

# STREAMING DATA SAUNG

TIPS



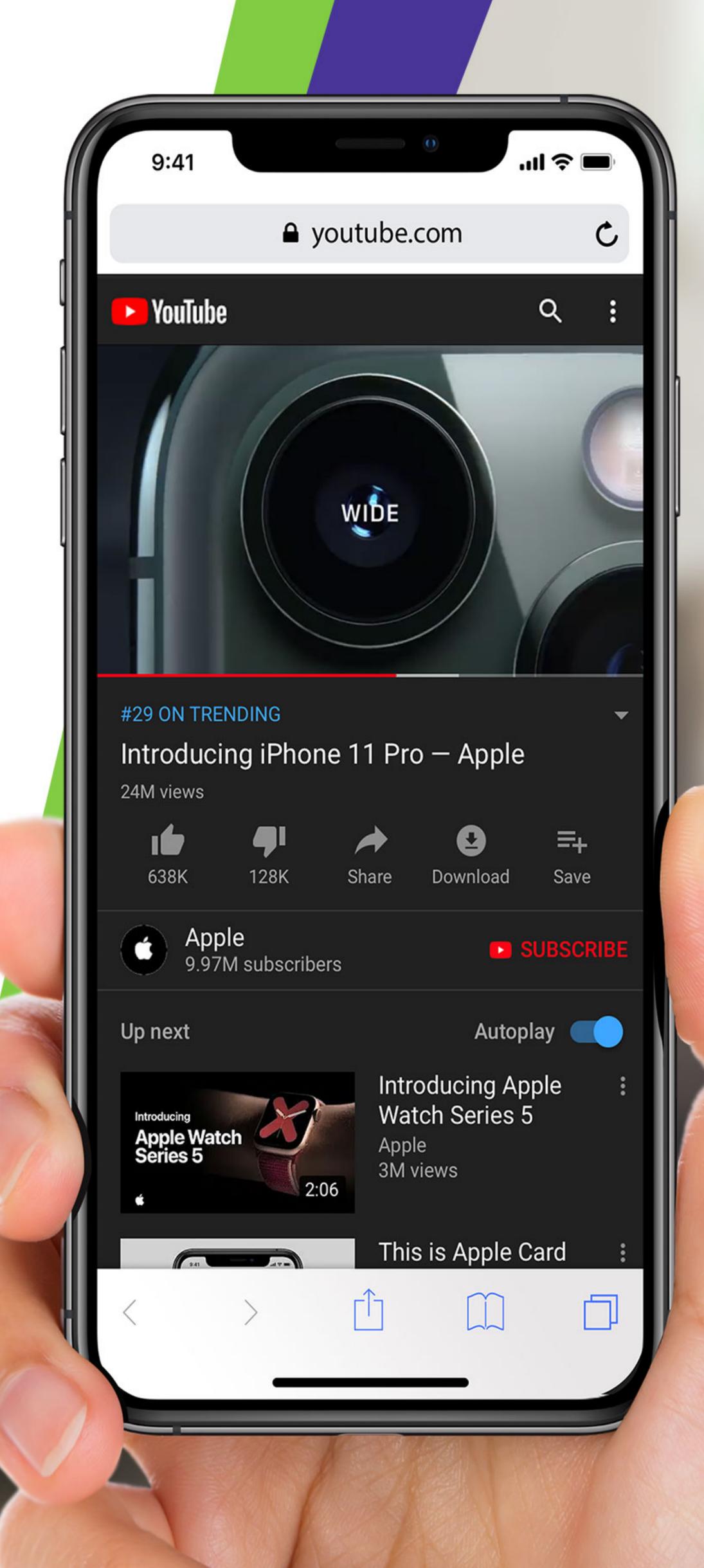












# **Table of Contents**

1	3 simple ways to manage your Spotify data	1
2	Tips for reducing data for Apple TV Users	3
3	How to download Netflix videos on Windows 10 during Off-Peak	4
4	Saving data on Twitch	7
5	How to reduce youtube data usage on mobile and pc	9
6	How to reduce amazon prime data usage	1
7	How to reduce netlix data usage	4
8	How To Reduce Stan Data Usage	6



# 3 Simple Ways To Manage Your Spotify Data

Spotify is one of the world's most popular music apps. Users of Spotify can instantly stream and listen to any song on the Spotify library for as long as they like. Many of our customers use Spotify every day to listen to their favourite songs and although Spotify does use way less data than Netflix, Stan or Foxtel in an hour, it can still make up a good percentage of someone's monthly data quota, particularly for customers on some of nbn™ Satellite's smaller plans such as our Satellite 10 or Satellite 40 options. How can you manage the data Spotify uses though?

#### Here's 3 simple ways to manage your Spotify data

#### 1. Turn on Data Saver

Turning on "Data Saver" will turn your music quality to low.

- **Step 1: Open Spotify**
- Step 2: Look at the top right corner and tap the cog wheel icon Spotify Data 🔘
- Step 3: Look for the data saver option in amongst the list of headings, then tap it.
- Step 4: Turn "Data Saver" on.

This setting however, will only save you data when you are on a mobile network. Once you connect to Wi-Fi, your data usage will then change to your streaming settings. See how to change this in our next tip.

#### 2. Adjust your music quality settings

Spotify allows users to stream or download music at different levels of quality. Changing the audio quality for streaming or when downloading can help you to reduce data usage from the app. Doing this will make a big difference for customers with smaller data limits.

Data choices include:

**Automatic** 

Low = 24 kbit/s

Normal = 96 kbit/s

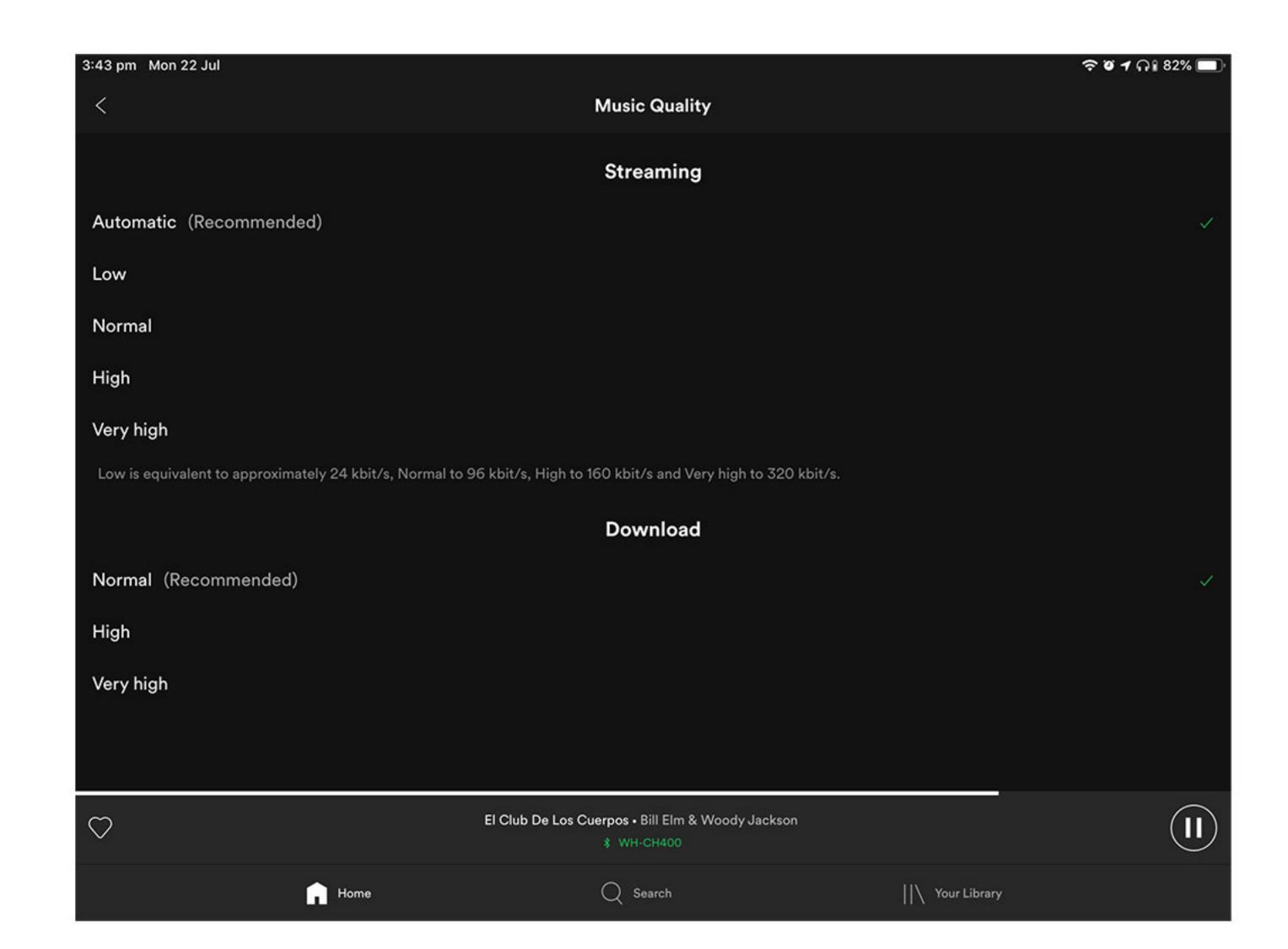
High = 160 kbit/s

Very High = 320 kbit/s

As you can see there are some data savings to be made between low at 24 kbit/s and very high at 320 kbit/s.

To adjust your Spotify music quality settings:

- **Step 1: Open Spotify**
- Step 2: Look at the top right corner and tap the cog wheel Spotify Data
- Step 3: Look for the "Music Quality" settings in amongst the list of menu items and tap it.
- Step 4: Select the music quality option that you think is best for you.





#### 3. Download all your music

This is only available for Spotify Premium users who pay to use all the extra Spotify features not available for Spotify users for free.

Downloading the songs the first time on your account will of course cause you to use a lot of data. But the good news is, that once downloaded the songs can be listened to again and again in offline mode for as long as you like, as long as you keep paying your subscription of course! A person with Spotify Premium can download and store up to 10,000 songs on each device.

Songs are available to download in 3 different audio quality settings. Normal (96 kbit/s), High (160 kbit/s) and very high (320 kbit/s). The settings can be changed using the same method shown in the previous tip.

**Step 1: Open Spotify** 

Step 2: Find an album or song you would like to download.

Step 3: Towards the top right there will be the word "Download" tap the switch to the right and the song or Album will immediately download.





# Tips For Reducing Data For Apple TV Users

If you are an Apple enthusiast, being part of the Apple ecosystem can be very convenient. You can have your iPhone, iPad, Mac and now even your TV all synced together.

Apple TV is a great asset to have in your home because it will give you access to a variety of Apple services to watch Movies, stream music or view your photos. You can also access more entertainment on apps such as Netflix, Stan or ABC iView. While all these streaming services are great for those on our Fixed Line or Fixed Wireless unlimited plans as there's no limit on what they can stream. For those on 100GB data limits or for those on our Satellite plans, Apple TV can use up a lot of data and fast!

Apple TV is able to stream in both HD in 1080P and in HD 4K. According to Apple, you need a minimum of 25mbps to stream content in 4k on Apple TV. According to a Reddit user, streaming The Fifth Element in 1080P on their Apple TV was 4.86GB, but in 4k the same film was 19.52GB. Depending on your data on your plan you can add up these amounts and figure out how many films you can stream on your Apple TV so you don't use all your data. But keep in mind as well, that different movies will have different sizes as some films are longer than others.



#### Here are some tips for reducing data for Apple TV Users

#### Turn Off Screensavers

A screensaver on Apple TV uses about 600MB of data and by default these download daily. If you leave your Apple TV on every day and don't even use it, you will still use 600MB of data each day if you leave your Apple TV on and just sitting there with the screensaver on.

Luckily, you can change your screensaver settings. In the home screen go to the settings section and find the section for general settings then go to the screensavers section. We recommend that if you don't want to use any of your data on screensavers then to select "Never" download in the options. But you can also choose to download your screensavers once a week or once a month instead if you prefer.

#### Change Your Video Quality Settings

This one is not as easy to do as turning off screensavers in your settings as there is no global way of changing video quality settings on Apple TV as the different apps themselves have their own individual settings.

You can change your iTunes Movies and TV Shows video settings if you go to your Apple TV's settings, then select "Apps" and then select "iTunes Movies and TV Shows". Then choosing a video resolution of 1080P, 720P or Standard Definition. Standard definition will use the least data when streaming movies or TV shows on the iTunes Movies and TV shows app.

#### Turn Off Automatic Updates

Updating Apps and syncing your Apple TV podcasts uses data. If you don't want your apps to use data without you knowing, you might want to turn off these features. To do this you will want to go to your settings in your Apple TV, then go to "Apps" then find where it says "Automatically Update Apps" and switch this off.



