HOW TO - Mixed Reality Capture for JUST HOOPS

This document will help you create a mixed reality video inside JUST HOOPS, so you can share it on your social networks.

To capture yourself inside JUST HOOPS using Mixed Reality Capture (MRC) you will need:
- Oculus Quest
- PC
- Camera USB
- Green screen that covers the size of your body

1. Connect your camera to your PC (a webcam can do the trick).

2. Download and install the Mixed Reality Capture software for PC.
https://developer.oculus.com/downloads/package/mixed-reality-capture-tools/

- Extract the file **MRC_Tools_5.1.1**
- Open the **MRC_Tools_5.1.1** folder
- Double click on **Mixed Reality Capture Setup 5.1.1** to install MRC

3. Install the Mixed Reality Capture Application for Quest on your headset

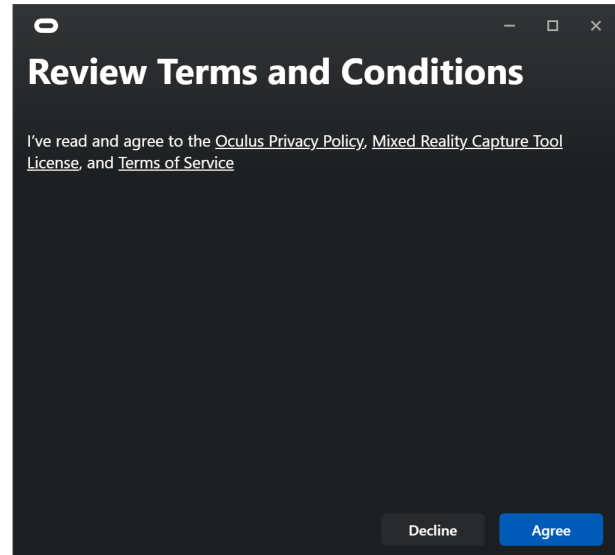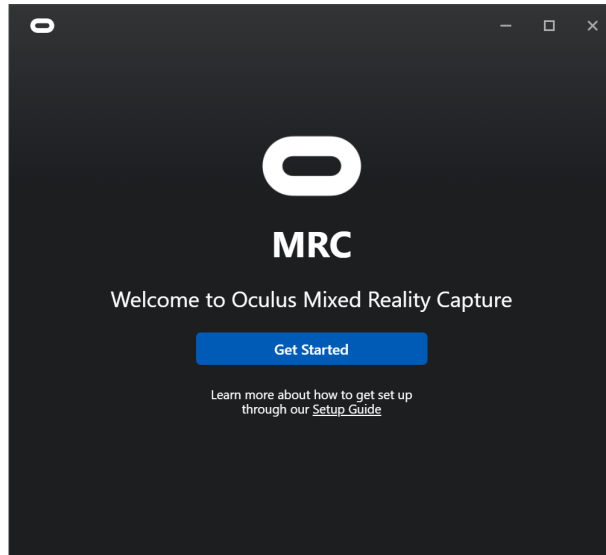Go to this link to get MRC on your Oculus library:
https://www.oculus.com/experiences/quest/2532132800176262/

Put your headset on. Go to "**Uninstalled Applications**" and **install Mixed Reality Capture** on your headset. **Launch the application**. You should see an **IP address**. We will use it later to pair your headset and your PC. From that point, keep your headset on your forehead to **prevent standby**.
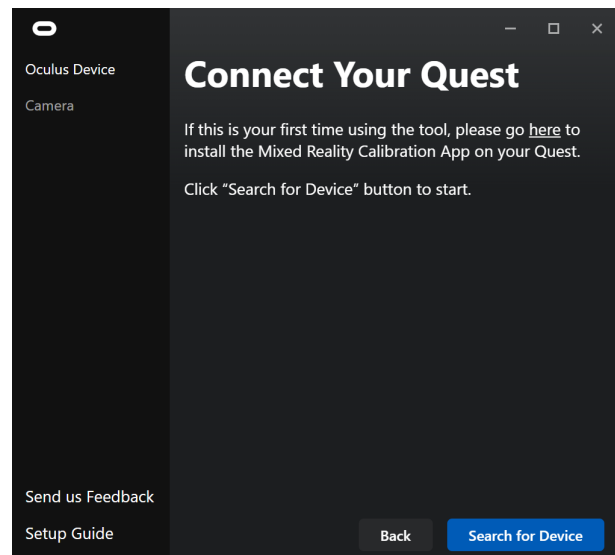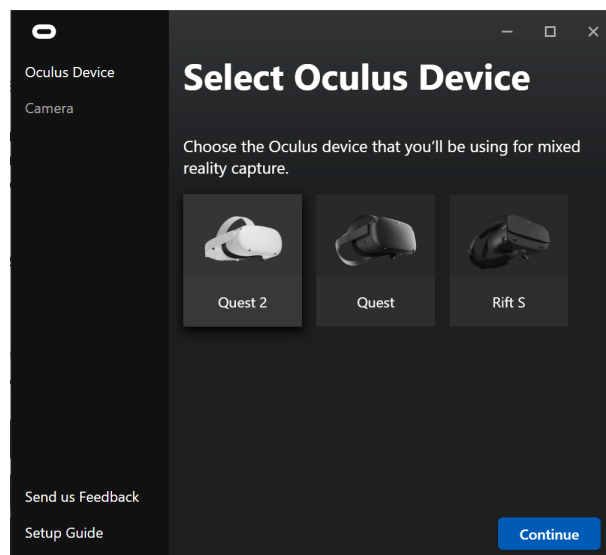
4. Pair your headset with your computer:

