline: Intro \rightarrow Demonstration \rightarrow Outro.
- 2. Set Up Scenes (if not already done) (5 minutes):
 - $\circ~$ Scene 1 (Title): Simple text or image.
 - Scene 2 (Screen + Camera): Display capture + webcam (with or without green screen).
 - Scene 3 (Outro): Thank-you slide or closing text.
- 3. **Record** (10 minutes):
 - 1. Start Recording in OBS.
 - 2. Press your **hotkey** for "Title" to introduce the topic.
 - 3. Press your **hotkey** for "Screen + Camera" to show the software demonstration.
 - 4. Use your **Outro** scene to wrap up.
 - 5. Stop Recording.

2. Review & Playback

- 1. Locate your recording file in your chosen folder.
- 2. Play It and verify:
 - $\circ~$ Scenes switched at the right times (thanks to hotkeys).
 - $\circ~$ Your green screen background is removed (if used) and looks clean.
 - $\circ~$ Audio is clear.
- 3. Adjust, If Needed
 - $\circ~$ If the green screen effect needs tweaking: go back to $\textbf{Filters} \rightarrow$ "Chroma Key."
 - $\circ~$ If audio is too quiet/loud, adjust in the ${\bf Audio}~{\bf Mixer}.$
 - Re-record as necessary.

3. Additional Features & Virtual Camera (Optional)

- 1. Virtual Camera
 - $\circ~$ In "Controls," click Start Virtual Camera (if available).
 - $\circ~$ In Zoom (or another app), select OBS Virtual Camera as your camera.
 - $\circ~$ You can then live-switch Scenes in Zoom just like you do in recordings.
- 2. Scene Transitions
 - $\circ~$ Check "Scene Transitions" in the lower-right area to change the transition style (Cut, Fade, etc.).
 - Adjust transition duration if desired.

Wrap-Up

- 1. Sharing Your Videos
 - $\,\circ\,$ You have an MP4 that you can upload to YouTube or another platform.
- 2. Final Tips
 - $\circ~$ Test $\ensuremath{\textit{Everything}}$: Always do a quick test before doing a long recording.
 - $\circ~$ Use Your Headset for consistent audio quality.
 - $\circ~$ Position Your Green Screen carefully for best chroma key results.
 - $\circ~$ Practice Scene Switching with your hotkeys to avoid on-screen window toggling.

Quick Reference Checklist

- 1. Auto-Config Wizard:
 - \circ Select "Optimize just for recording."
- 2. Scenes:

- Intro, Screen + Camera, Camera Only, Outro.
- 3. Sources:
 - Display Capture (or Window Capture) for your screen.
 - $\circ~$ Video Capture Device (webcam) with optional Green Screen.
 - Images/Text for intro/outro slides.

4. Hotkeys:

- $\circ~$ Assign a unique key combo to "Switch to Scene."
- $\circ~$ Use these combos during recording for seamless transitions.

5. Green Screen Setup:

- $\circ~$ Good lighting, minimal wrinkles/shadows.
- $\circ~$ Right-click webcam \rightarrow Filters \rightarrow Chroma Key \rightarrow Adjust settings.

6. Record & Review:

- $\circ~$ Verify audio levels.
- $\circ~$ Check green screen effect.
- $\circ\;$ Make sure the Scenes switch at the right times.

You're now set to record professional-looking screencasts with smooth scene switching via hotkeys and optional green screen effects—all with **no post-processing** required. Good luck with your recordings, and have fun making your tutorials!

^[1] https://obsproject.com/

^[2] https://obsproject.com/download