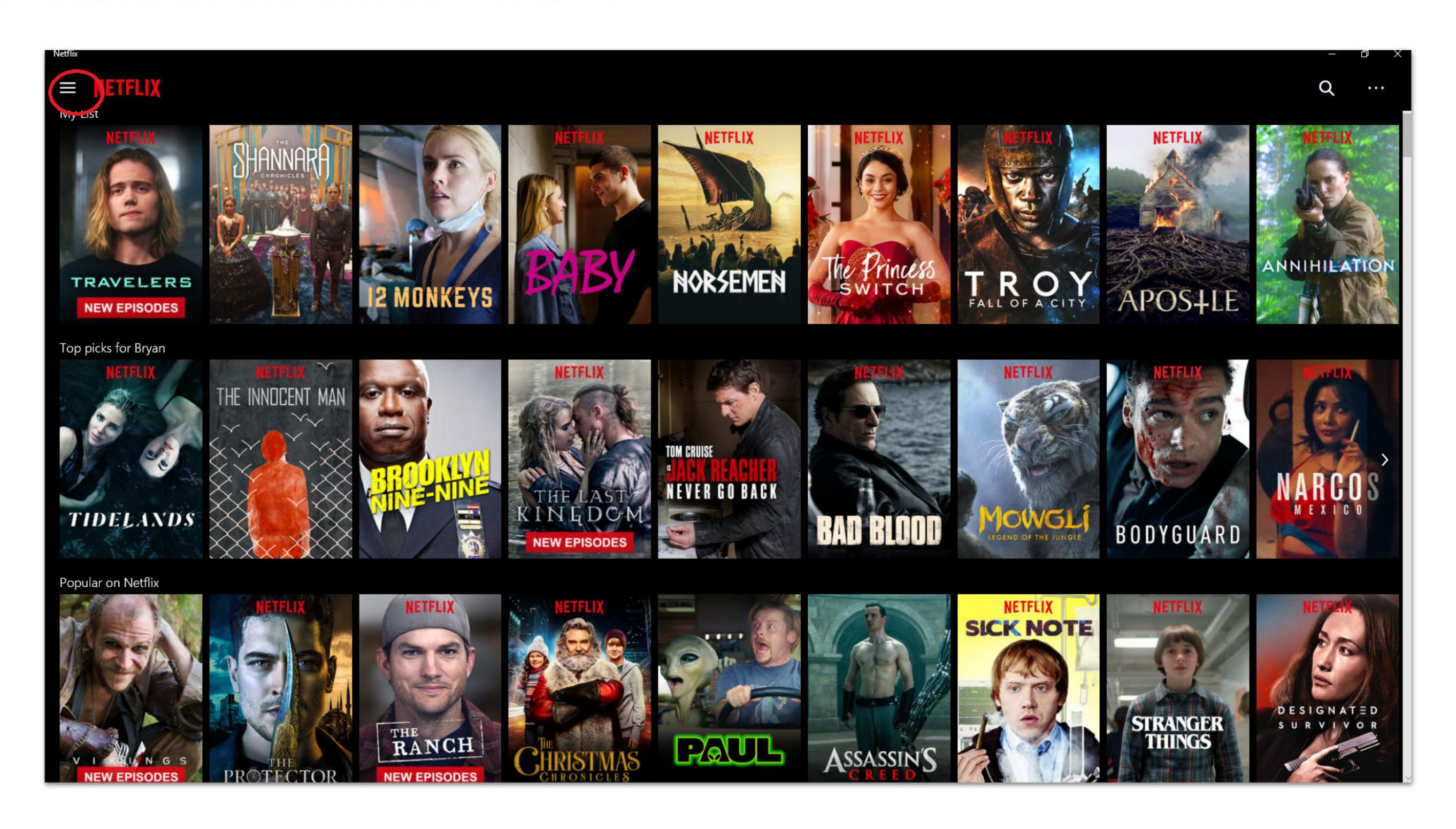
# How To Download Netflix Videos On Windows 10 During Off-Peak

This article focuses in on the Windows 10 Netflix app, which can be downloaded from the Microsoft Store app within Windows 10 for free on any Windows 10 PC. The app works in a similar way to how downloads work on your mobile devices or tablets. You find the TV show or movie you want to watch and if Netflix has it available for download, you simply tap the icon next to the title's name and download it to the device.

The reason why this is useful to start using this on your PC rather than on a phone or tablet is because it allows you to potentially eliminate the use of a Chromecast in your home. For those on our smaller data plans, a Chromecast can use quite a bit of data even when left idle in your home. You can see our article on Chromecast data use. When downloading Netflix videos on your PC, instead of using a Chromecast, you can plug your computer directly into your TV at home. Many laptops and desktop PC's nowadays have HDMI out ports on them and if you have a spare HDMI cable you can plug your computer into your TV with the cable and simply play your downloaded Netflix videos from your PC, to your TV. With the HDMI cable and your shows downloaded, you won't even need an internet connection to watch your downloaded videos, meaning no data is being used to re-watch your downloads. Alternatively you can also just watch your downloaded shows directly on your computer through the Windows 10 app instead of only having the option of streaming them through your browser.

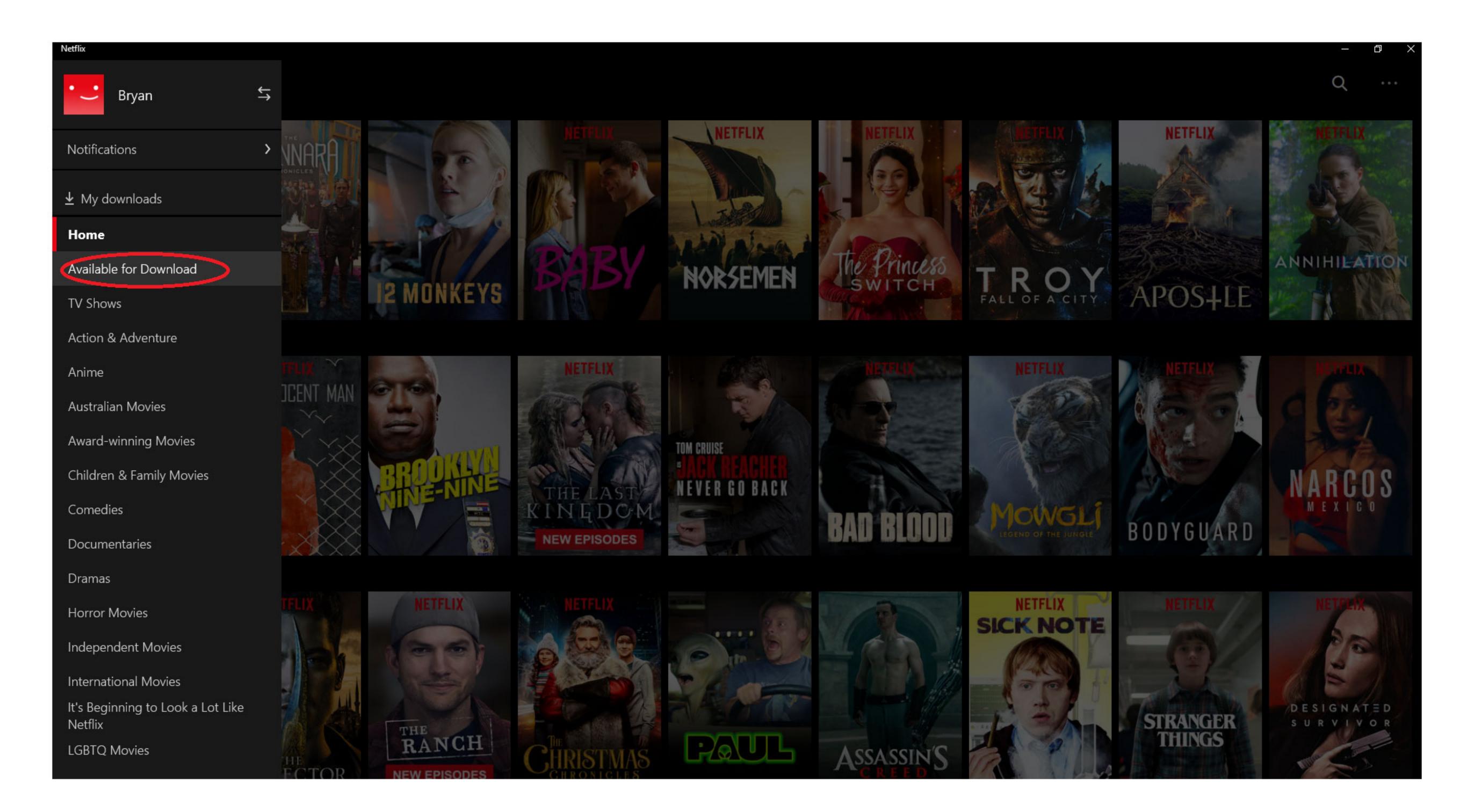
#### Here's how to download Netflix videos on Windows 10

Step 1: Log into your Netflix app that you download from the Windows 10 store. You will see a list of all the available shows. Look to the top left of the screen and click on the area marked with the three lines.

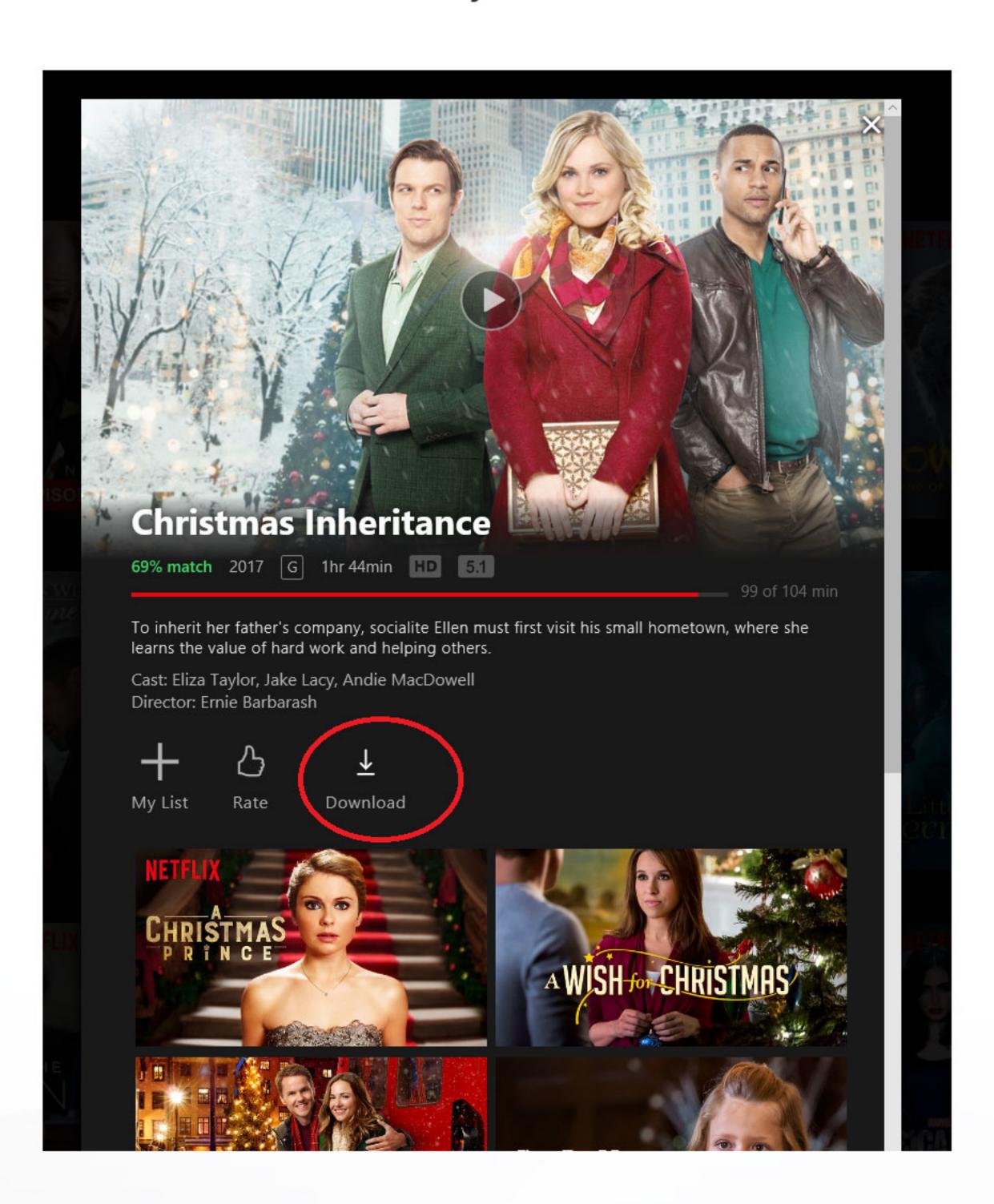




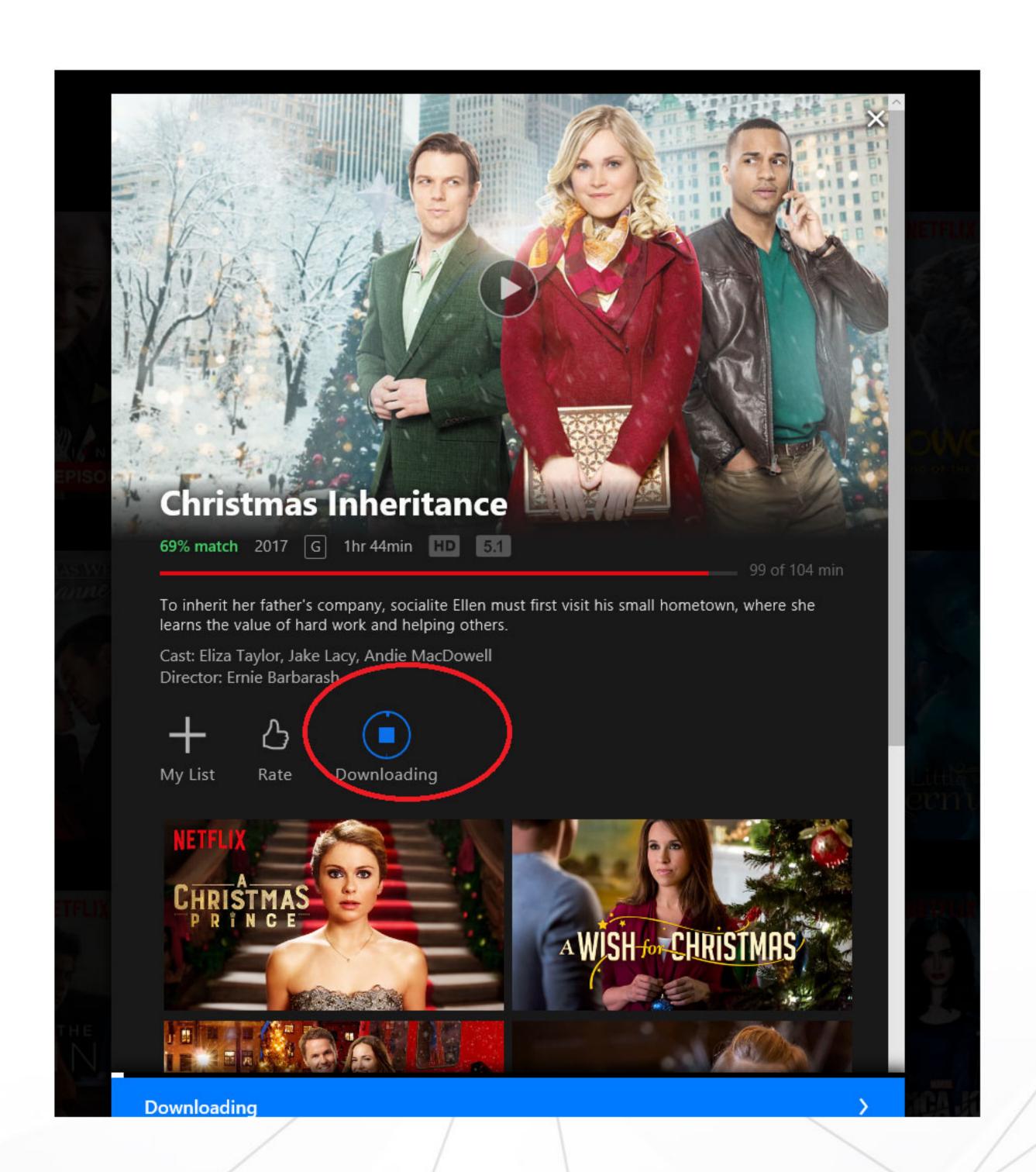
Step 2 Take a look at the menu that is now open. Click on the option that reads "Available for download".



