How to Improve Your Google Meet Video Quality

In this article, I'll be showing you the ultimate guide that you'll ever need to improve Google Meet video quality.

I will be giving you practical and useful tips to improve, diagnose and provide a solution when experiencing bad video quality when using Google Meet.

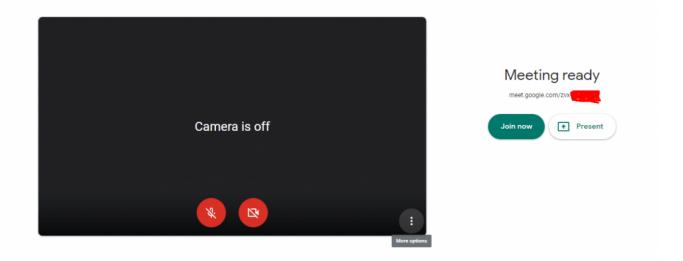
Video Tutorial

https://www.youtube.com/watch?v=QUviDBYwqKwVideo can't be loaded because JavaScript is disabled: How to Improve Google Meet Video Quality | Improve Google Meet Bad Video Quality (5 Tips) (https://www.youtube.com/watch?v=QUviDBYwqKw)

1. Change Send & Receive Quality to improve Google Meet Video Quality

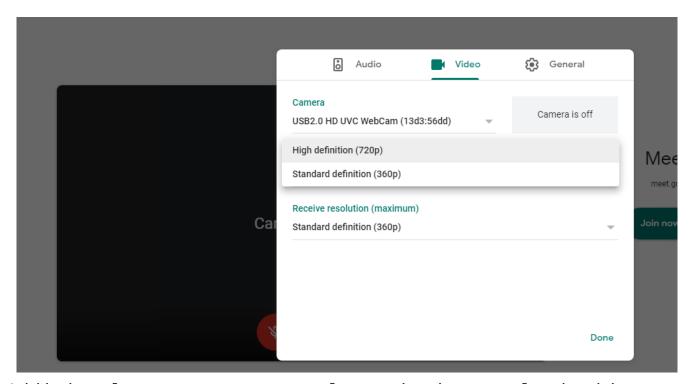
If you are seeing blurry pixels, choppy audio even if you have a good internet connection, one possible cause for this terrible Google Meet video quality is that you or the people connected on your Google Meet session might have set their send and receive quality to 360p.

To change this video quality setting, it is very simple. If you're not yet inside a Google Meet room, click on the option on the right bottom-portion of your window that says "More Options".



Once opened click on **Settings** > Go to the **Video Tab** where you will be able to see the send resolution and receive resolution which refers to the video quality that you are uploading and video quality you are receiving from users connected on your Google Meet room.

To improve Google Meet video quality make sure that the setting is set to the highest supported resolution (eg. 720p, 1080p, etc.) depending on your hardware.



Additional note, you must also ask the people inside your Google Meet room to change their corresponding setting (send quality) to improve the video quality that you are receiving

for example from your professor.

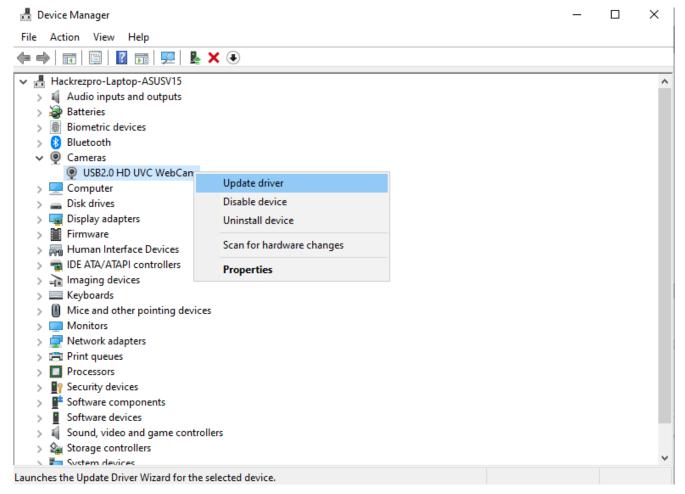
IMPORTANT NOTE: The Google Meet video quality settings as of this writing automatically resets itself back to the lowest quality (360p) so in each room / meeting you'd have to reconfigure the Google Meet video quality settings to make sure that you are receiving and sending the best video quality.

