RECORDING GAMEPLAY VIDEO AT HIGH FRAME RATES IN OBSTUDIO

1. Open OBStudio, go to Settings ->Video.
2. Select Fractional FPS Value and set it to what you think your game's framerate is running at.
3. Record a small but representative sample of your target gameplay.
4. Go to Help->Log Files->Show Log Files.
5. There will be 3 roughly corresponding to start, middle, and end timestamps.
6. Select the middle one, i.e., 2nd from bottom.
7. Scroll down to the line that contains "obs_graphics_thread".
8. Write down the 99th percentile value, for example, "99th percentile=1.993 ms".
9. This means 99% of your frames were recorded in 0.001993 seconds.
10. Take the inverse 1 / 0.001993 = 501.756.
11. This means the frame rate being recorded was 501.756.
12. Got back to OBStudio settings and set the denominator to 501. Realistically speaking, you likely will be able to get away with "divided by 2" values for the denominator, i.e., 250, 125, or perhaps even 75 fps.
13. Rerecord a sample. Evaluate and adjust settings to get best recording quality.