Step 3: You will see another list of TV shows and films that are available to download. Click on the one you would like to watch at another time and want to download now, it will open up. Before you press play, look for a small download option on the screen and click on that to download your video.

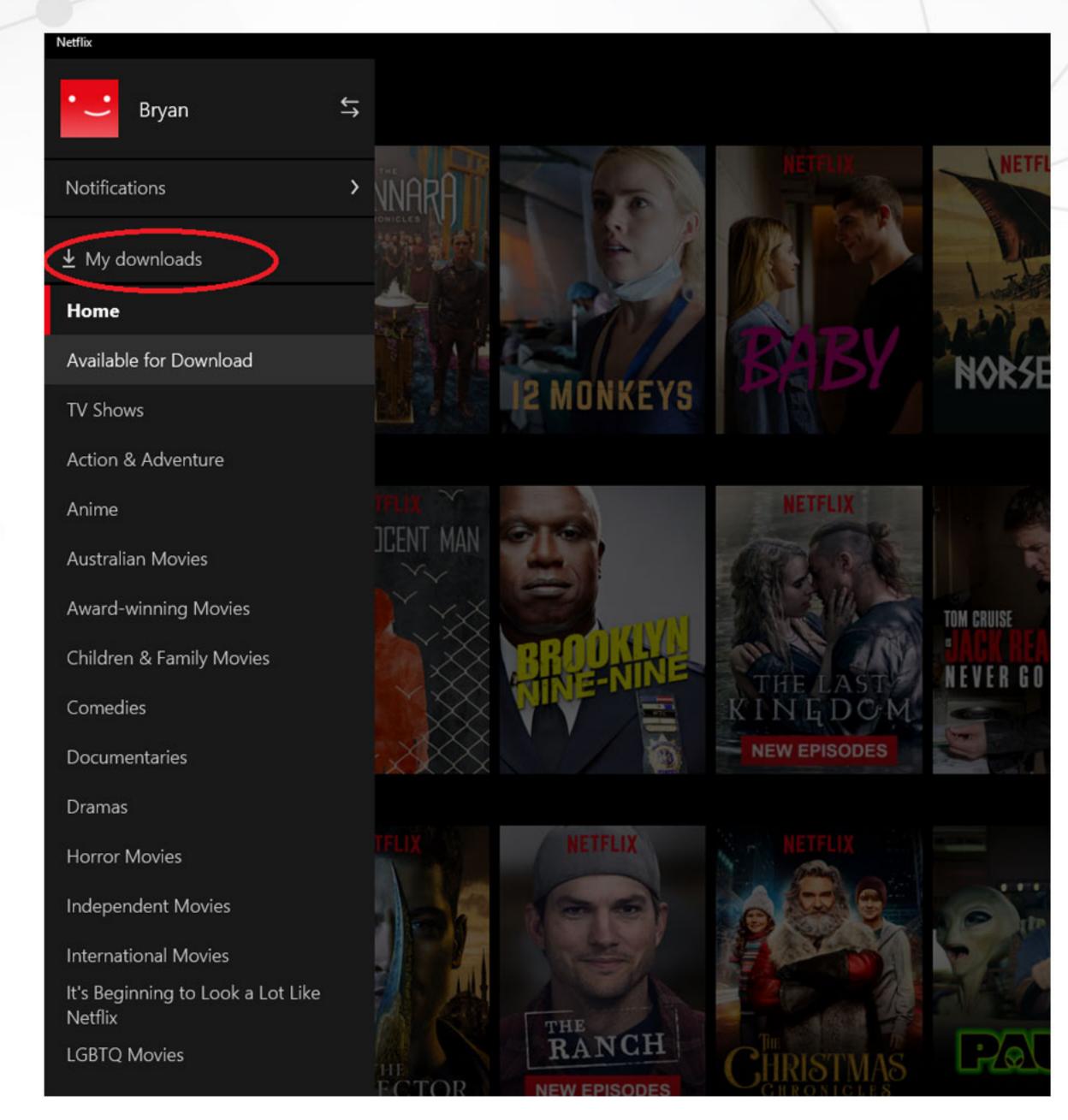


Step 4: You will need to wait some time for your episode to download. The progress of the download will be displayed on your screen.

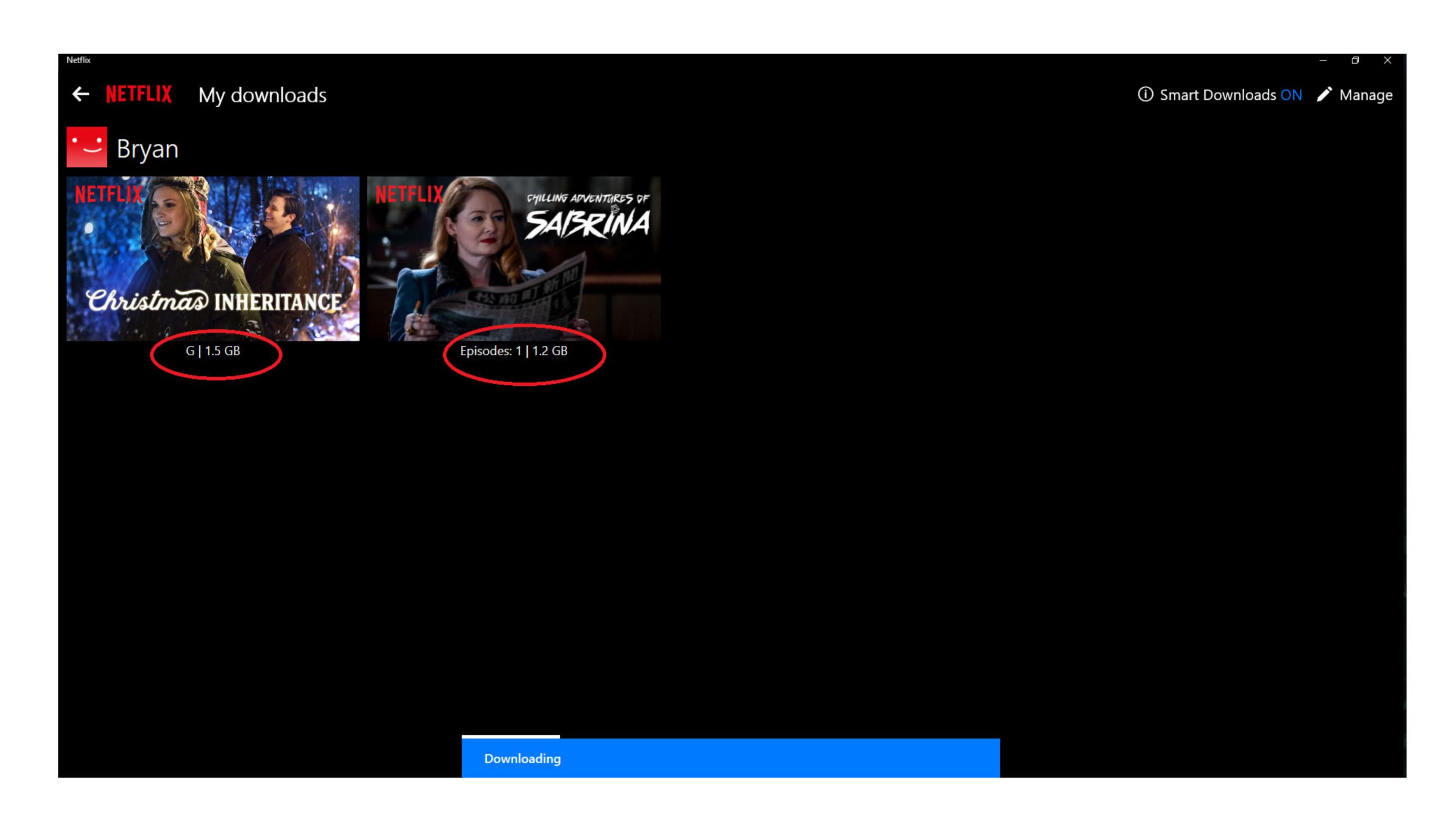




Step 5: To find your downloaded shows, click again on the menu bar marked with the three lines shown in step 1. Then click on the option that reads "My Downloads".



- Step 6: Once inside the "My downloads" area you will see all of your downloaded TV shows or movies. You will also be able to see the file size of everything you've downloaded recently. This will give you an idea of how much data these files do take up when you do download them at home.
- Step 7: Plug in your computer/laptop to your television using a HDMI cable, some models may also be able to connect using a VGA cable. Set up your TV as a second screen and start watching.



# Handy tip:

In the top right of the image above. You can see there is a "Smart Downloads" option. You may want to choose to switch this off as leaving it on will allow Netflix to automatically download new TV show episodes you may be watching so that they will be ready for when you need them next. But leaving this on may mean more data use than you wanted to use that month. So if you want complete control, choose smart downloads to be off.



# Saving Data On Twitch

Twitch.tv is a streaming service where anyone can livestream themselves playing video games on the site and if they're good at the game and find a viewership, there's potential to earn a living doing it and play video games full time as a career. But for the most part, thousands of people tune in each day to watch their favourite streamers play video games, sometimes for hours in just one session. But all of this does use quite a bit of data and if the kids in your household are watching their favourite streamers every day, you may notice your data usage skyrocketing.

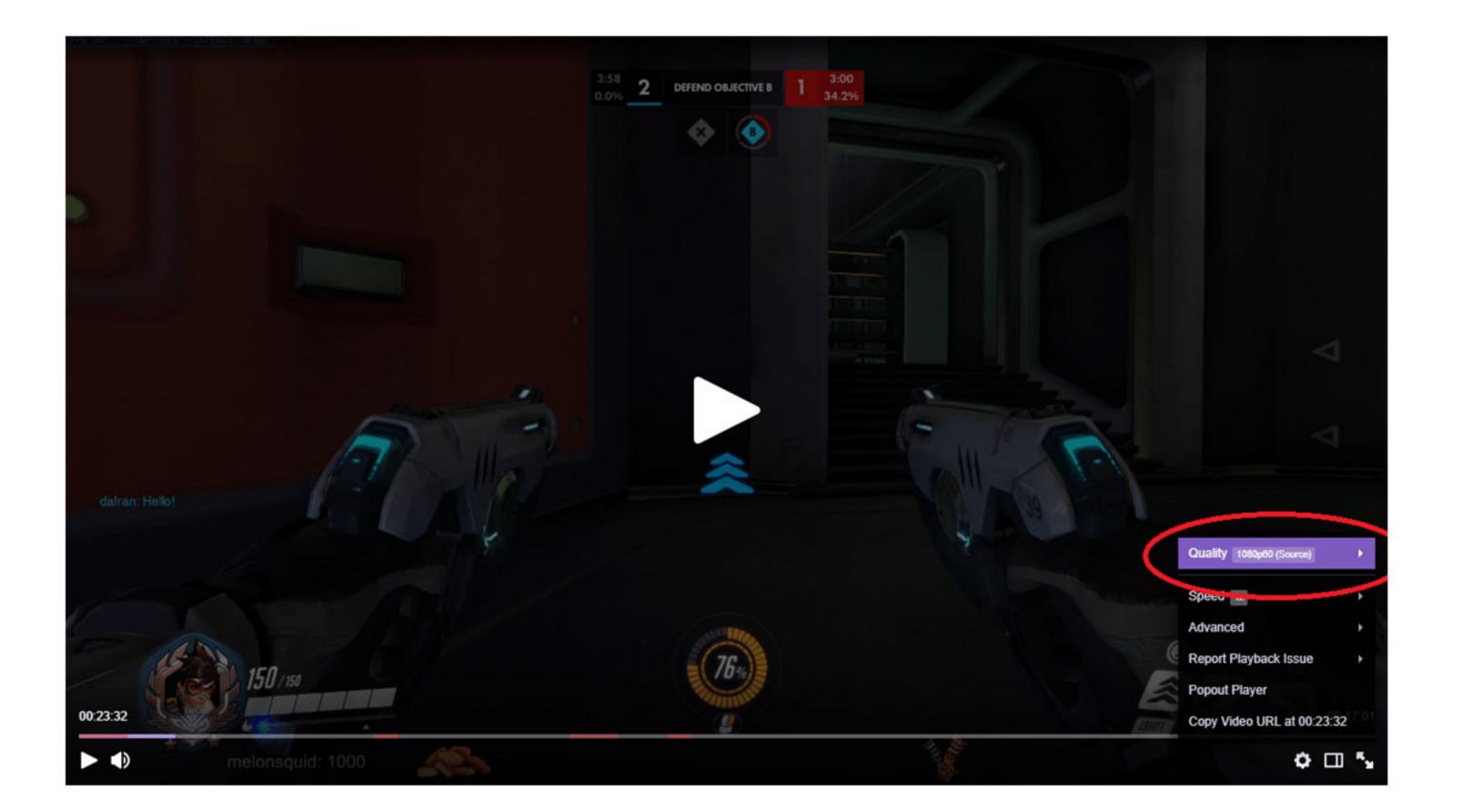
#### So what can you do when it comes to saving data on Twitch?