2. Update Camera/Webcam Drivers

Another practical method that you can try to address Google Meet bad video quality is to update your camera drivers.

Go to your **Start Menu** and search for **Device Manager** and then open it up.

Expand the **Cameras** and then right click your webcam or camera connected on your laptop/desktop then click on the **Update driver**.



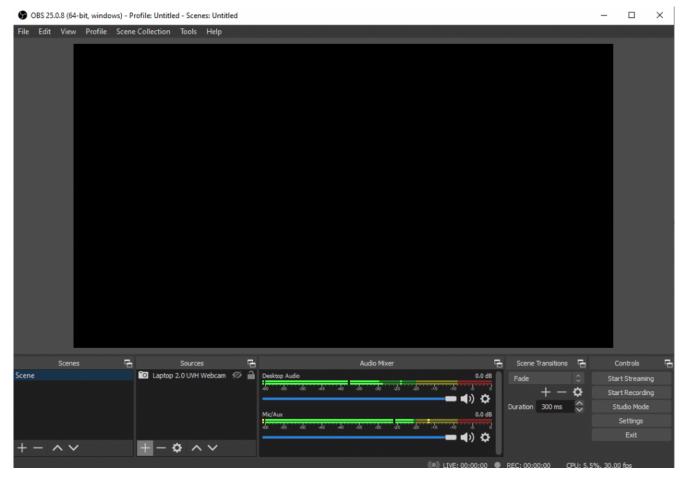
Wait for it to finish updating, the time depends on the size of the update / driver and your internet speed.

3. Configure your Webcam Settings

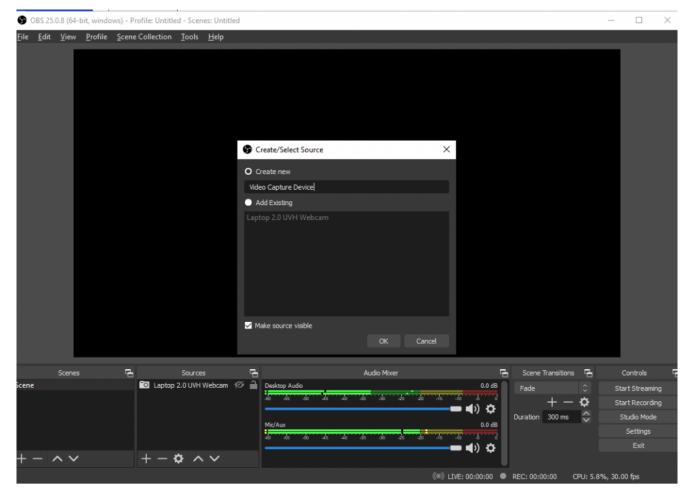
After making sure that you have the updated driver for your Camera device, next thing that you can do is to configure your webcam settings.

Out of the box, webcams and low-mid range stock cameras tend to have a pretty generic configuration hence manually adjusting them could improve Google Meet video quality.

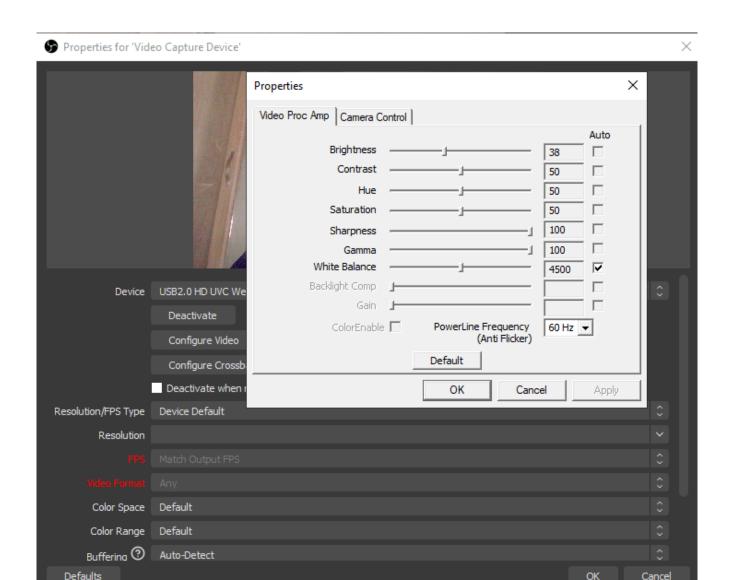
Go ahead and <u>download OBS Studio</u> and install the app. Open the OBS Studio once launched click on the + icon under the Sources and select "Video capture device"



Then give it any name and hit ok once you've decided what to name your webcam/camera device.