Go back to your **PC**. Start the **Mixed Reality Capture Application** from your computer. Click on "**Get Started**", then "**Agree**".
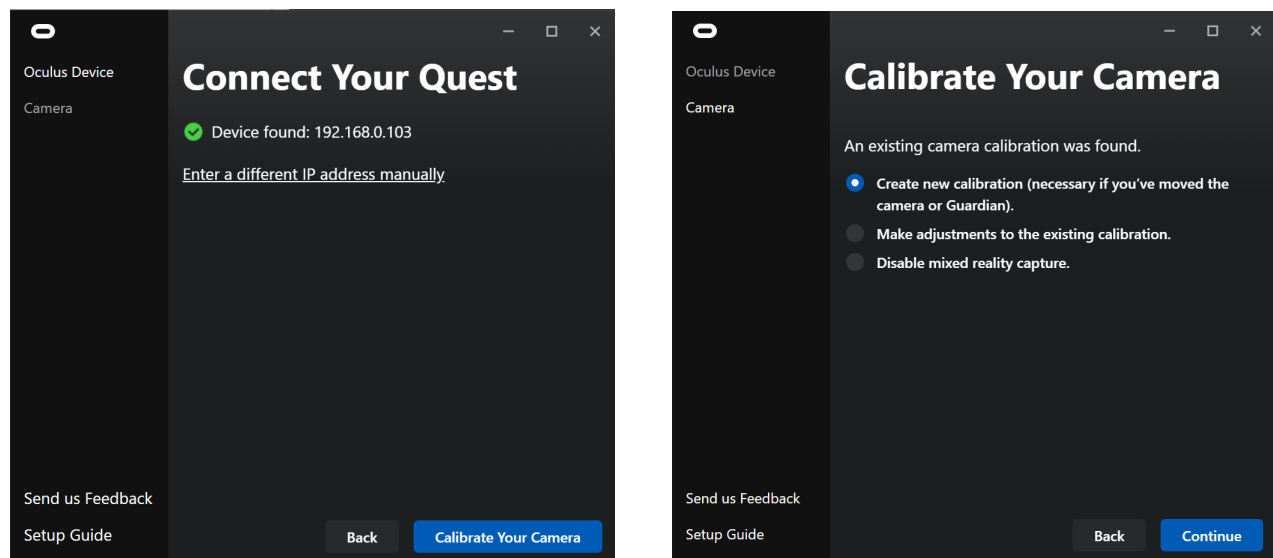

Follow the instructions on the application: **select your headset model**, click on "**Continue**" then click on "**Search for Device**". If you don't find your device, make sure **MRC is launched** on your device and your device is **not in standby**. Make sure the IP address corresponds to the one you see in your headset in the MRC application. You should be on the **same Wi-Fi network**.
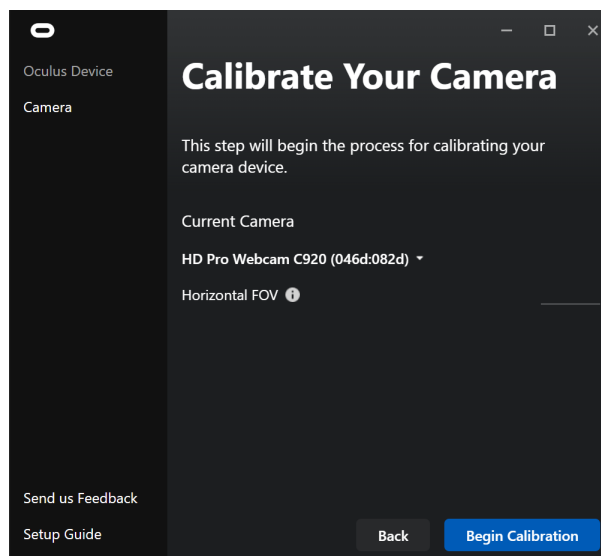
5. Calibrate your camera:

Click on "**Calibrate your camera**". Create a **new calibration**. Click on "**Continue**".
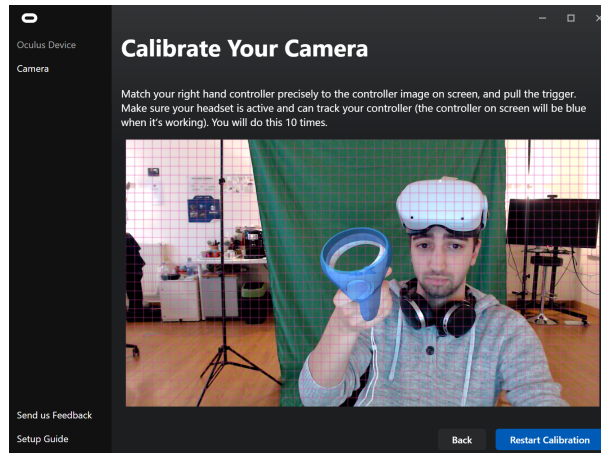

Select your camera. If you don't find it, make sure it's correctly connected to your PC. You can specify your camera's FOV but it's not necessary. You can let it blank and the software will determine it during the calibration. **Before calibration, prepare your filming set:** make sure you place the camera exactly on the spot you want, point of view, field of view, zoom…

Click on "**Begin Calibration**".

During calibration, make sure your headset is **not in standby and put it on your forehead so it can detect your controller**. Make sure your **guardian is big enough**. If you leave your guardian, you will have to restart calibration. **Don't move your camera during or after calibration**. If you do so, you will have to calibrate your camera again.

Process to the calibration by using your controller and follow the instructions. **Test your calibration** by moving your controllers in front of your camera. The virtual controllers should follow yours. For a good test, don't hesitate to move the controllers back and forward your camera.
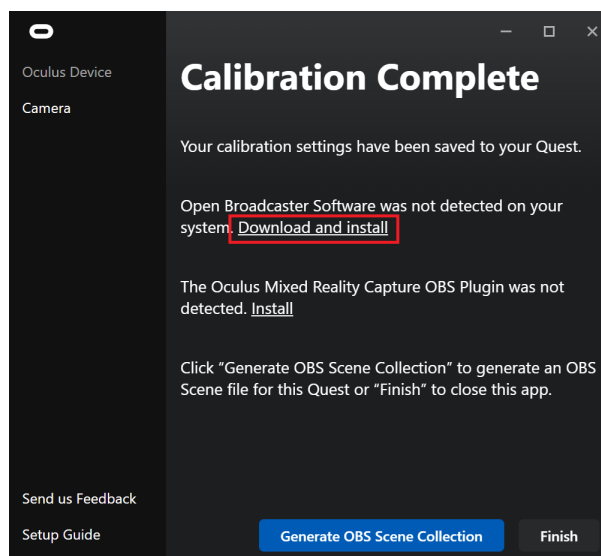
If you find that the calibration isn't good, make some adjustments or restart the calibration.

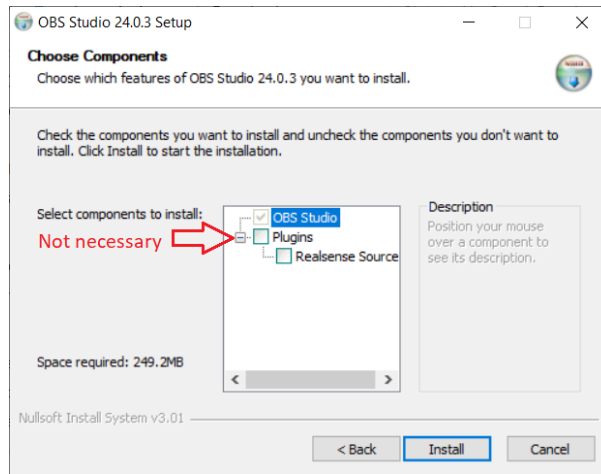If everything is ok, click on "**Save to Headset**".