For the most part, saving data on Twitch comes down to essentially changing the video quality settings each time you watch a video. Essentially the lower the quality of the video, the lower the data use and the higher the quality the higher the data use. To change video quality settings here's what you need to do:

All images in this guide were taken on a PC using Google Chrome

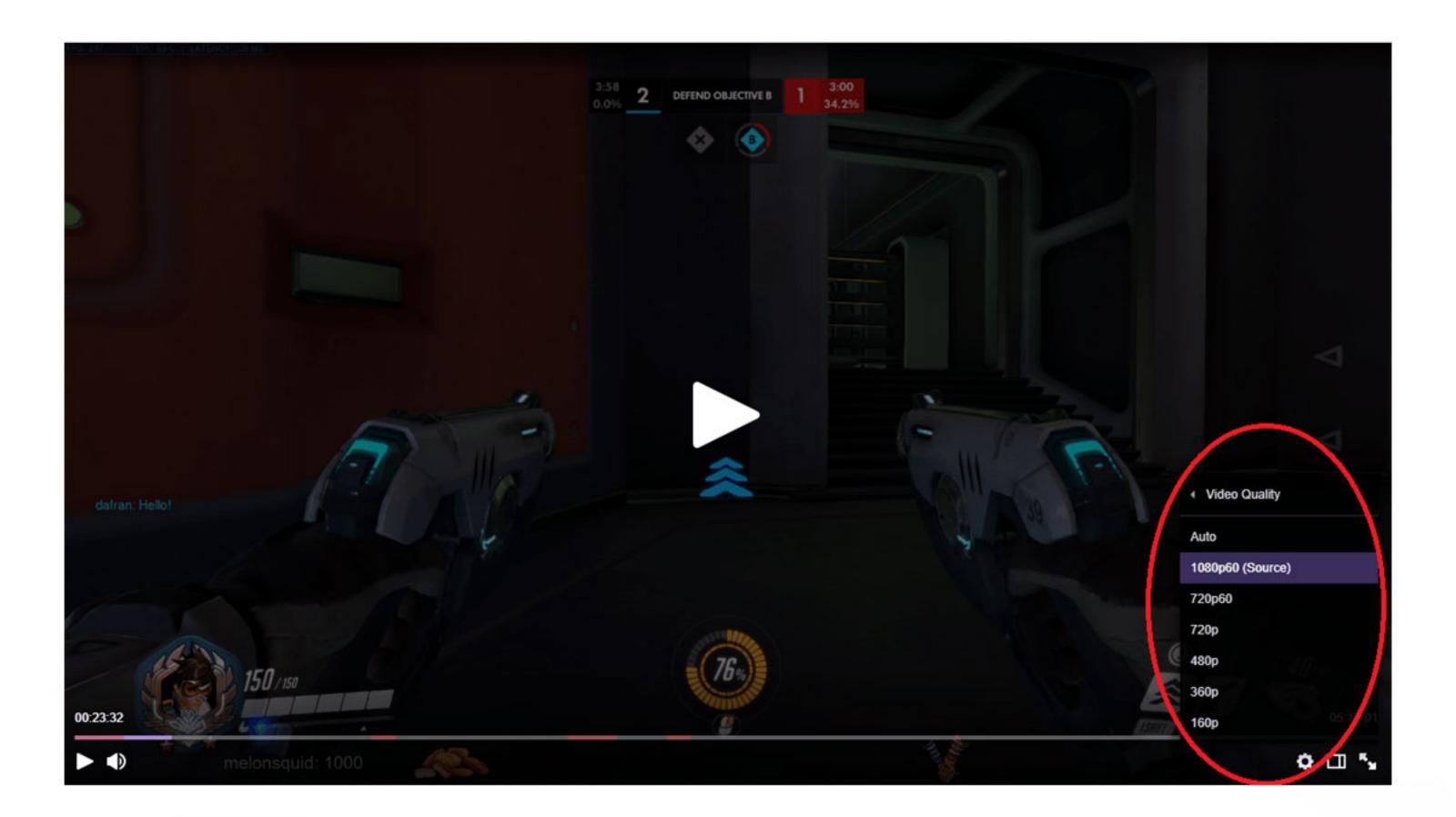
- Step 1: Visit Twitch.tv and find a streamer you would like to watch. Click on their video.
- Step 2: Look towards the bottom right of the video. You will see a gear icon. Click on that to open the settings of the video.
- dalran: Heliof

Step 3: With the settings now open, click on the menu item labelled "Quality".



Step 4: Once you're in the "Quality" section, you will now see a list of different video quality options for each stream. If you're looking for a lower data setting, choose one of the lower video quality options.

Ф <u>ш %</u>



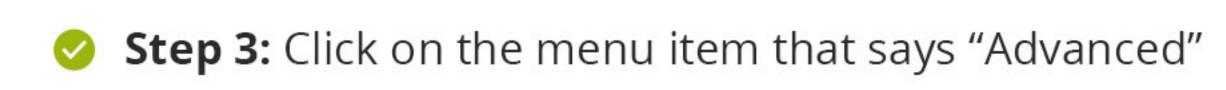


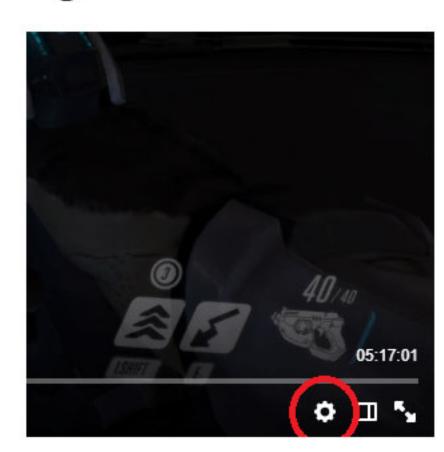
#### But how do I know how much data each video quality setting is using?

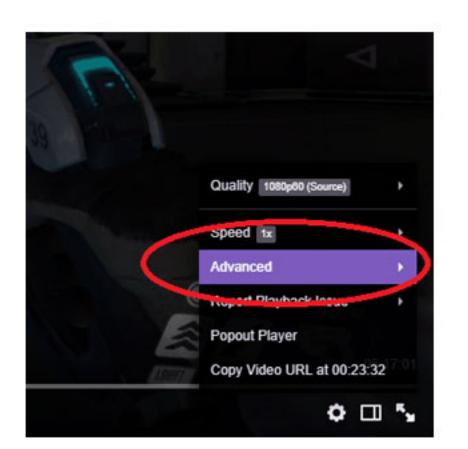
Taking a look at how much data exactly each stream is using is actually not much more difficult than changing the video quality. What's interesting to know from our findings on this is that the 60fps video options for both 1080p and 720p use quite a bit more data than the next lowest option of 720p. If you want to lower your Twitch data a little, but still want good watchable quality on bigger screens, it's recommended to choose the 720p (not 720p 60) option.

Here's how you know how much data each quality setting is using

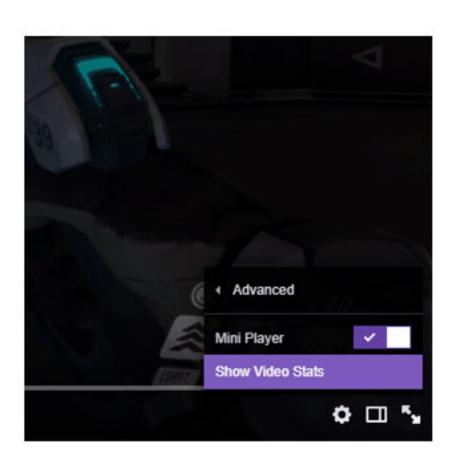
- Step 1: Visit Twitch.tv and find a streamer you would like to watch. Click on their video.
- Step 2: Look towards the bottom right of the video. You will see a gear icon. Click on that to open the settings of the video.





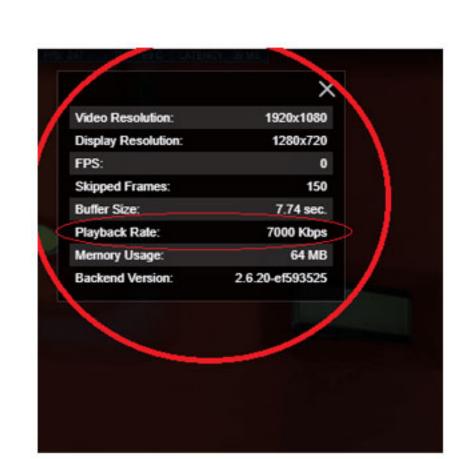


Step 4: Now that you are in the advanced menu, click the option that reads "Show Video Stats".



Step 5: Once you have opened the video stats, a small window will appear to the top left of your video with different pieces of information about what is happening. In this area, you can see how much data the stream you are currently watching is using.

In the beside example you can see that at 1080p and 60fps, the stream was using 7000kbps which is high data usage.



#### When Streaming On Twitch

You may have kids at home who have decided to stream themselves playing video games on the site. The data from this works similarly to the data when watching a video stream. But the ability to stream will be based on the upload speed in your plan. As you are uploading videos to the internet.

The data you upload on an IPSTAR plan does count towards your download data limit, so it's something to keep in mind when deciding to go live.

Twitch does have a very useful chart about how much data streaming videos live on the site consumes. You can find all the information about livestreaming and data on Twitch.

Generally the higher quality livestreams will use 4500-6000 kbps on 1080p 60fps settings and the lower quality stream qualities will use 400-1200 kbps at 480, 360 and 240 video quality options. These settings depend on your PC settings for the stream, what streaming software you are using, what you've chosen to output and also what your plan's upload speed limit can handle.



# How To Reduce YouTube Data Usage On Mobile & PC

Watching YouTube videos online is one of those things that almost any internet user does. But unknowingly at times, YouTube can actually chew up quite a bit of data. Especially if you've got a nice 4k device in your home. Watching a lot of videos and seeing data use skyrocket might leave you wondering how to reduce YouTube data usage on your plan. The table on the right shows how much data is used per second. Watching videos in 360p for an hour will use only 60 megabytes of data. But watching videos in 4k for an hour might use 2.7GB of data on your plan or more if you're watching on a higher frame rate.

There are two ways data use on YouTube can be reduced on either mobile devices or your desktop PC's.

Туре	Video Bitrate, Standard Frame Rate (24, 25, 30)	Video Bitrate, High Frame Rate (48, 50, 60)
2160p (4k)	35-45 Mbps	53-68 Mbps
1440p (2k)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps
720p	5 Mbps	7.5 Mbps
480p	2.5 Mbps	4 Mbps
360p	1 Mbps	1.5 Mbps

#### How To Reduce YouTube Data Usage On Mobile

The following steps will tell you how to reduce YouTube data usage on your mobile. These steps are great for people who often go out of their home and are away from their usual Wi-Fi connection and sometimes watch YouTube using mobile data.

Photo's were taken on an Android device

- Step 1: Open your YouTube app. Then take a look towards the top corner near where your profile picture is and click there.
- Step 2: You will now be in your "Account" page. Look towards the bottom and click on "Settings"
- Step 3: You will now be in the "Settings" page. Now click on the option that says "General".
- Step 4: You are now in the "General" page. In here is the option you are looking for, tap on the options titled "Limit mobile data usage".