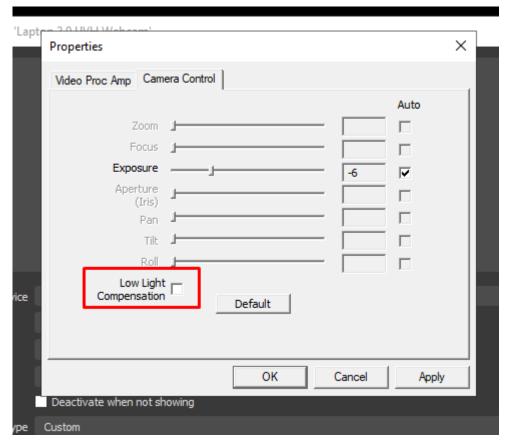


Under the **Device** select your webcam / camera device, click on the **configure video** and you'll be shown a window to change Brightness, Contrast, Hue, Saturation, Sharpness, Gamma, and White balance. You can play around with these settings to have the best picture quality depending on your setup and lighting environment.



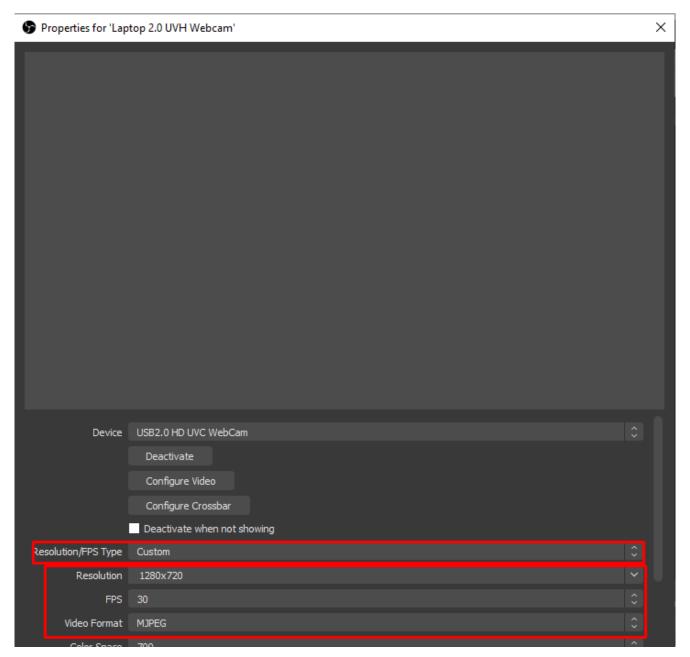
Recommendation for the Video Proc Amp: If you are using a laptop webcam turning up the sharpness could improve clarity of your webcam.

After adjusting the image settings, go to the Camera Control tab. You'll be able to see "Low Light Compensation". If you have this option available, you can turn this one off to improve the webcam / camera frames per second (FPS) to avoid stuttering or motion blurring when moving.



Disabling the Low Light Compensation reduces the amount of work put into your camera device. Although this might cause some darker image quality, it is better to just compensate this by getting a lamp or a small source of light facing towards your window (eg. natural light from windows).

After adjusting the camera properties, hit the apply and ok button and change the following settings:



Set the resolution / fps type -> Custom, Resolution -> Highest Resolution supported by your camera (eg. 720p or 1280×720), FPS -> Highest frame rate supported by your camera (eg. 30), Video Format -> MJPEG.

This will further improve the fps and reduce the "webcammy" feels where your picture creates massive amounts of motion blur when moving due to the lack of FPS.