6. Install broadcasting software OBS

If you don't have Open Broadcaster Software (OBS) installed or if you don't have the good version of OBS, the **MRC application proposes you to install a specific version of OBS**. It's really important that you **use this specific version**. **Don't install the latest version of OBS**. Otherwise, MRC may not work. **If you have the latest version of OBS, uninstall it before installing the version proposed by MRC.**.
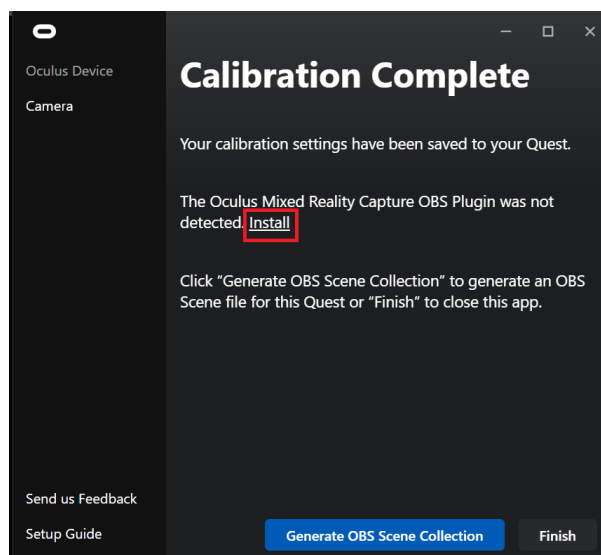
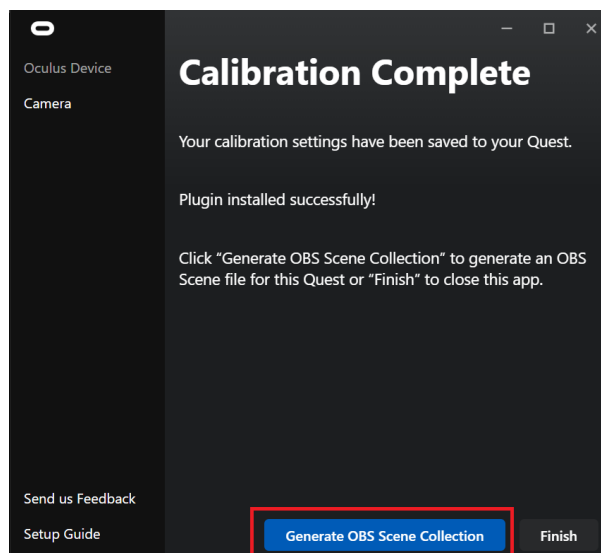Click on "**Download and Install**", then **launch the .exe** you have downloaded, **install OBS**.

You don't have to install other OBS components. Left the box unselected.

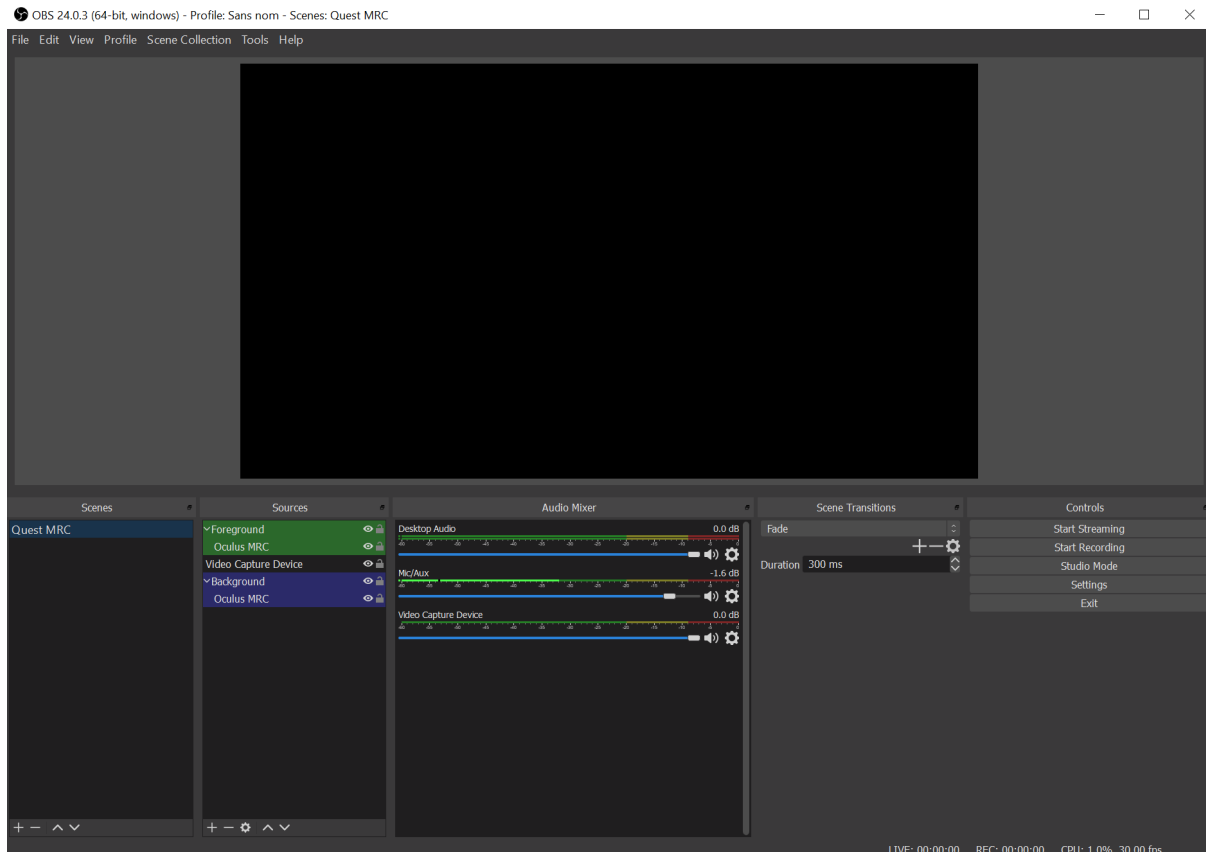Install the **Oculus Mixed Reality Capture OBS Plugin** by clicking on "**Install**".