Step 3 Step 1 Step 2 Step 4 General YouTube Settings Account Remind me to take a break General My channel Time watched Dark theme Enable dark theme throughout the app Watch on TV Get YouTube Premium History & privacy Limit mobile data usage Paid memberships Only stream HD video on Wi-Fi Paid memberships Switch account Double-tap to seek Billing & payments Turn on Incognito Notifications Settings Specify network preferences for uploads Connected accounts Terms & privacy policy Upload quality Live chat Specify video quality for uploads Help & feedback Captions Location About

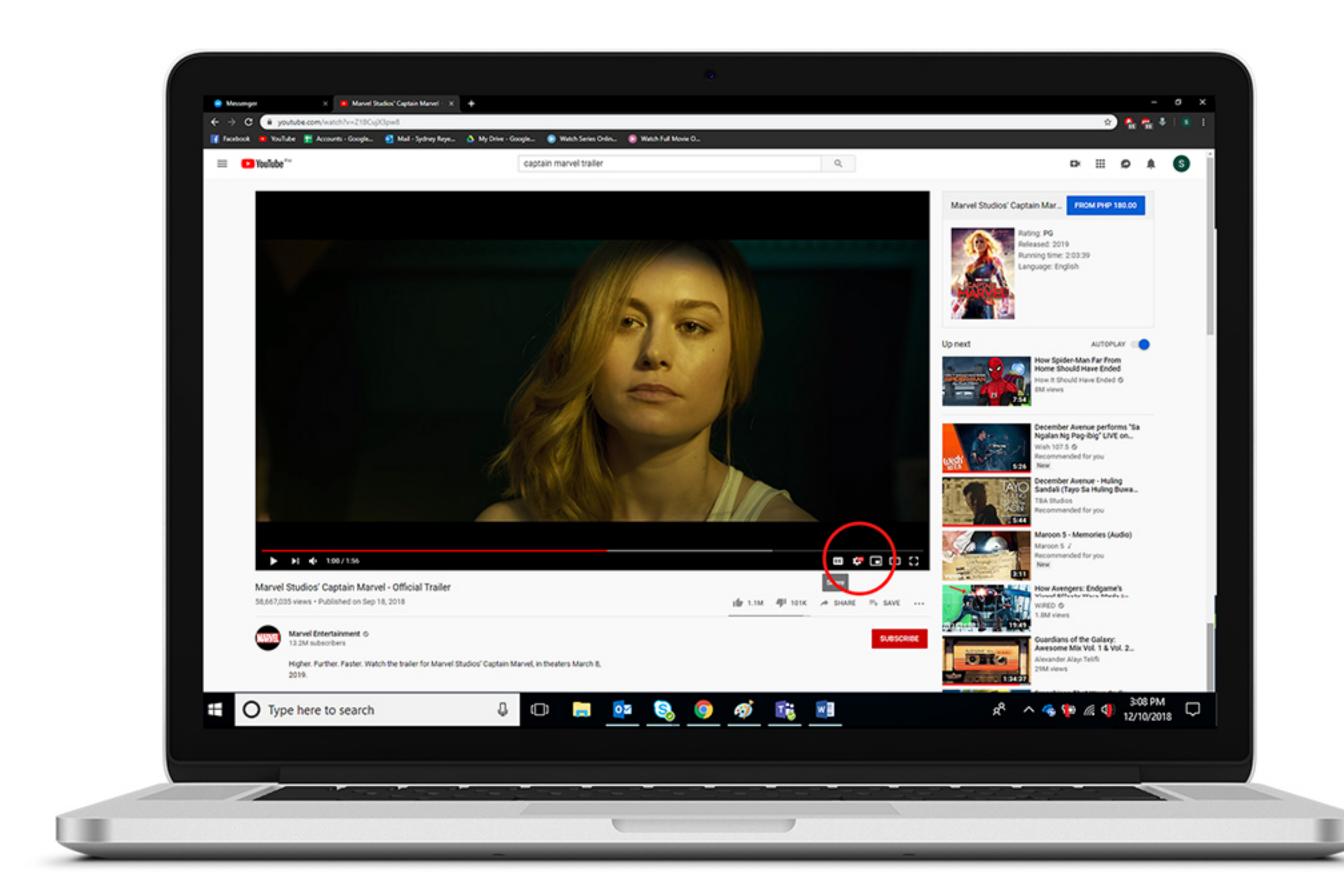
After this your YouTube app will only stream HD video on Wi-Fi only.



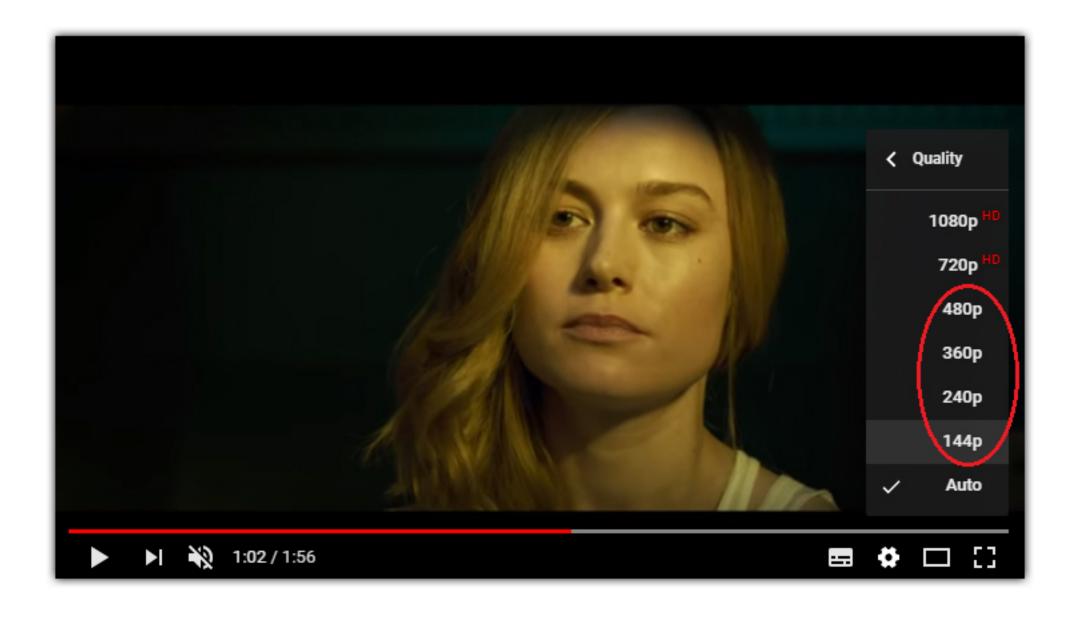
#### How To Reduce YouTube Data Usage On PC

Usually when you are at home you will watch YouTube on your PC. But sometimes if you have used a lot of data in your plan it can become easy to exceed it if you spend hours per day watching your favourite YouTube videos. There is a way on PC to change the default video settings so they don't go to more than you would want. Generally YouTube will try to stream its videos at the highest quality for internet speed, which is great for quality, but not for your data at times. So here's what you could do.

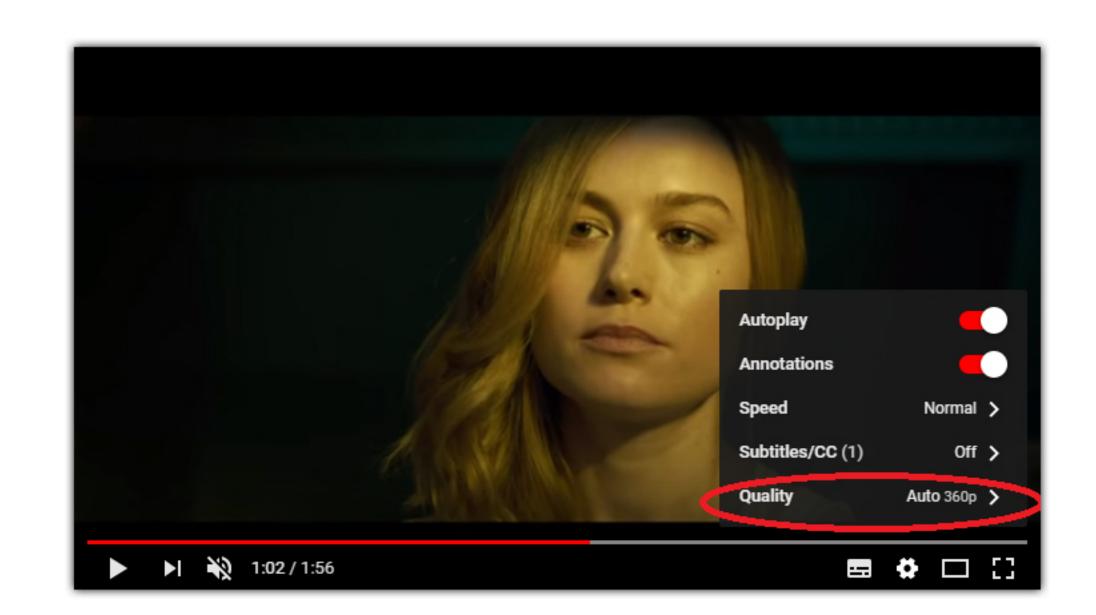
- Step 1: Login to your YouTube Account, logging in is optional. You can still complete the following steps not logged into YouTube.
- Step 2: Click on a video you would like to watch. Pause the video and take a look at the gear icon towards the bottom right of the video. Then click on that icon.



Step 4: You will now see a range of video quality options. Ideally if you want to save a lot of data you might want to consider one of the 480p or lower choices as the HD options will use a lot more data. But if you usually stream in 1080p and want to save some data, but still want good quality, then choosing 720p might be all you need to do. Your choice of video quality simply depends on how much data you have left and how much you want to use.



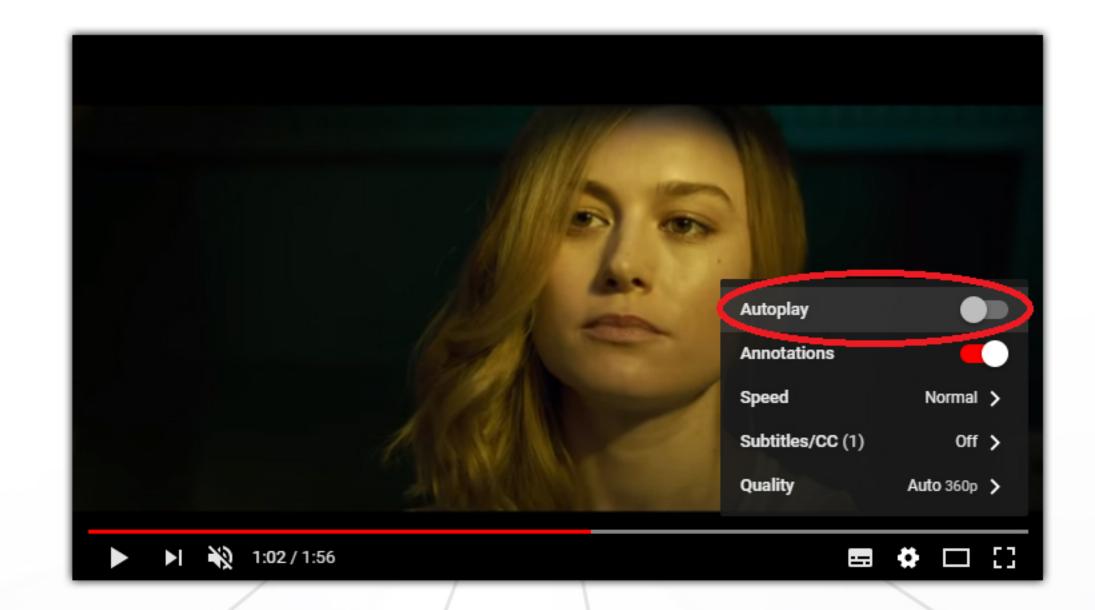
Step 3: After clicking on the gear icon a small menu will appear which shows you a few different video options. Next you will want to click on the heading labelled "Quality".



Step 5 (Optional): Using the same gear icon you clicked on in the previous steps to change your video quality. If you click it again you will see an option entitled "Autoplay". When the "Autoplay" option is on, this will mean that when you finish watching a video on YouTube, YouTube will then automatically play the next video in a queue.

If you leave the room often and often leave YouTube running, it's possible for it to keep playing for quite a long time. If the next video is a long one and if your video settings are set to 1080p then you might use a lot of data, even when you're not even in the room at all!

To help stop this from happening you can check the "Autoplay" feature off and it won't do that anymore on your PC.





# How To Reduce Amazon Prime Data Usage

#### How to reduce Amazon Prime usage when streaming on a mobile

On mobile devices it's best to always stream when connected to your home's Wi-Fi. If you do choose to stream without being connected to your home's Wi-Fi then you run the risk of eating into your phone's data usage cap quite quickly, especially if the video quality is on any high level. Take a look at step 6 below under "Reducing data on mobile devices" for how to make sure you don't use your phone's data.

But some homes with small data caps might find it a good idea to change their video quality settings even when connected to Wi-Fi as the data usage on Amazon Prime can be quite high, especially on the higher quality settings.

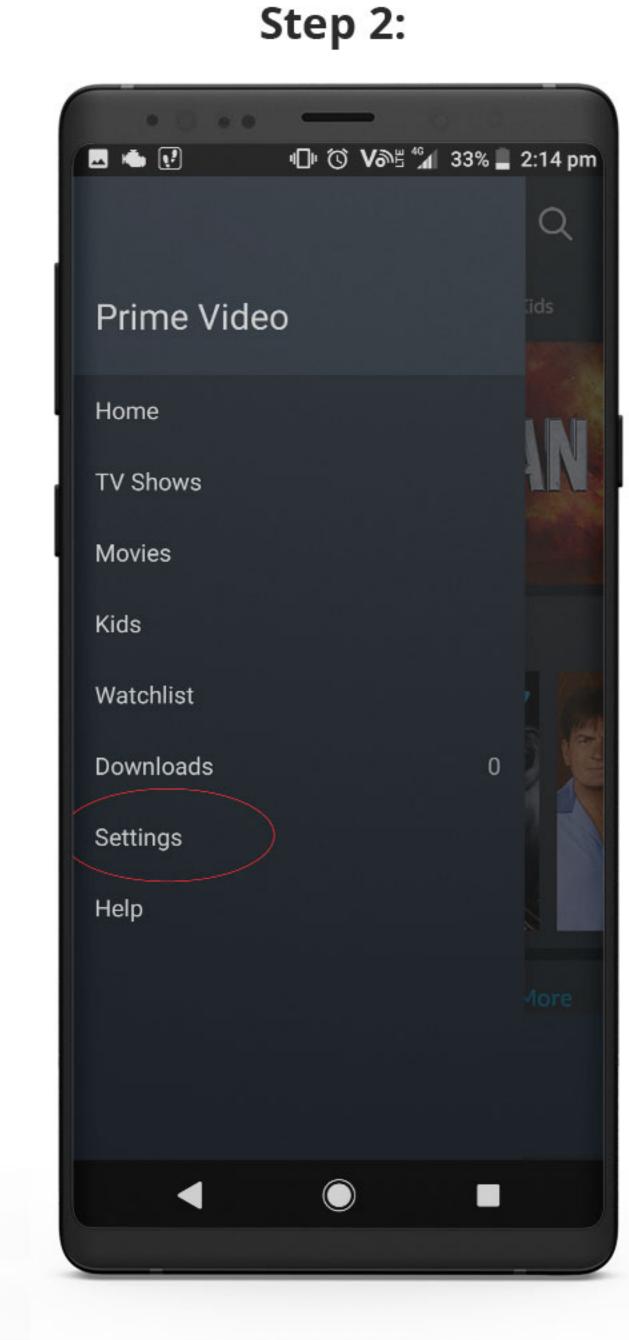
Here are the steps for reducing data on mobile devices Note: All images taken on the Android Amazon Prime App

