

# Improve Elgato Game Capture HD software performance

**Elgato Game Capture HD** software works well if your computer exceeds the basic System Requirements.

Those requirements vary depending on what hardware unit you're using. To find out more, please see these detailed articles:

[Elgato Game Capture HD System Requirements](#)

[Elgato Game Capture HD60 System Requirements](#)

[Elgato Game Capture HD60 S System Requirements](#)

[Elgato Game Capture HD60 Pro System Requirements](#)

If your computer barely meets the minimum System Requirements, then performance may suffer, especially if you are trying to do a number of things at the same time.

Here are a few steps you can take to improve performance in such situations.

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## Change The USB Port

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Try your hardware using all possible USB ports on your computer, to see if performance improves.

Using another USB port can help because there often is more than one internal USB bus, and switching ports may provide more USB bandwidth.

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## Change The Quality (Bitrate)

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Video **Quality**, also known as the **Bitrate**, is how much data is used to represent each second of video. It's usually measured in Megabits Per Second (Mbps).

**Elgato Game Capture HD** has a maximum quality of 30Mbps for 1080p video.

**Elgato Game Capture HD60** has a maximum quality of 40Mbps for 1080p video.

**Elgato Game Capture HD60 S** has a maximum quality of 40Mbps for 1080p video.

**Elgato Game Capture HD60 Pro** has a maximum quality of 60Mbps for 1080p video.

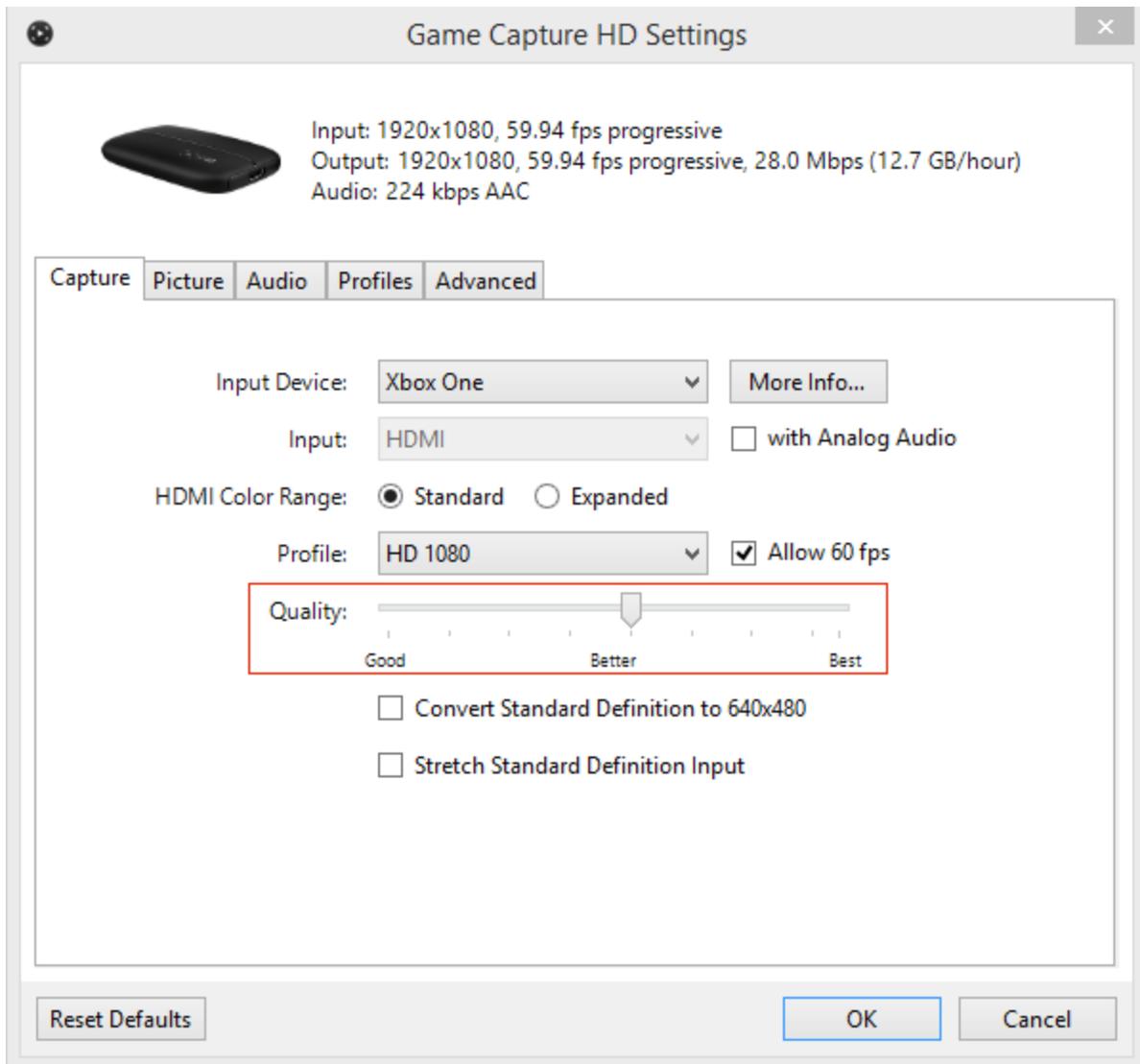
These **Bitrates** are higher than some computers can handle.