When it's done, click on "**Generate OBS Scene Collection**". Save the generated file. We will use it later to set up the OBS scene.
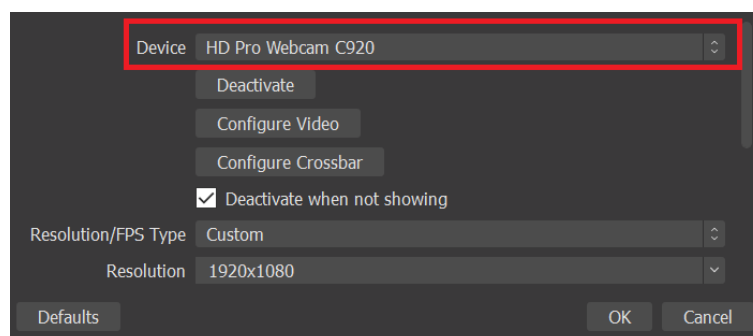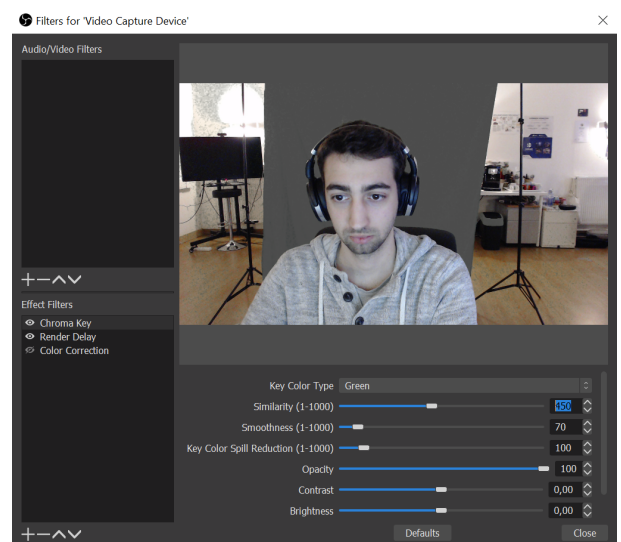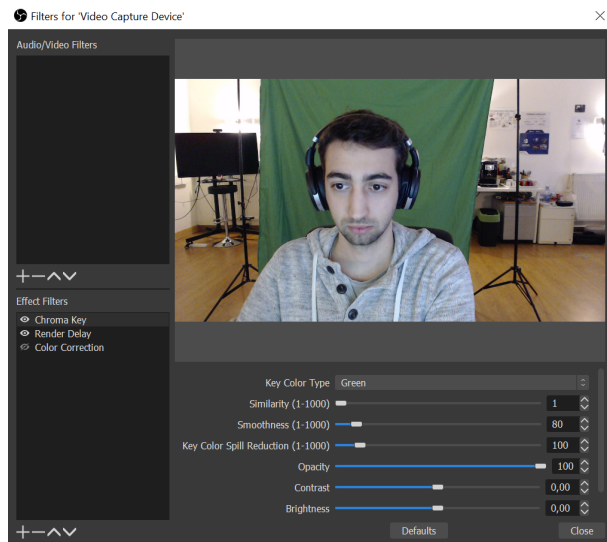
7. OBS Setup