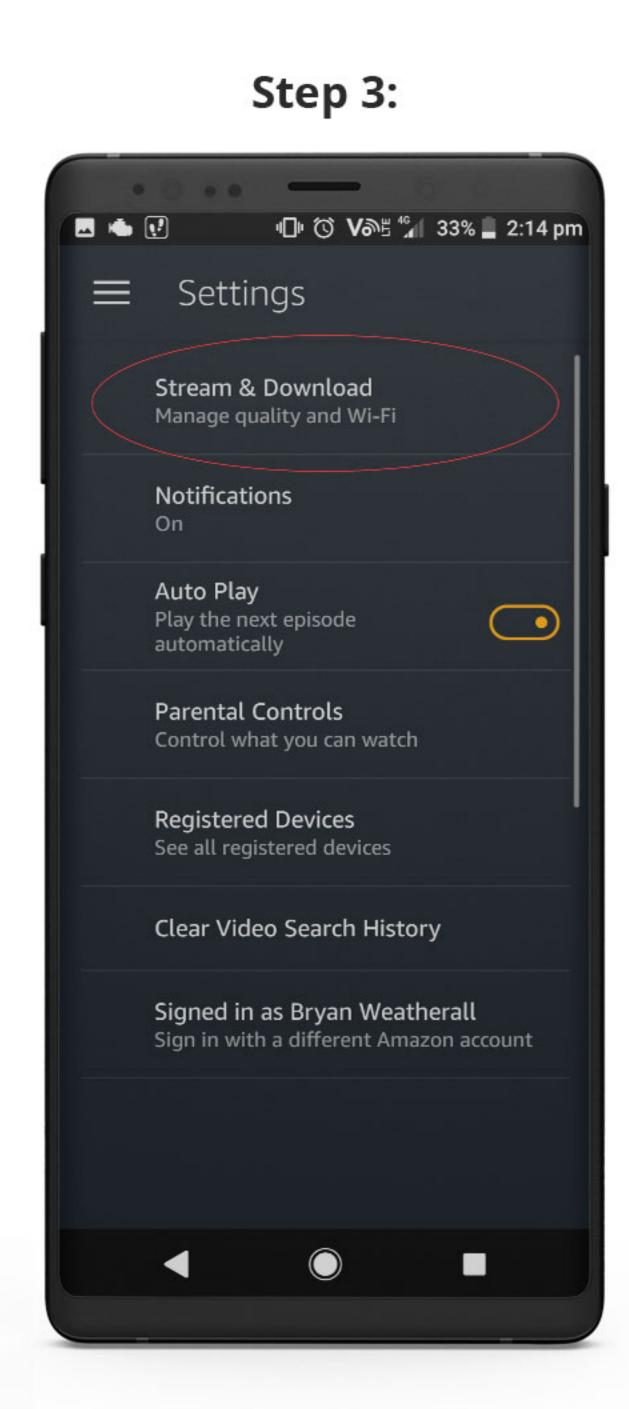
- Step 1: Log into your Amazon Prime Account on your mobile device. Once logged in, click on the menu icon which is represented by three lines near the top of the screen.
- Step 2: Once inside the Amazon Prime Video menu items tab, look towards the bottom of the screen to where it says "Settings" and click there.
- Step 3: On the next screen you will see a list of different settings to choose from which will help you save data. You will want to at first click on the menu item that says "Stream and Download". Click this option then go to step 4.

Prime Original Series

See More

Step 1:





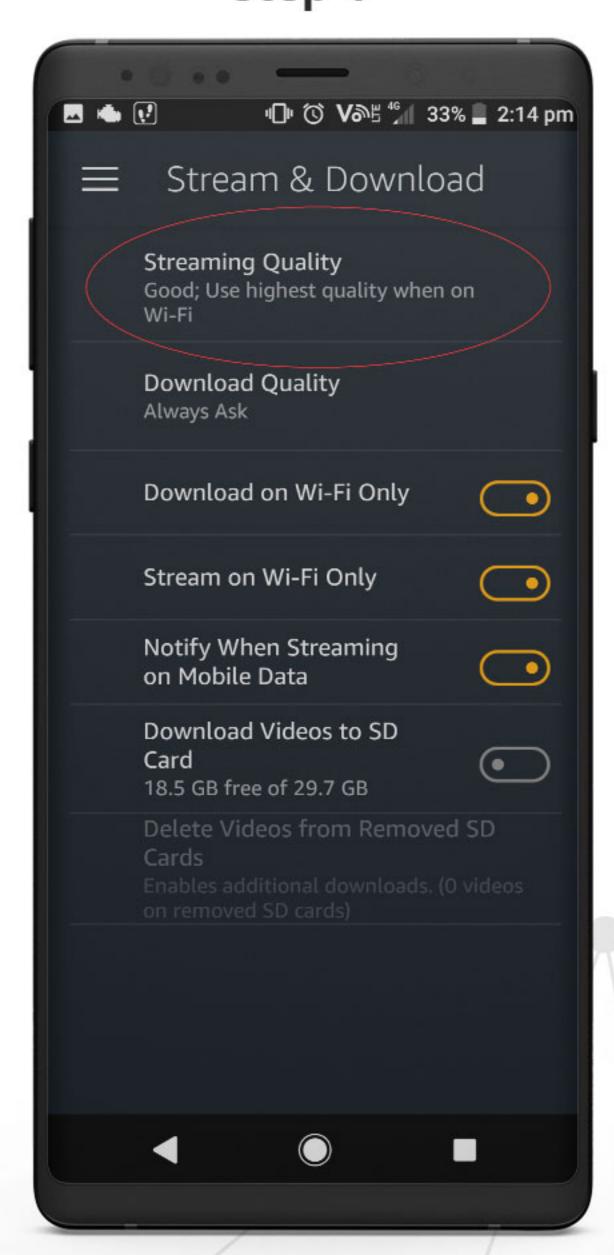
- Step 4: Inside "Stream & Download" you will find a lot of useful data saving settings for Amazon Prime. The first thing you want to do is go to the "Streaming Quality" option in the menu. Click there and take a look at step 5.
- Step 5: Inside this section of the app you will see the various streaming quality options. Select the one that's right for you, but for the maximum amount of data savings you will want to select "Data Saver"

Streaming quality settings are as follows:

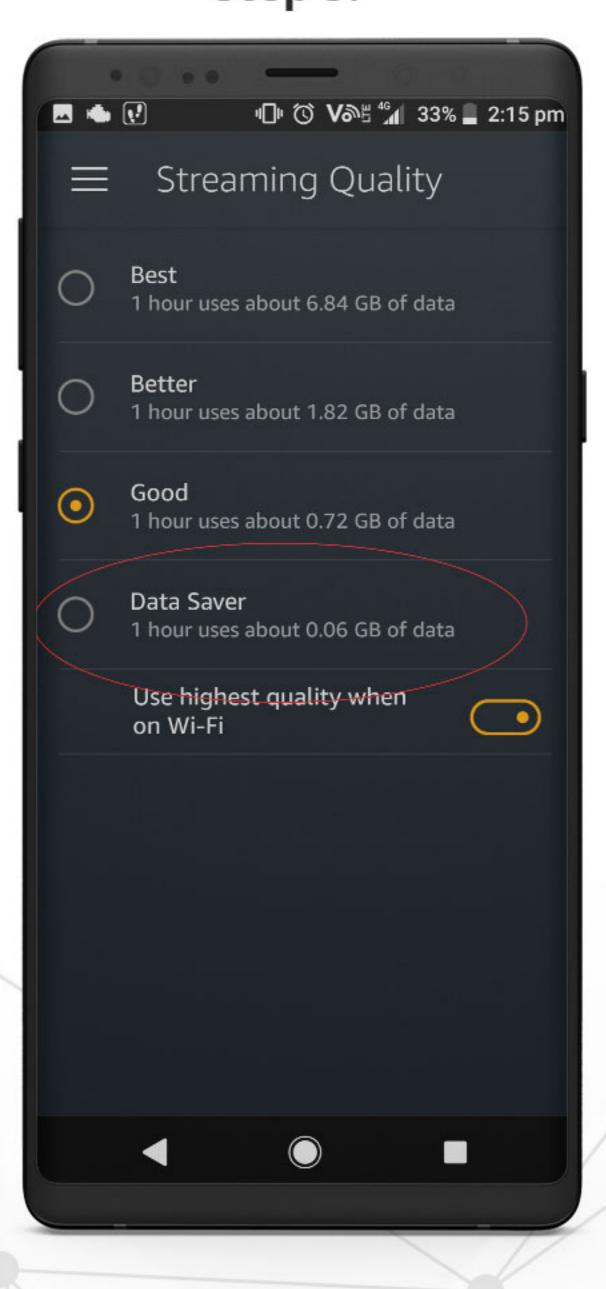
**Best:** 1 hour uses about 6.84 GB of data (this option uses a lot of data)

**Better:** 1 hour uses about 1.82 GB of data **Good:** 1 hour uses about 0.72 GB of data **Data Saver:** 1 hour uses about 0.06 GB of data (choose this option for the most data saving)





Step 5:

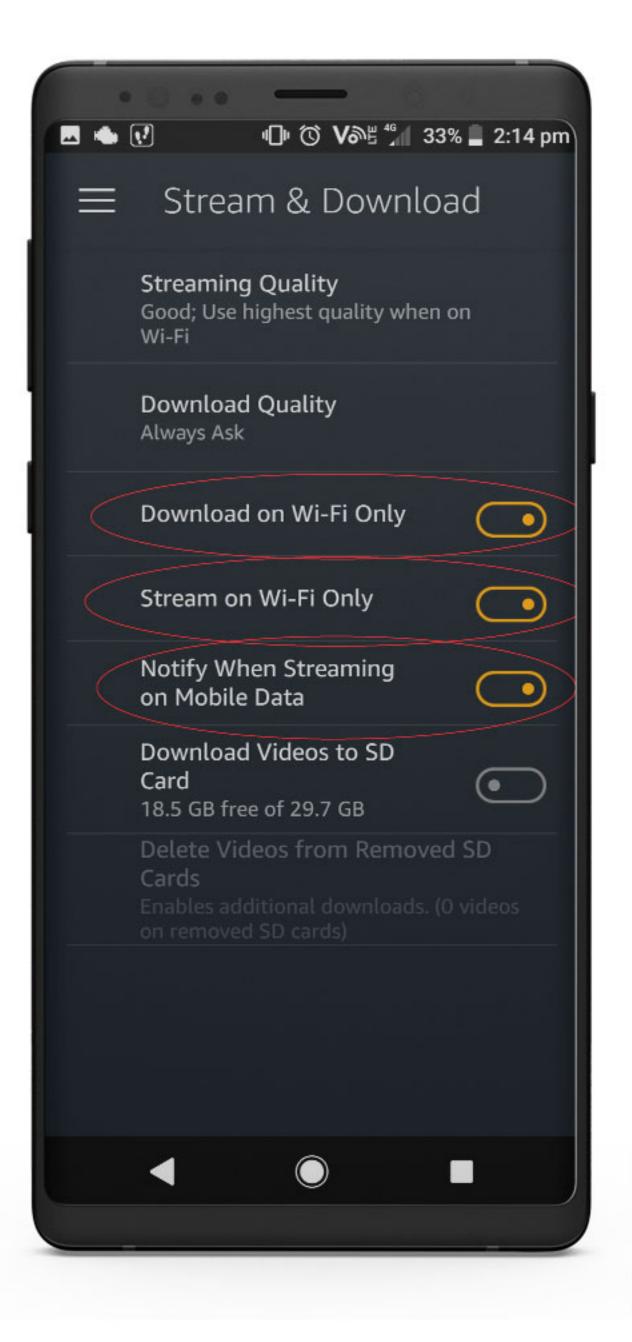


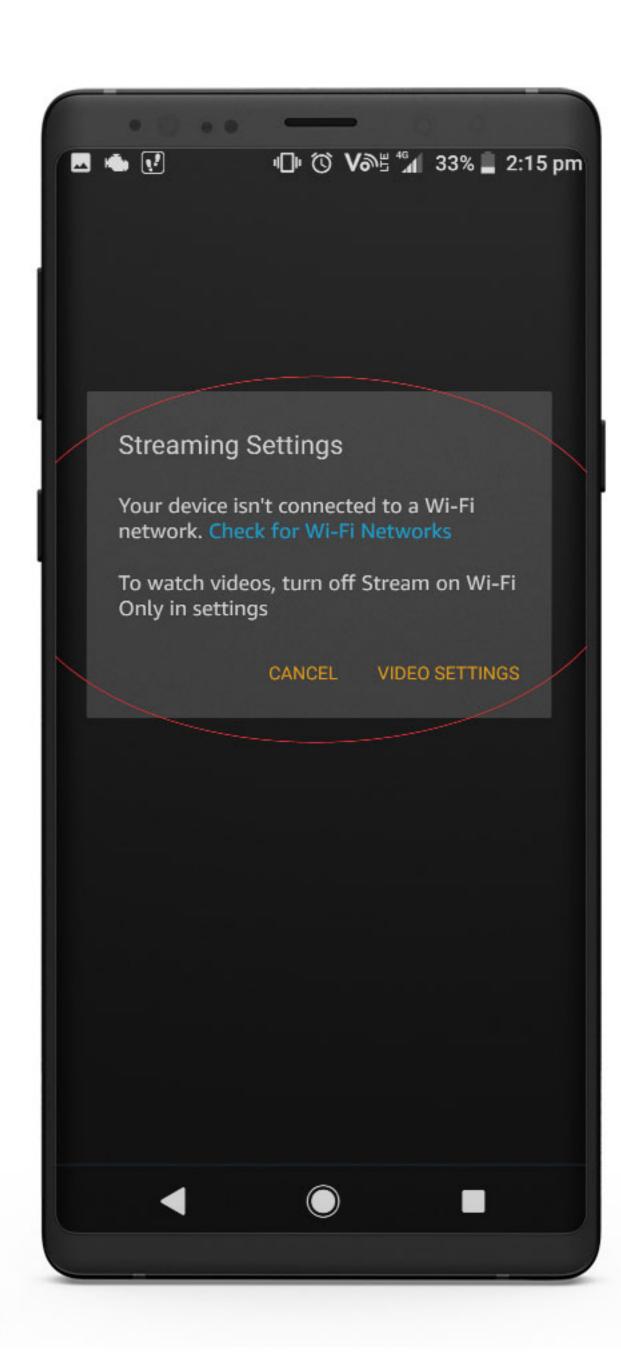


## Handy tip:

"As you can see in the above image, there is also an option to select "Use highest quality when on Wi-Fi". If you are planning to change your streaming settings to save data on your Wi-Fi, then you should make sure that you un-tick this option. Otherwise it will stream at the highest quality on your network regardless of your choice above."