Lowering the **Bitrate** will save a lot of hard drive space, and will allow your computer to process the H.264 video you're capturing with less effort.

Lowering the **Bitrate** will reduce the time it takes to upload files to YouTube.

Since most every streaming service can't handle very high **Bitrates**, lowering the **Bitrate** can also improve streaming performance.

You can change the **Bitrate** in the **Capture Settings** of the **Elgato Game Capture HD** software, by moving the **Quality** slider.



Try lowering the **Bitrate** to somewhere between 10 and 15Mbps, to see if that helps. Make further adjustments as needed, either higher or lower, until you find the point where performance starts to dip. Then, make sure you stay below that level.

You will be able to see the current **Bitrate** listed at the top of the **Capture Settings** window, if you have a signal.

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## Change The Resolution

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Video **Resolution** is how many pixels are used to make an image. 720p (1280 by 720 pixels)

and 1080p (1920 by 1080 pixels) are resolutions.

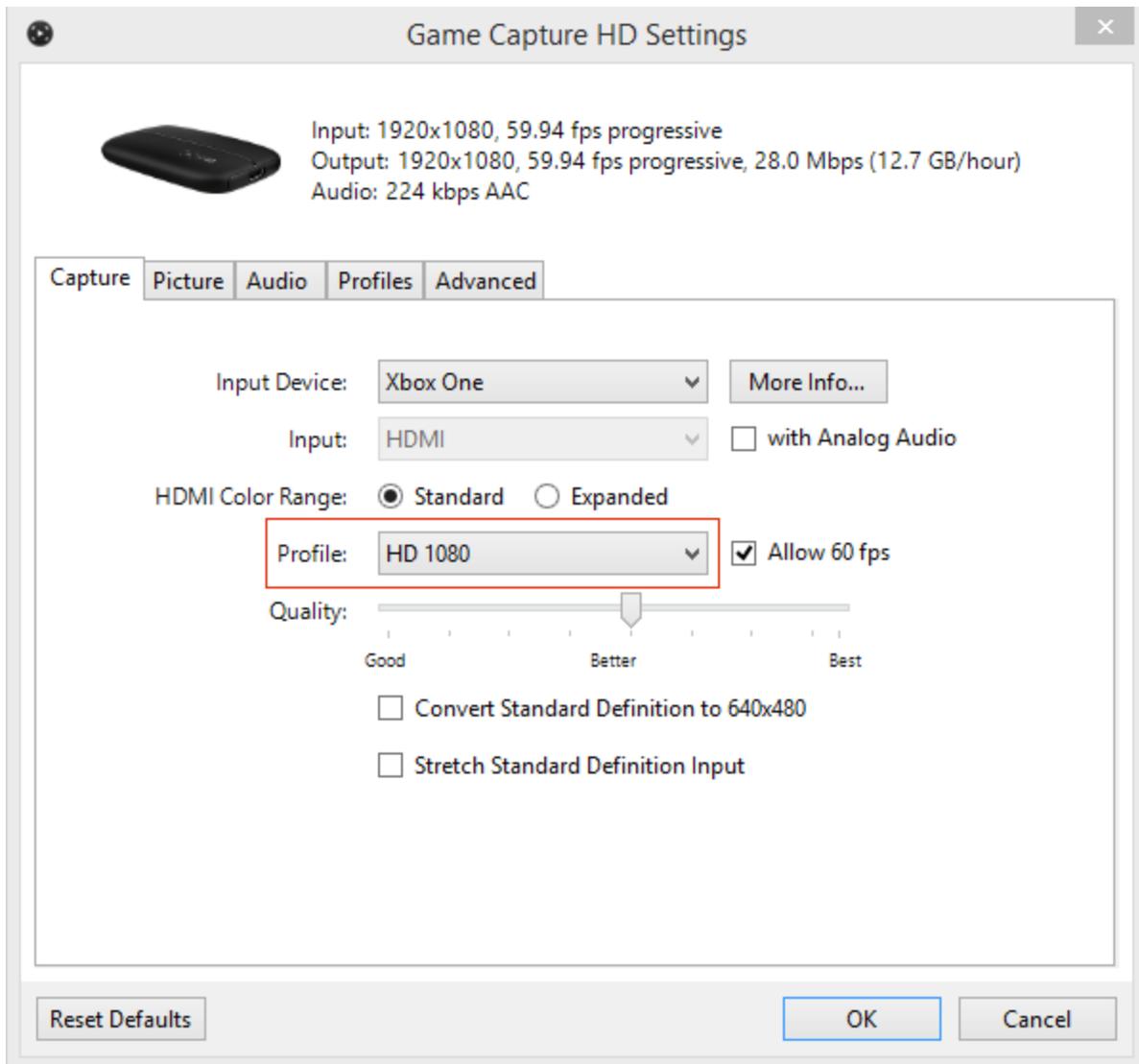
Increasing the **Resolution** increases how much data is used to represent each frame of video. Increased resolutions will make your computer work harder to process the same video.

Lowering the **Resolution** will save a lot of hard drive space, and will allow your computer to process the H.264 video you're capturing with less effort.

Lowering the **Resolution** will reduce the time it takes to upload files to YouTube.

Since most every streaming service can't handle very high **Resolutions**, lowering the **Resolution** can also improve streaming performance.

You can change the **Resolution** in the **Capture Settings** of the **Elgato Game Capture HD** software, by adjusting the **Profile**.



However, the primary place to change the **Resolution** is at the video source. For example, go to the settings of your PlayStation 4 or Xbox One and change the resolution from 1080p to 720p.

You will be able to see the current **Resolution** listed at the top of the **Capture Settings** window, if you have a signal.

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### Lower The Frame Rate (fps)

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The video **Frame Rate** is how many still images are used to make a second of video. 30 Frames Per Second (fps) or 60 fps are **Frame Rates**.