Launch OBS, then click on "**Scene collection**" -> "**Import**". Find and open the file you just generated with the MRC application. Now you have to open it in OBS : return to "**Scene collection**" and **select the scene** you have imported, its name should be **Quest MRC**. Your screen should shows like this:
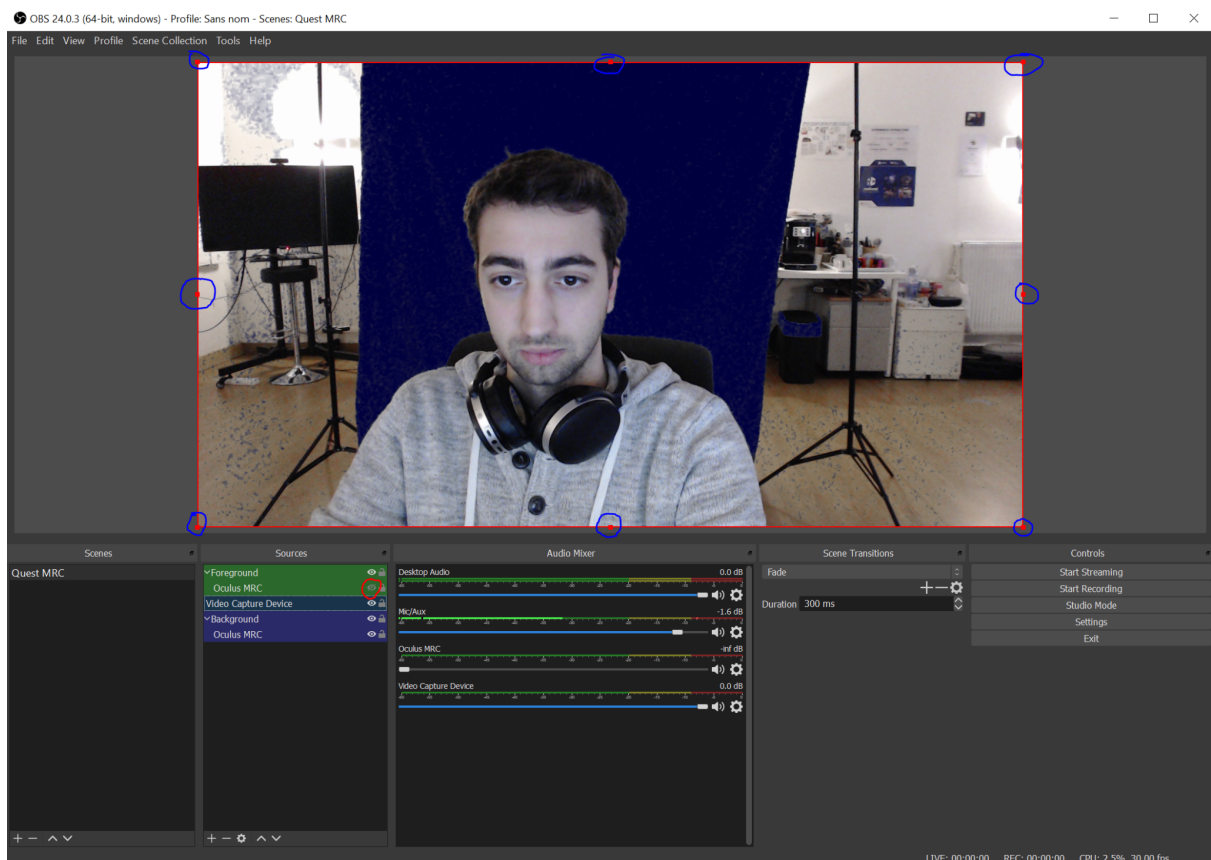

Double click on "**Video Capture Device**" and make sure OBS is using the camera you used for calibration. Click on "OK".
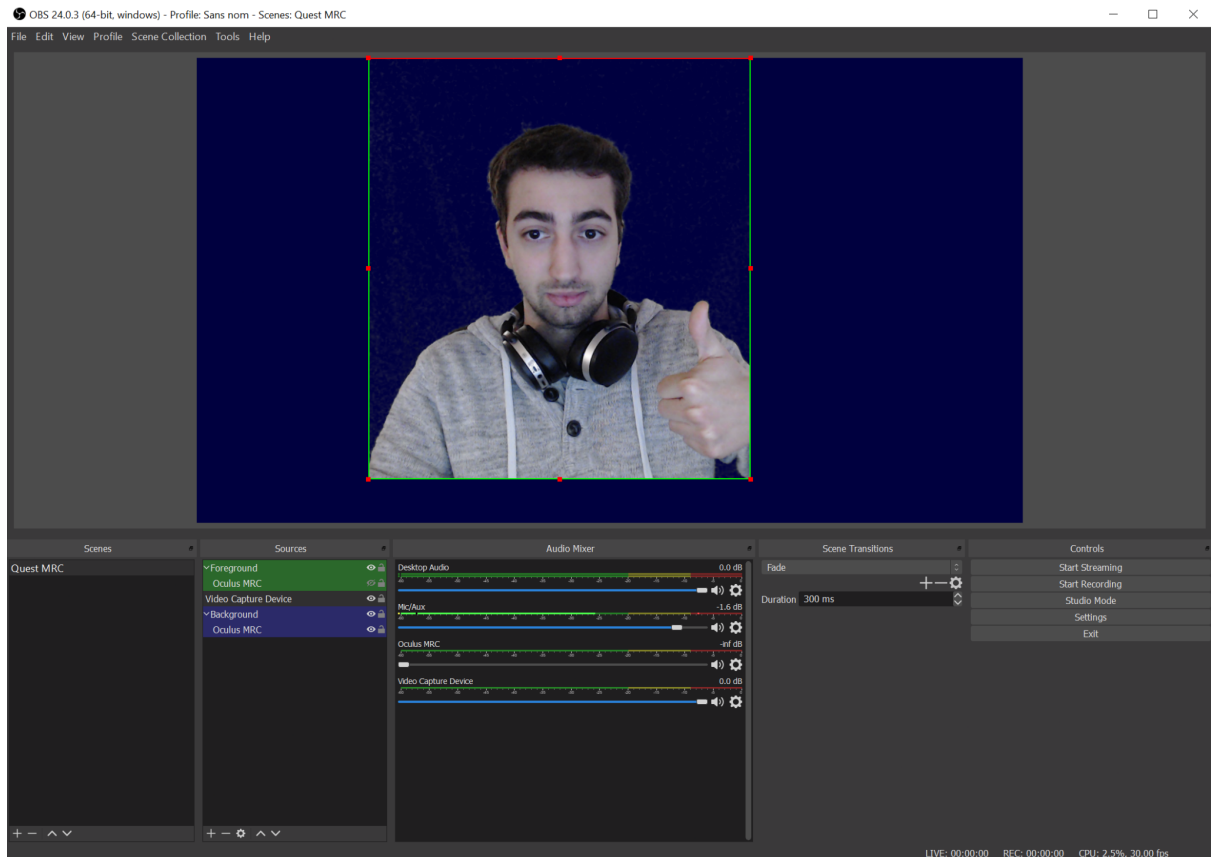