4. Pause Windows Updates or System

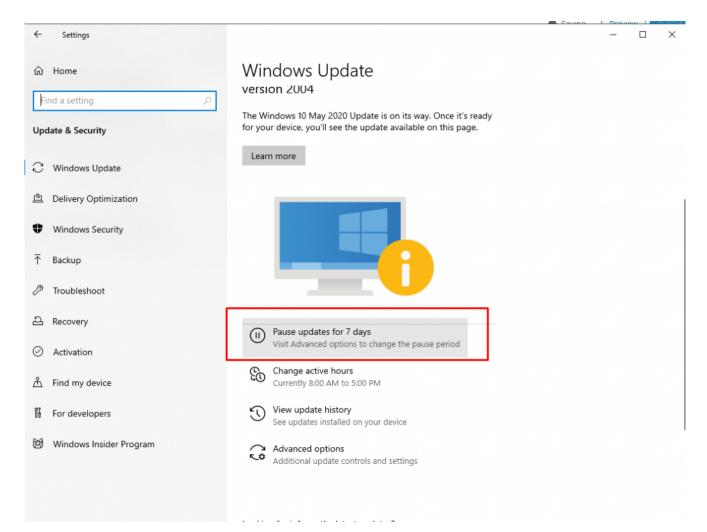
Updates

Additionally, you can also try pausing Windows Updates or System Updates on your computer / device to improve google meet bad video quality.

Updates can sometimes hog your speed and bandwidth on your home network.

Disabling these updates temporarily will assure you that this is not the cause of terrible video quality when attending an important meeting on Google Meet.

To disable Windows Updates, go to the **Start Menu** and search for **Windows Update Settings**, scroll down and you'll be able to see the option "**Pause updates for 7 days**"



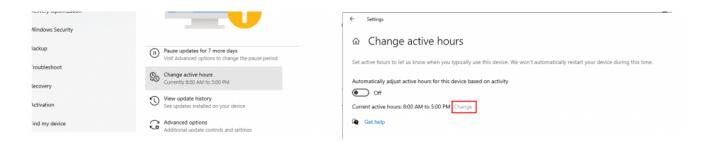
To confirm that your windows updates have been successfully paused, scroll up and you'll be able to see a notification

that the updates has been paused.



Alternatively, you can also set your active hours to make sure that Windows will not conduct any updates during these period or time of the day.

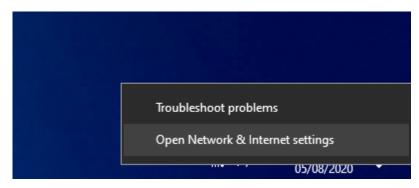
To change the active hours, click on the **Change Active Hours** and set your preferred time.



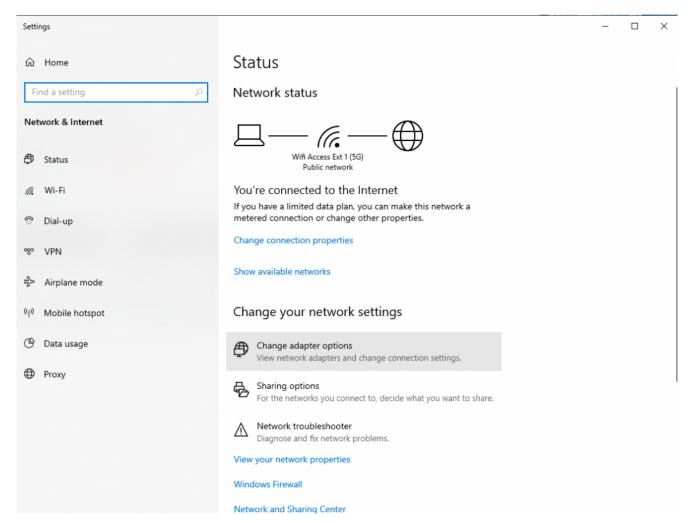
5. Change your DNS Server to Cloudflare / Google DNS

Although it is uncommon for your DNS server to be the cause of the issue with regards to bad video quality on Google meet, however it is not impossible.