**Elgato Game Capture HD** has a maximum **Frame Rate** of 30 fps for 1080p video.

**Elgato Game Capture HD60** has a maximum **Frame Rate** of 60 fps for 1080p video.

**Elgato Game Capture HD60 S** has a maximum **Frame Rate** of 60 fps for 1080p video.

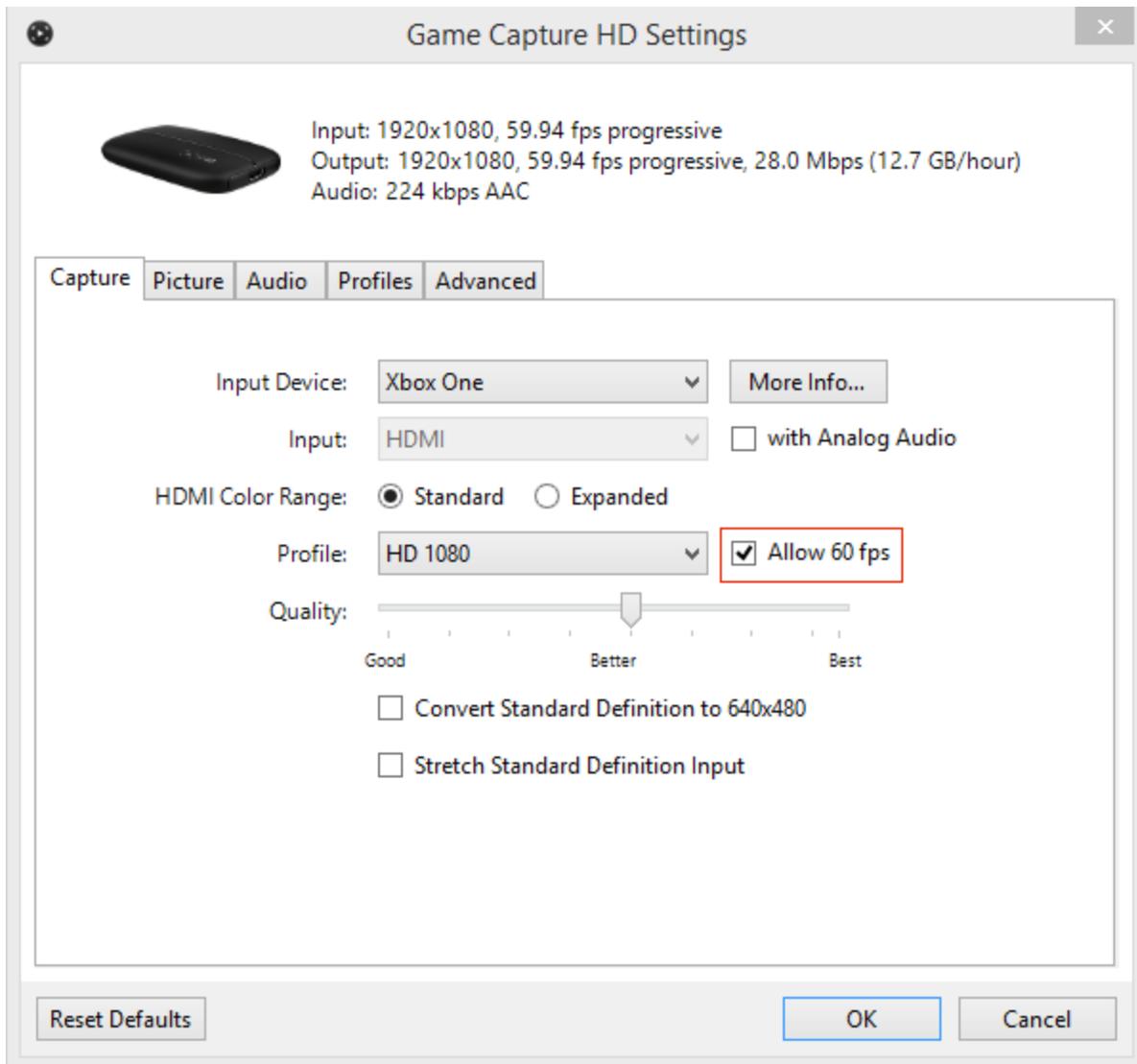
**Elgato Game Capture HD60 Pro** has a maximum **Frame Rate** of 60 fps for 1080p video.

All devices have a maximum **Frame Rate** of 60 fps for 720p video.

Increasing the **Frame Rate** increases how much data is used to represent each second of video. Increased **Frame Rates** will make your computer work harder to process the same video.

Lowering the **Frame Rate** will save a lot of hard drive space, and will allow your computer to process the H.264 video you're capturing with less effort.

You can change the **Frame Rate** in the **Capture Settings** of the **Elgato Game Capture HD** software.



In **Elgato Game Capture HD** software version 2.0, the option will be called **Allow 60 fps**. In earlier software, the 60 fps option is called **Preserve Source Format**. If you turn off 60 fps, you will get 30 fps.