Right click on "**Video Capture Device**", select "**Filters**" then go to "**Chroma Key**". There, you can modify the option for your green screen. In "**Key Color Type**", select your screen color. Change "**Similarity**" and "**Smoothness**" parameters so your **green screen turns gray**. Click on "Close".

If your green screen isn't big enough, **crop your camera view**. In "**Sources**" -> "**Foreground**" -> "**Oculus MRC**" unselect the layer by clicking on the little eye (red circle on the screenshot). You should see yourself on the camera view and the green screen behind you should turn blue. Click on "**Video Capture Camera**" to select it, and **hold *Alt* while adjusting the borders** (blue circles on the screenshot) until they fit the borders of the blue screen behind you.
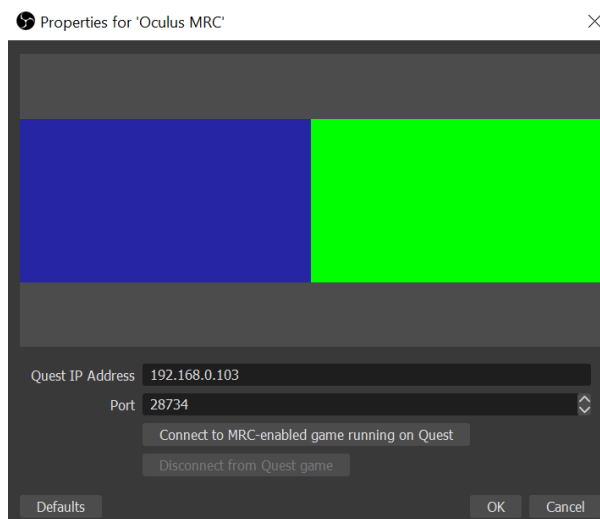

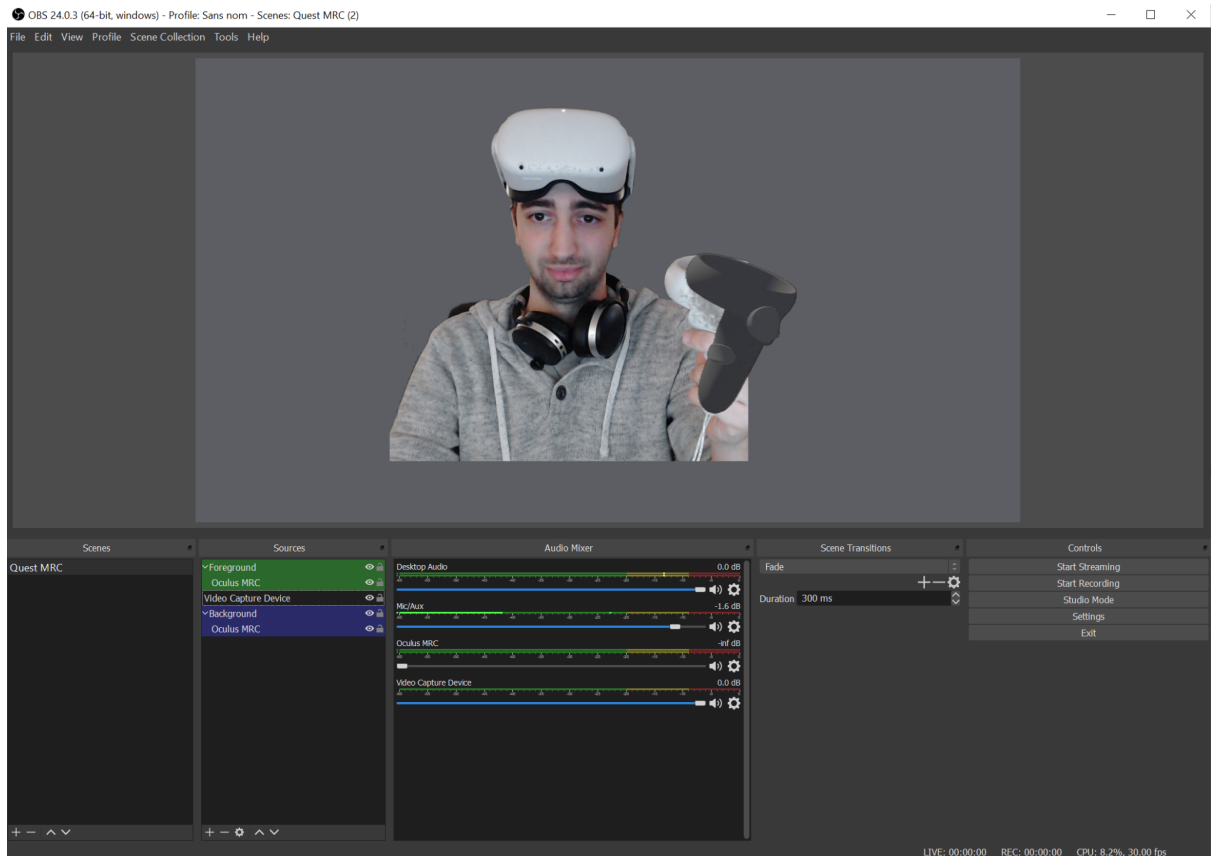Make sure **everything is blue but you.**