Step 6: Once you are done with your streaming quality settings you will want to go back one more step to the "Stream and Download Page". If you really want to make sure you don't accidentally stream data on your mobile network while at home, you can tick the "Download on Wi-Fi only" and "Stream on Wi-Fi only" buttons. You will also want to activate the "Notify When Streaming on Mobile Data.



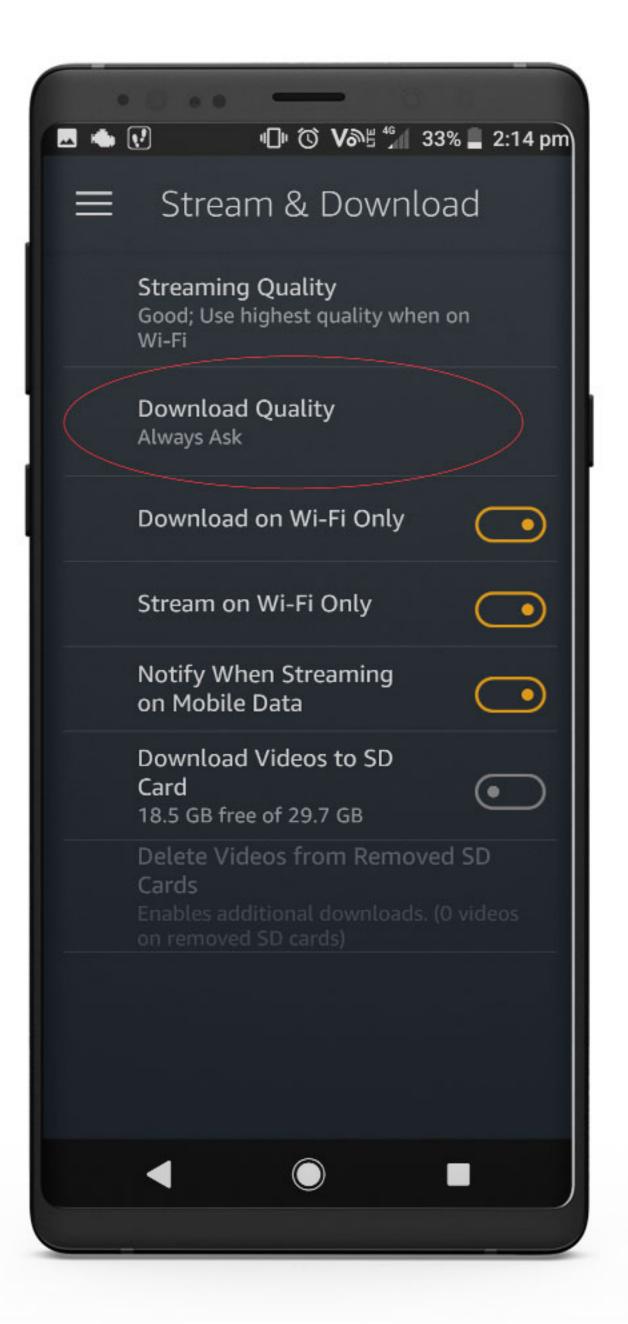


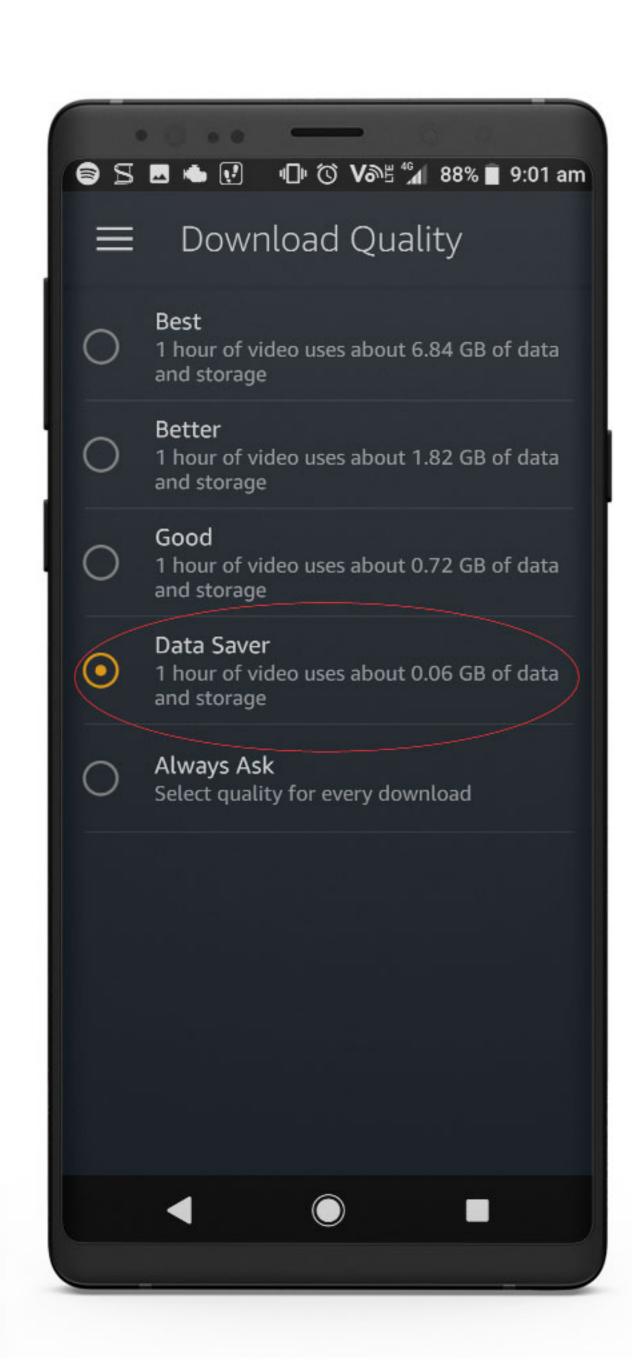
Step 7: Test your settings are working: After you have put on all three of the mentioned options on from step 6 and when you have checked that you are connected to Wi-Fi. Then you can try to play a video and it should display a message on your phone or tablet. If you see this message it means everything you activated in step 6 is working, you won't be able to use your phone's data to stream.

# How to reduce Amazon Prime usage when downloading TV shows or movies on a mobile or tablet

On Amazon Prime mobile or tablet apps, users have the option to download their favourite shows or films so they can watch them on the go without having to stream and use their mobile data. Some people might use this option for downloading quite a bit of content, which is great. But it does eat into your data usage at home depending on the quality of the downloads that you choose.

- Step 1: To change your download settings follow steps 1-4 of the mobile streaming guide and when you get to the "Stream and Download" settings page on your device click on "Download Quality"
- Step 2:Choose to download videos at the quality that is right for you and your plan. You can see in this screen the different video quality options and how much data they will take when they download things.