See this article for more information about accessing 60 fps content:

[How do I record 720p video at 59.94 or 60 fps with Elgato Game Capture HD?](#)

Note that in many situations 30 fps may be represented as 29.97 fps, and 60 fps as 59.94 fps.

You will be able to see the current **Frame Rate** listed at the top of the **Capture Settings** window, if you have a signal.

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## Turn Off Flashback Recording

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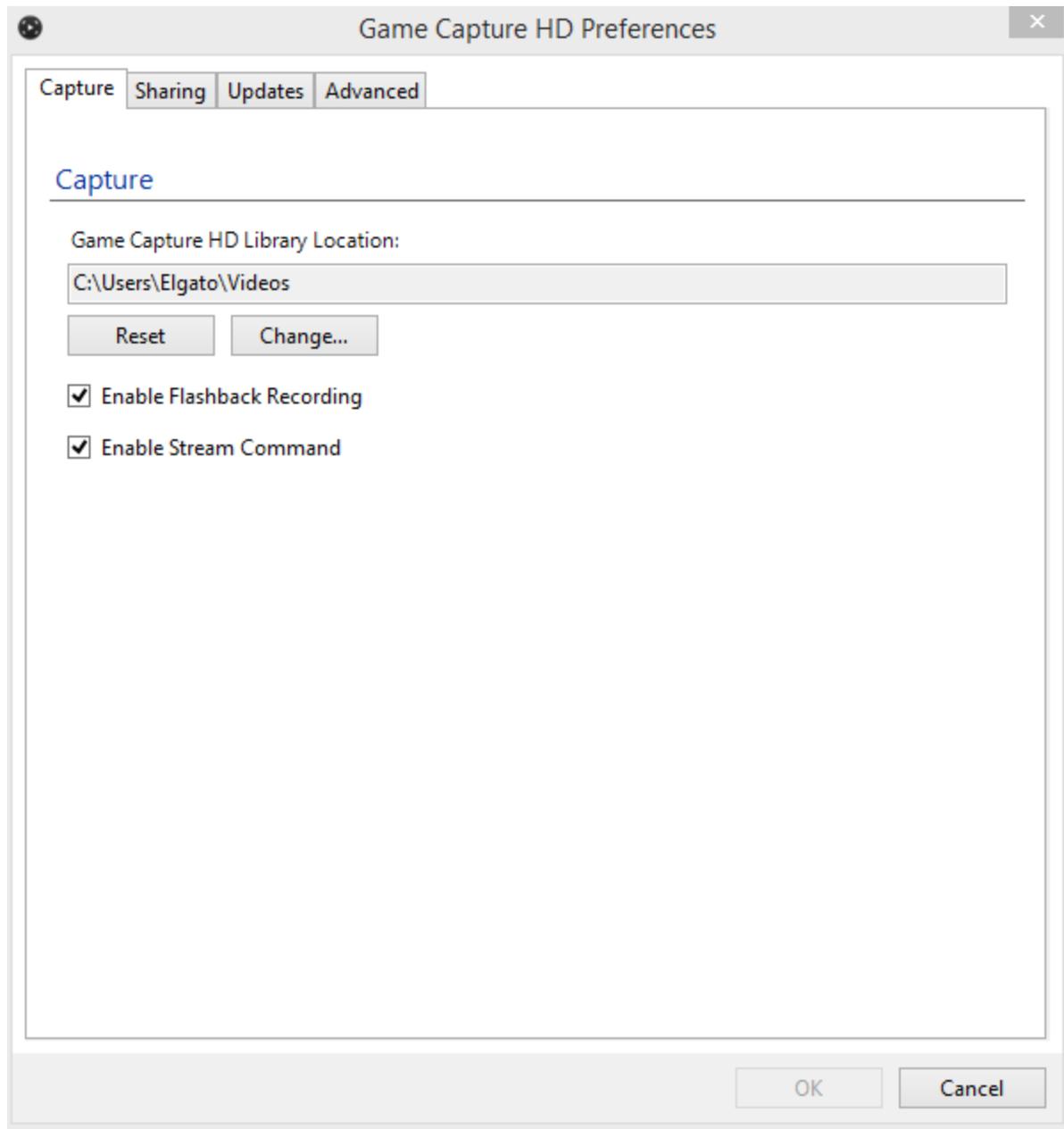
**Elgato Game Capture HD** has a video buffer, that constantly records video while you play your game.