Reactivate the Foreground layer by pressing on the eye icon.
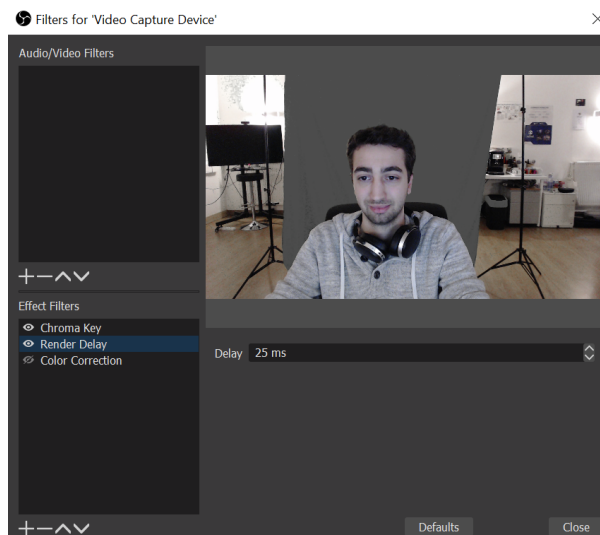
8. Test OBS Setup

Now you can check if everything is well set up and ready to go. Put your headset on to start the test. On OBS, double click on "**Oculus MRC**" in **Sources**. The IP address should be the same as before. Click on "**Connect to MRC-enabled game running on Quest**".

If nothing is shown in "**Properties for 'OculusMRC'**", quit and launch OBS again.
If you can't connect to an MRC-enabled game, quit and launch this app again.

If there is a **delay between your virtual controller and your controller**, you can add a latency: right click on "**Video Capture Device**", select "**Filters**", "**Render Delay**". Increase or decrease the **delay parameter** according to your needs.
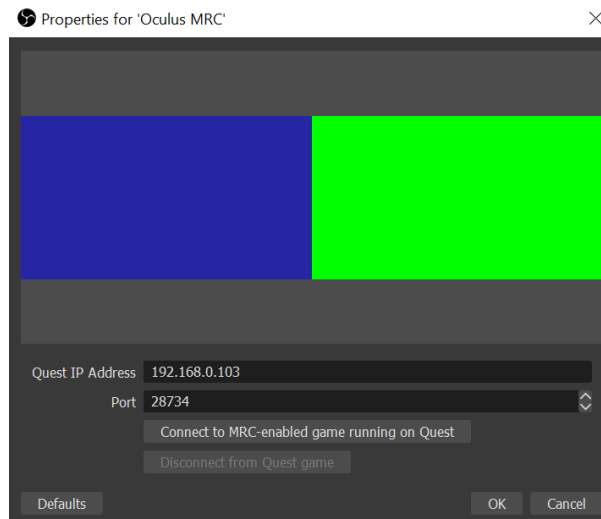

9. MRC Recording

Quit MRC application on your Quest.

Launch JUST HOOPS on Quest.
Activate Mixed Reality Capture in the game menu **TOYBOX**.

On OBS, double click on "**Oculus MRC**" in **Sources**. The IP address should be the same as before. Click on "**Connect to MRC-enabled game running on Quest**".

Click on "**Start recording**" and play!

If you want to **change your camera point of view in the game,** move around the room changing your orientation through your camera. Then, reset your position/orientation by **holding the oculus button** on your right controller.

By default, your records will be saved in the Windows Videos folder. You can change the path in "File"->"Settings"->"Output"->"Recording"->"Recording Path".

Once you have finished the recording edit the video file and share it on social networks.

Don't forget to tag **@justhoops.game** and **#justhoops** on your post!

For any question you can contact us at contact@justhoops.gg

Thank you.

Realcast team

Oculus official documentation for MRC setup :
https://support.oculus.com/articles/in-vr-experiences/social-features-and-sharing/quest-2-mixed-reality-capture

A good video of how to set up MRC Quest :
https://www.youtube.com/watch?v=tQnYsWj2ePo