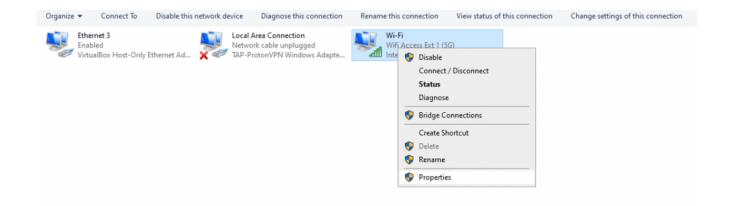
To change your dns server to a more reliable DNS server such as Cloudflare, Google DNS, OpenDNs, etc. look for your network icon on your task bar and right click on it and click on Open Network & Internet Settings.



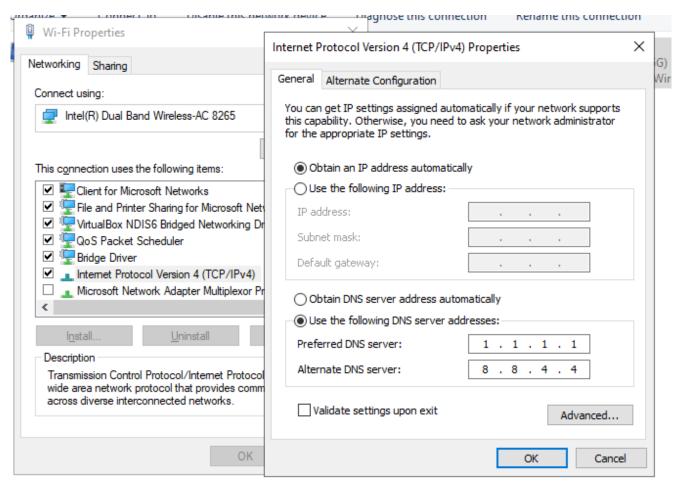
Click on the Change Adapter Options under the Change Network Settings.



Locate your network adapter (WiFi / Ethernet Adapter) and right click on it and click on **Properties**.



Look for the **Internet Protocol Version 4 (IPv4)** entry and click on it and then click the Properties button. Select the Use the following DNS Server addresses option and enter the following.



Once done, go ahead and restart your computer to apply all the recent DNS changes you've made.

6. Try to use modern web browsers

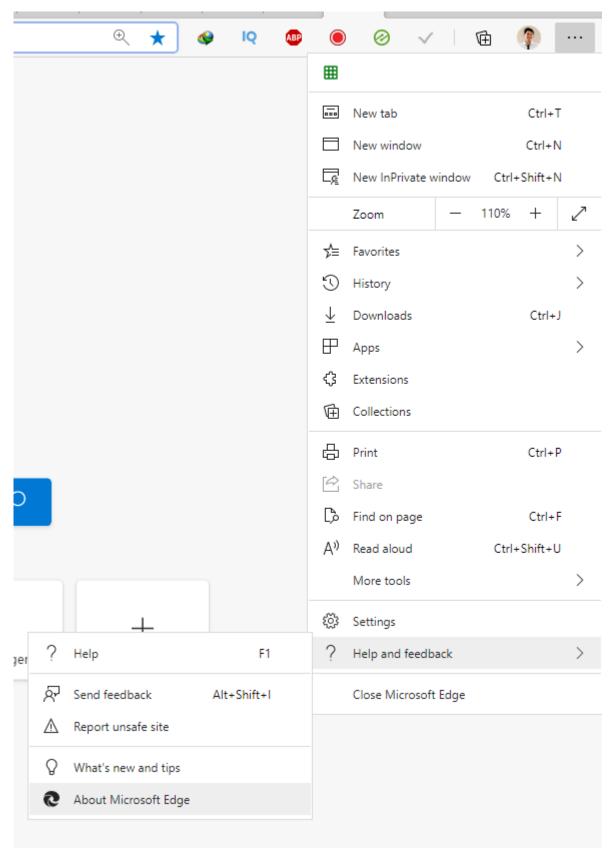
Consider also using modern web browsers if you haven't just yet. Google Meet mostly runs through web browsers thus having a modern and up-to-date browser will improve video and audio clarity of calls or meetings inside Google Meet.

Some examples of modern web browsers are Google Chrome, Microsoft Edge (Chromium), Firefox, Opera, and many more! Here are the their respective download pages.

- Google Chrome
- Microsoft Edge
- Firefox
- Opera

If you're already using one of the many modern web browsers, you can try checking if you have the latest version / updated version of the browser.