You can manipulate that buffer as much as you want - rewind, pause or fast forward - and you can also use **Flashback Recording**.

**Flashback Recording** lets you rewind incoming video to where you want to start recording, and press the **Record** button. **Elgato Game Capture HD** will start recording from that point, even if it's from an hour ago.

If you turn off **Flashback Recording**, then a lot less hard drive space will be used. **Elgato Game Capture HD** software also won't work as hard. This can improve overall performance.

You can turn off **Flashback Recording** in the **Capture** section of the **Preferences**.



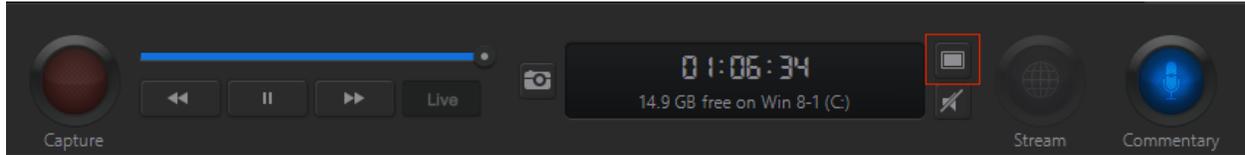
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### Turn Off Video Preview

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**Elgato Game Capture HD** will display incoming video in the main software window, but you can still capture and stream even if that video is not being displayed.

To disable the video preview, you can use a special button in the software interface. It is highlighted in red, in the image below:



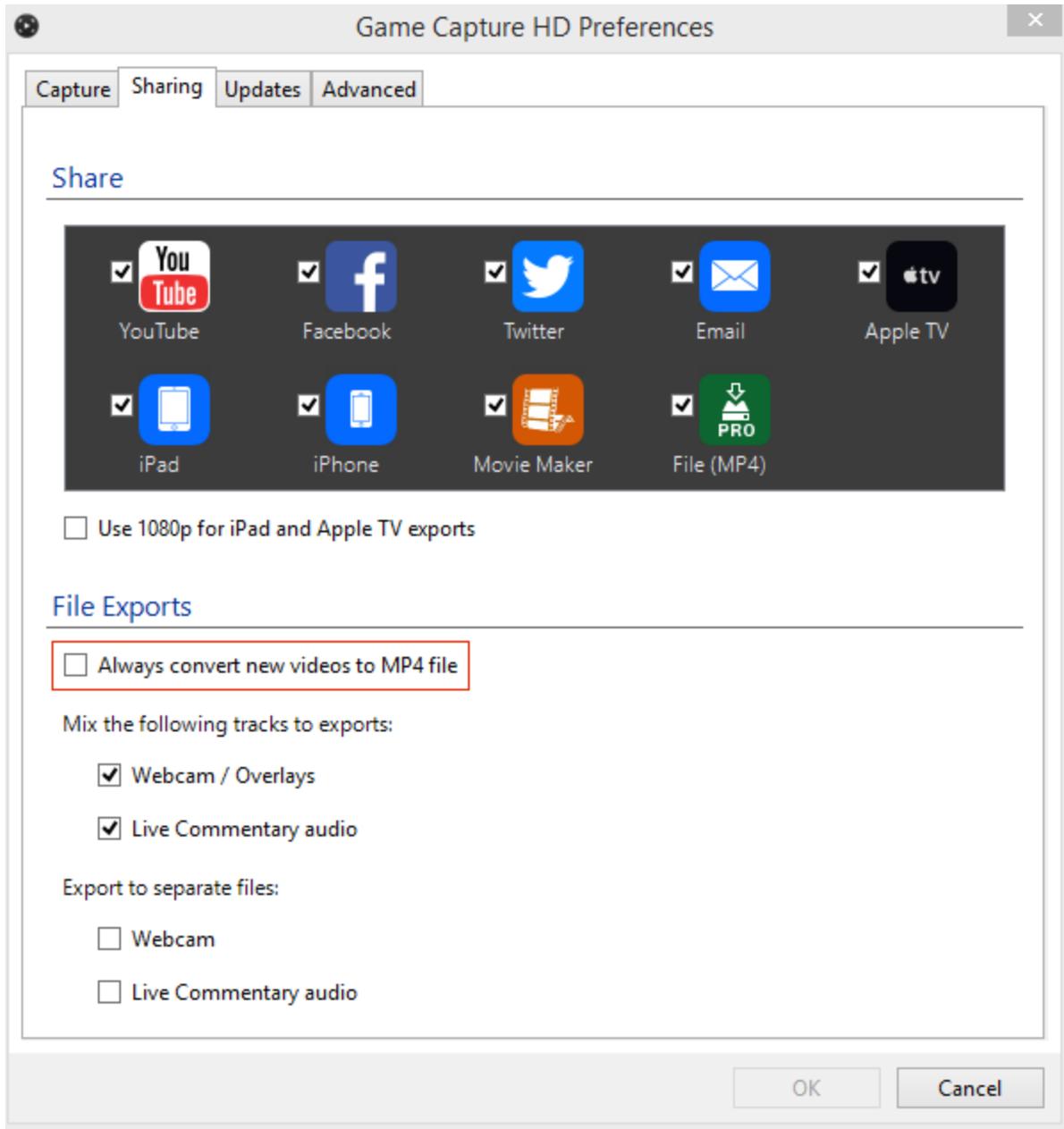
**Elgato Game Capture HD** software won't need to work as hard, since it won't have to decode video for playback. This can improve overall performance.

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### Turn Off Automatic Export

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**Elgato Game Capture HD** software has a feature that allows you to "Always convert new videos to MP4 file". That feature is in the **Sharing** section of the **Preferences**.



This conversion process takes additional CPU power, and if you are doing other things in the **Elgato Game Capture HD** software during the export to MP4, there can be a performance hit.

Turning off this feature can improve performance. If you turn it off, you can always manually **Share** video from the **Edit** section of the **Elgato Game Capture HD** software.

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**Turn Off Stream Command**

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**Elgato Game Capture HD** software version 2.0 for Windows adds the ability to overlay webcam video and still graphics on top of your gameplay, while you are streaming.

This new feature is called **Stream Command**, and it needs a very powerful computer to operate.

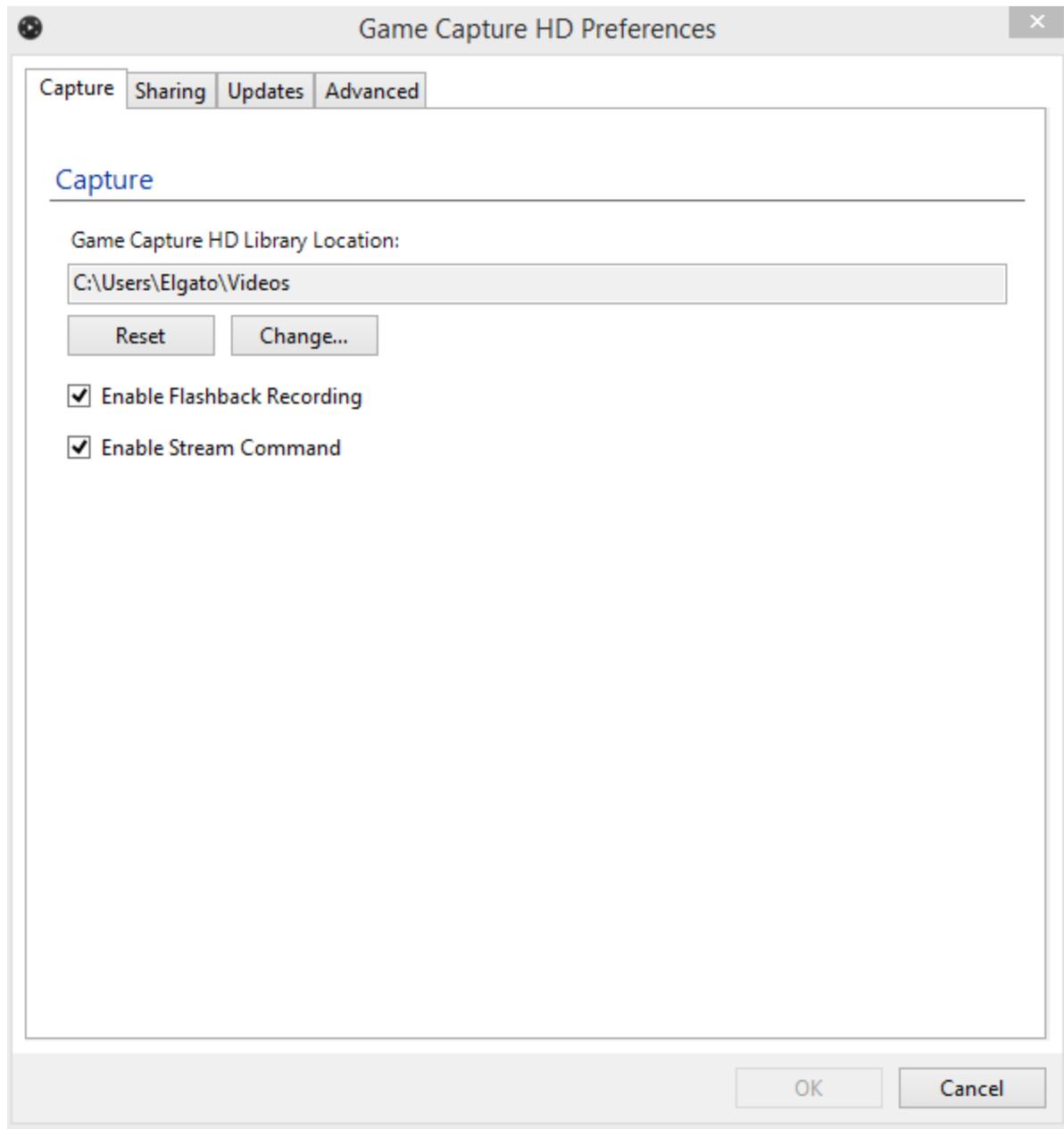
More about this feature, and its System Requirements, can be found here:

[Stream Command 2.0 and Elgato Game Capture HD software](#)

[Stream Command 3.1 and Elgato Game Capture HD software](#)

If your computer does not meet the System Requirements for **Stream Command**, you should turn that feature off, and use standard **Live Streaming** instead.

You can turn off **Stream Command** in the **Capture** section of the **Preferences**.



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### **Update Computer Operating System**

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Make sure your Operating System is up to date, so that any performance improvements from Microsoft or Apple will be available to you.

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## Try Another Software Version

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Check to make sure that you're using the latest version of the **Elgato Game Capture HD** software, by visiting this page:

<https://www.elgato.com/en/game-capture-hd-support>

The newer **Elgato Game Capture HD60** device must use version 2.0 or higher of the software.

**Elgato Game Capture HD60 Pro** must use version 2.20.6 or higher of the software.

**Elgato Game Capture HD60 S** must use version 3.20.2 or higher of the software.

### **NOTE:**

**Elgato Game Capture HD** is designed to be easy to use, but it has many features to discover.

There are many instructive articles that cover these features, which can be found in a searchable database:

[http://help.elgato.com/customer/portal/topics/460393-game-capture-hd/articles?b\\_id=360](http://help.elgato.com/customer/portal/topics/460393-game-capture-hd/articles?b_id=360)

The following article is a logical presentation of that information, designed to be a great way for new users to find the information they need.

If you would like more information about the **Elgato Game Capture HD** software interface, then see this detailed article:

[Elgato Game Capture HD 3.1 Software Interface](#)