For Microsoft Edge go the top-right portion of your screen and you'll be able to see a **Settings Menu** icon expand that one go **Help and Feedback** and click on **About Microsoft Edge**.



Typically, it will automatically check for updates that says "Checking for updates" when opening this window.

About



Checking for updates

Version 84.0.522.52 (Official build) (64-bit)

This browser is made possible by the Chromium open source project and other open source software.

Microsoft Edge

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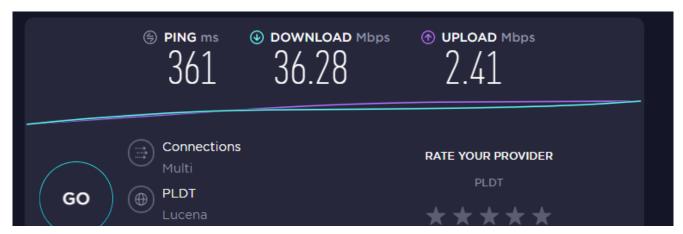
If you're browser is up=to=date it will show you a message that your browser is up-to-date.

7. Check your internet speed / connection

After doing all the optimization possible, yet you still experience terrible video quality on Google Meet, I suggest you to check your internet connection.

To check your internet speed, you can run a download and upload speed tests that will show you the current speed of your network as well as it's latency.

Go to speedtest.net, then click on the Go button. Once the tests are finished (typically 1-3 minutes) it will show you three things. Ping (Latency), Download Speed and Upload Speed.



To interpret this, a good quality internet connection must have low Ping or latency and have both high download and upload speeds.

In the snapshot of my speed test, the ping / latency is 361ms which is higher than normal hence it will cause delays / lags / stuttering when receiving and sending video during a Google Meet conference.

Typically a Fiber connection must only have 10-60 ms, a wired DSL/Cable internet must have only less than 100ms and wireless LTE networks are typically at around 120ms and below.

The **download speed** will affect the quality that you RECEIVE from the people talking / broadcasting their video inside a Google Meeting.

The **upload speed** will affect the quality of your video and audio being sent to the people connecting inside your Google Meeting.

The photo / snapshot above shows you a slow network since the ping is higher than normal (should only be around 10-40ms) and the upload speed is lower than normal (fibr must have symmetrical upload and download speeds).

8. Upgrade your internet connection

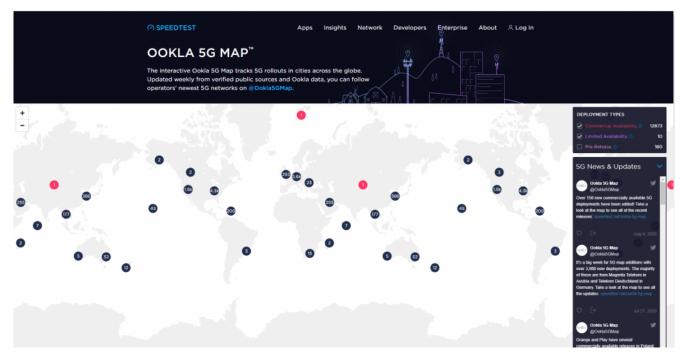
So you've reached the end of this list, and yet still you haven't improved your Google Meet video quality, my last

suggestion is to find a better internet service provider or upgrade from your existing plan.

If you are offered between Fiber, DSL/Cable, and Wireless LTE plans always choose Fiber plan over any other as it is the latest technology that offers high quality internet connection.

An emerging technology called 5G service is also another possible option however due to the fact that it is not yet widely available, your best option is to choose Fiber internet or if no facilities can accommodate you try Cable internet, or LTE Wireless internet and least recommended is the DSL internet.

You can check the 5G coverage in this <u>OOKLA 5G Map</u> if you're area is already 5G ready then you can start inquiring for this newest technology that allows you to connect at fiber fast speeds wirelessly.



Related Articles:

- PLDT Fibr Boost 2.4 Ghz Best Wifi Settings
- Speed up slow / dead utorrent, qbittorrent, bittorrent downloads (2020)

How to limit wifi / lan users on PLDT Fibr Router (NO QOS)