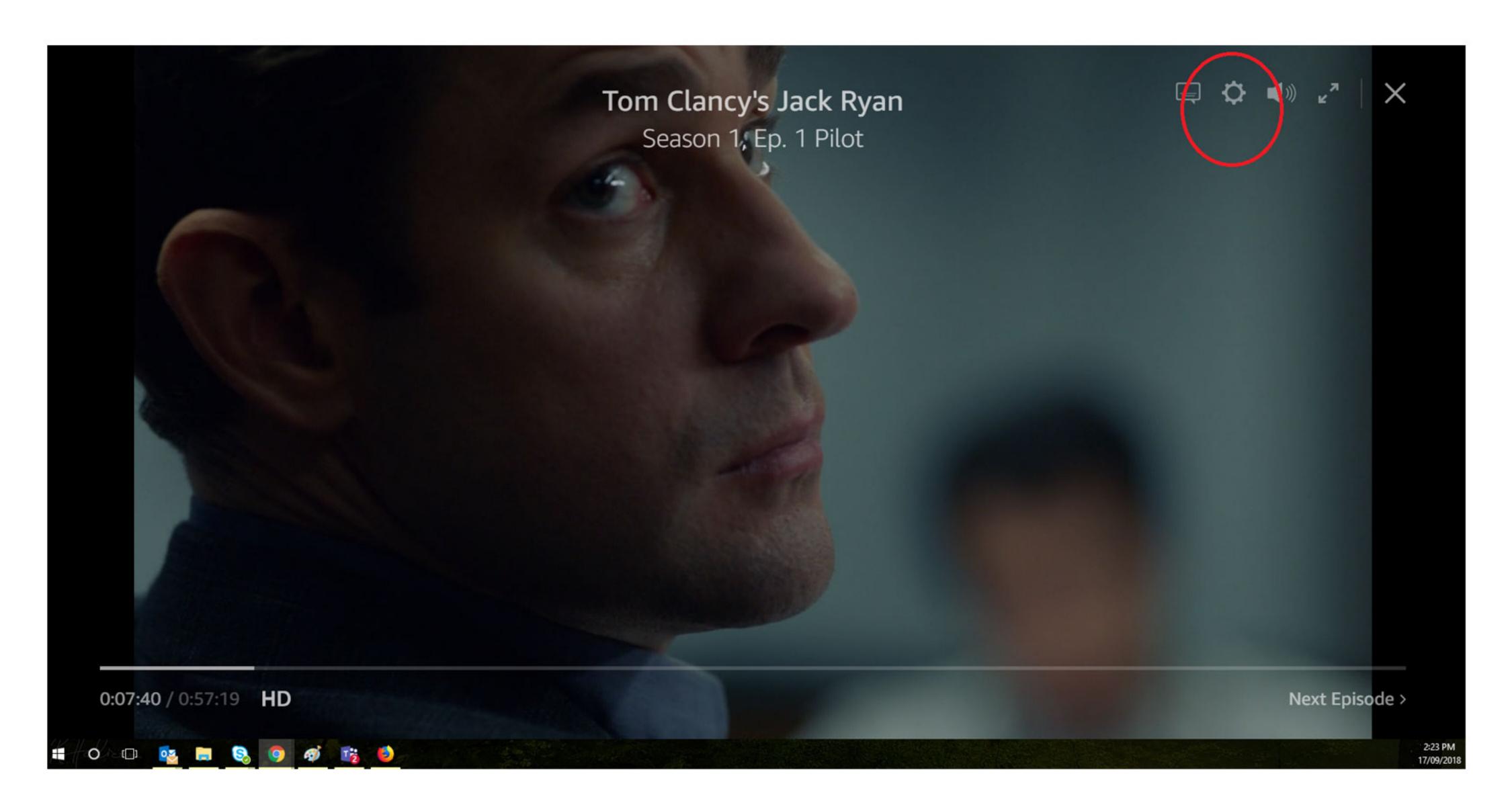




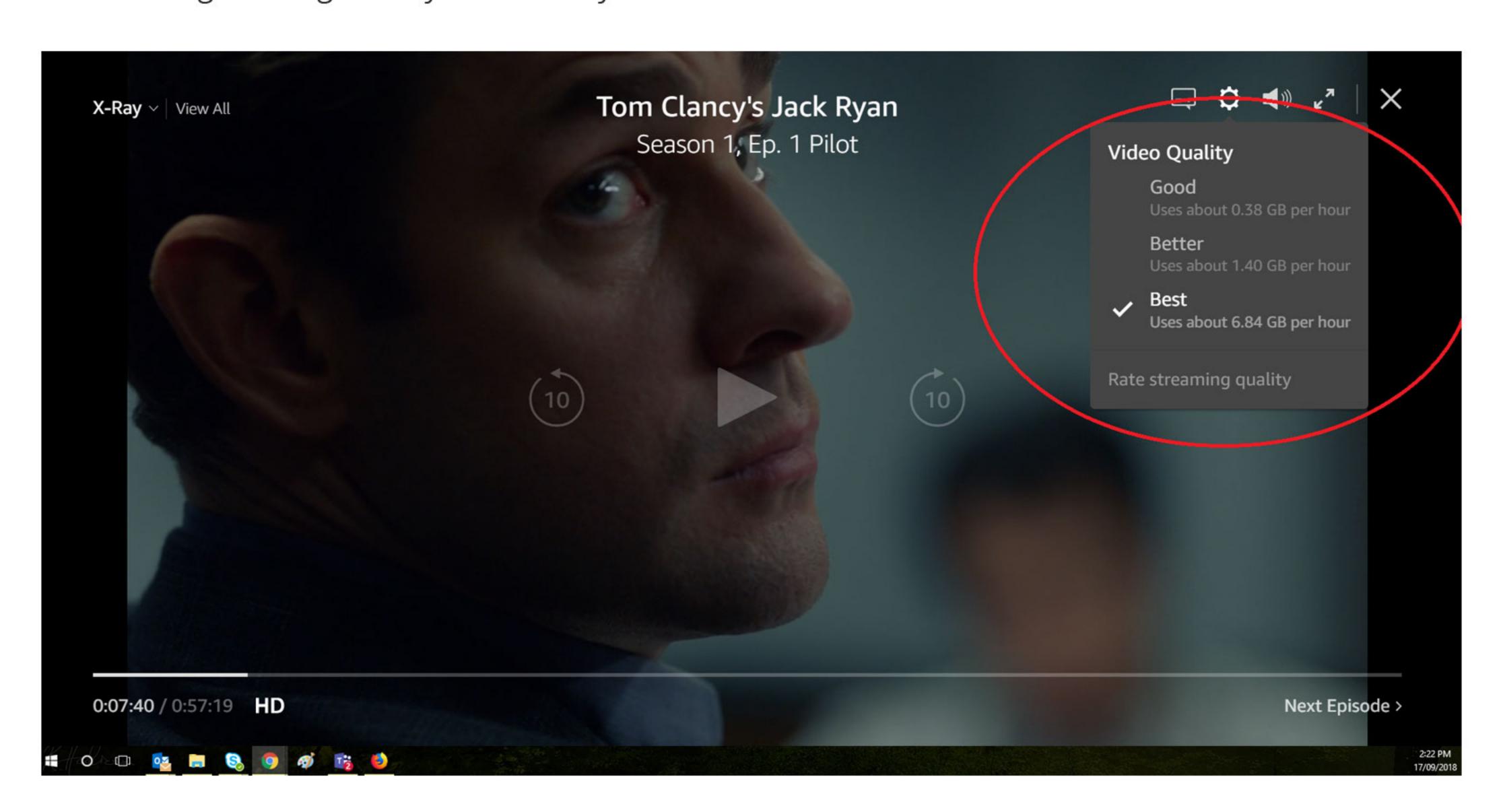
#### How to reduce Amazon Prime usage when streaming on a PC

On a PC there are far fewer steps in the process to reducing your data then on a mobile device.

- Step 1: Log into your Amazon Prime account
- Step 2:Click on a video you would like to watch.
- Step 3:Press Pause and take a look at the top right of the screen. There will be a gear icon you can click on.



Step 4:Once pressed, you will see a list of options for reducing your video quality. Choose the one that is right for you or the lowest if you really want to save data. You can change settings at any time on any video.



Data settings on PC are as follows:

Good: 38 GB per hour (choose this option for data saving)

Better: 40 GB per hour

Best: 84GB per hour (this option uses the most data)



# How To Reduce Netflix Data Usage

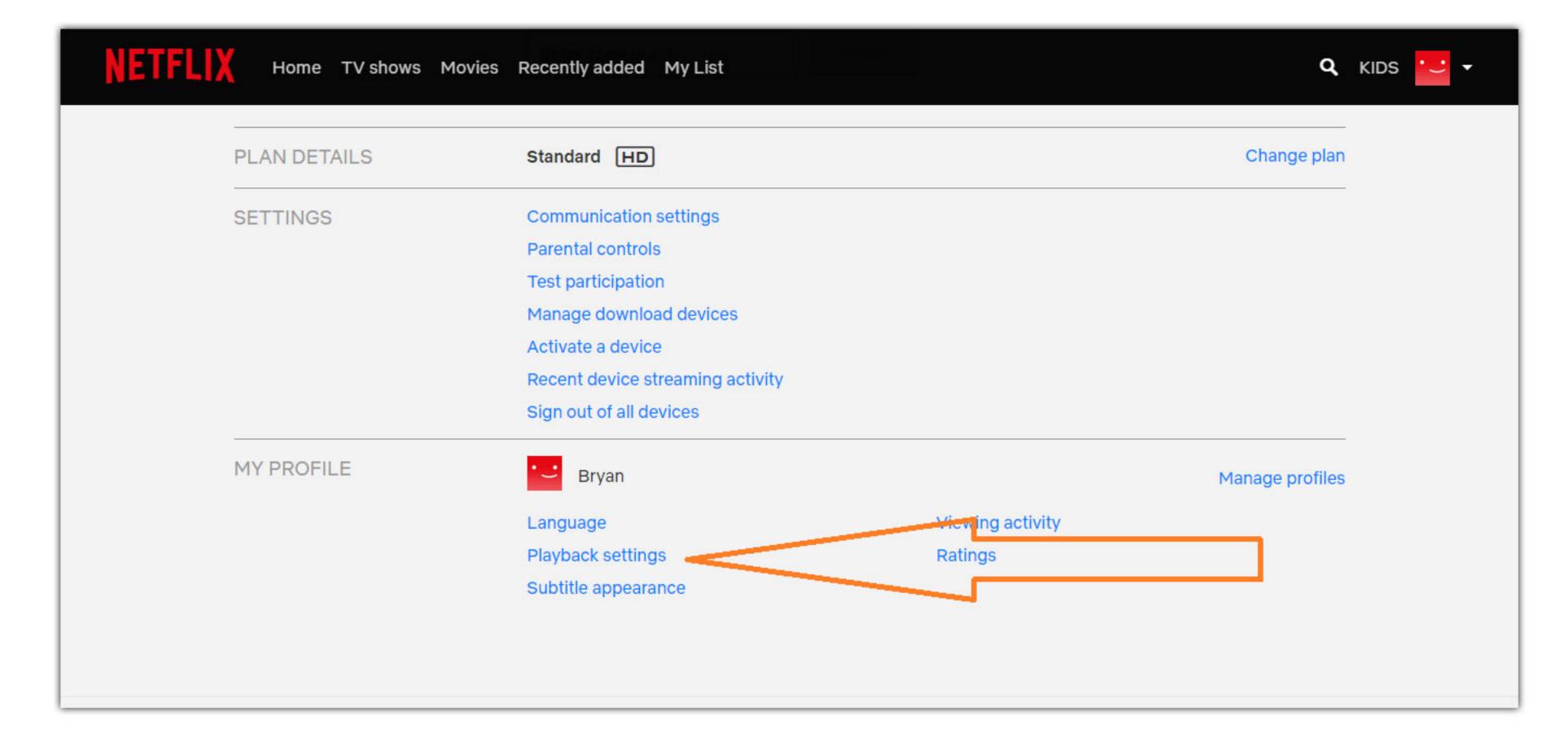
#### How to reduce Netlflix data usage when streaming TV shows or movies

On a PC there are far fewer steps in the process to reducing your data then on a mobile device.

## Handy tip:

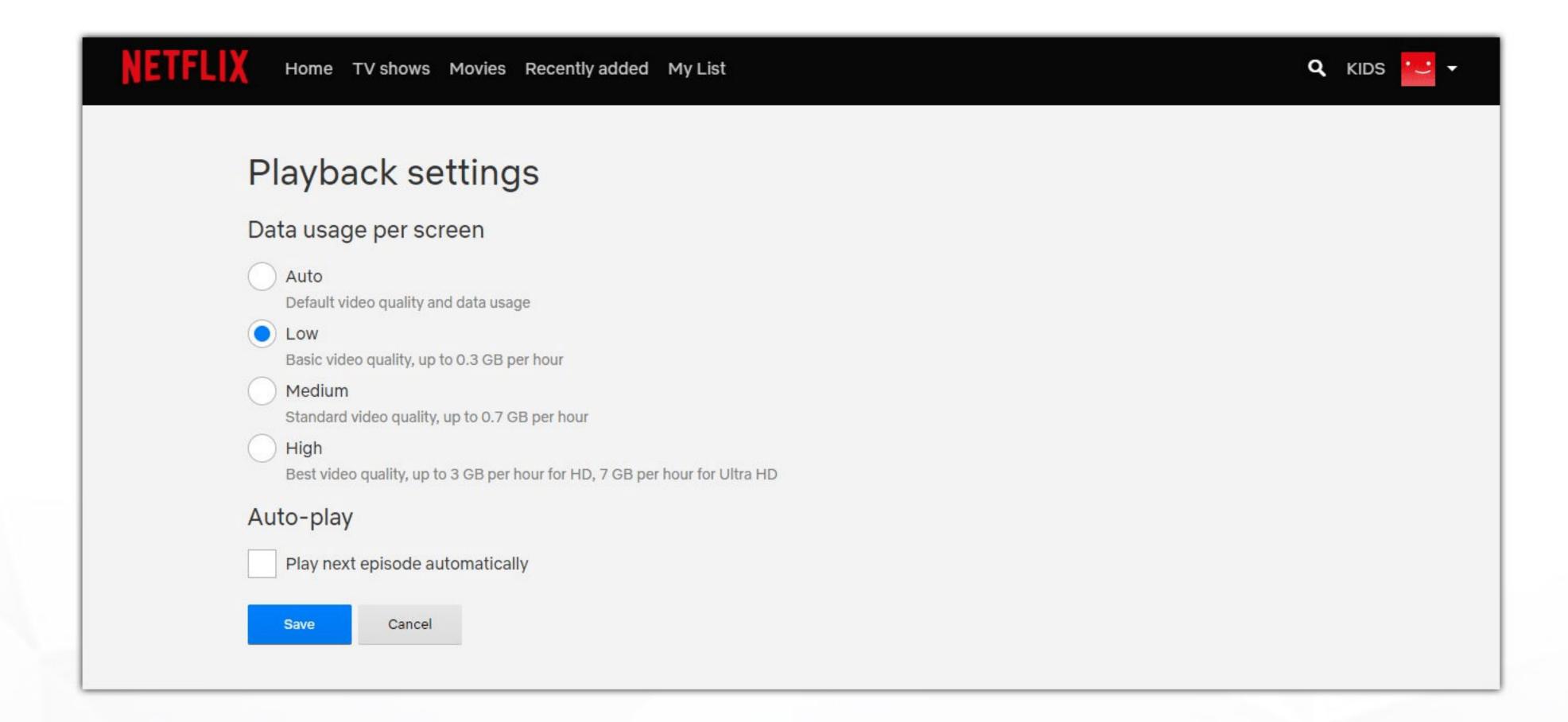
Data usage settings only apply to the profile you have decided to change them on. Many families set up different user profiles for different family members to use when they go in to watch their favourite shows. Changing data settings on one profile does not apply to other profiles on the account

- Step 1: Sign into your Netflix account
- Step 2: Click the profile you would like to change the settings for
- Step 3: Move your cursor to the top right (near your profile picture) and click "account"
- Step 4: Scroll down until you see the "My Profile" section. Inside this section click on "Playback Settings"



Step 5: In the "Playback settings" screen you can select a lower quality video option which will use less data. Choose the option that's right for you.

On the "Playback Settings" screen is also a box you can tick to stop videos from auto playing after you finish watching one. If you leave the room often and often leave Netflix on then ticking this box alone will save you data instantly by not playing episodes of shows when you aren't even in the room and you aren't even watching.





**Step 5:** Remember to click save!

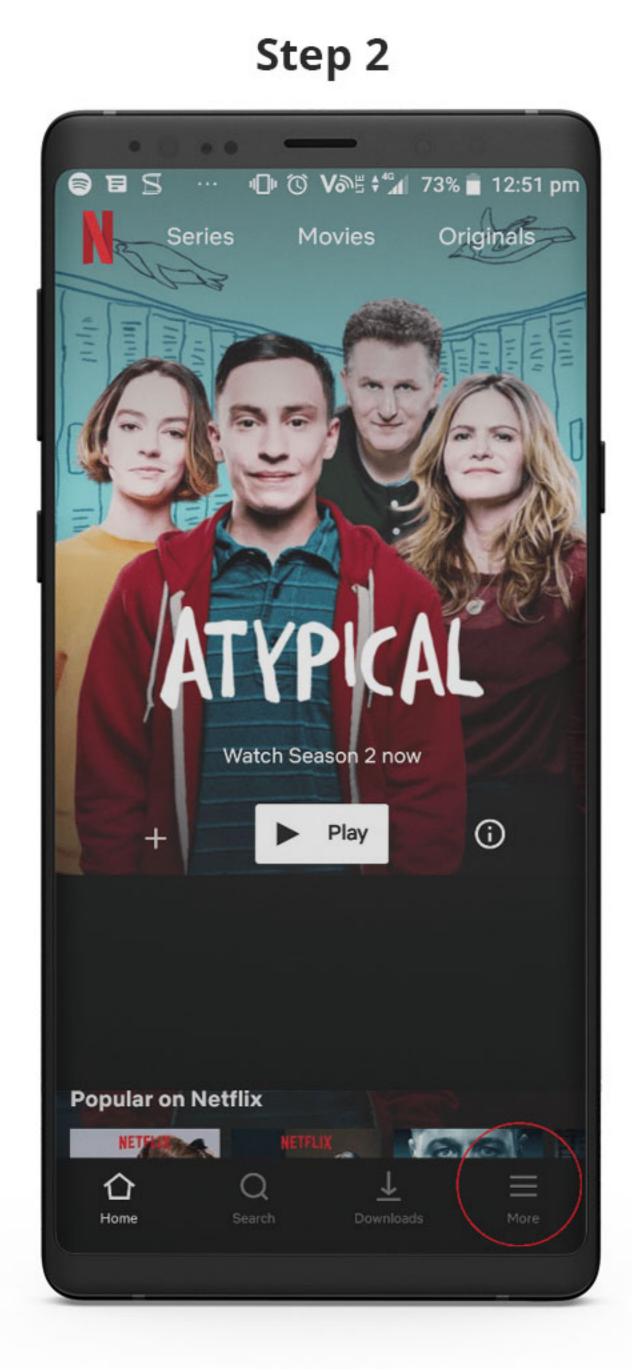
According to Netflix, data use changes can take up to 8 hours to take effect.

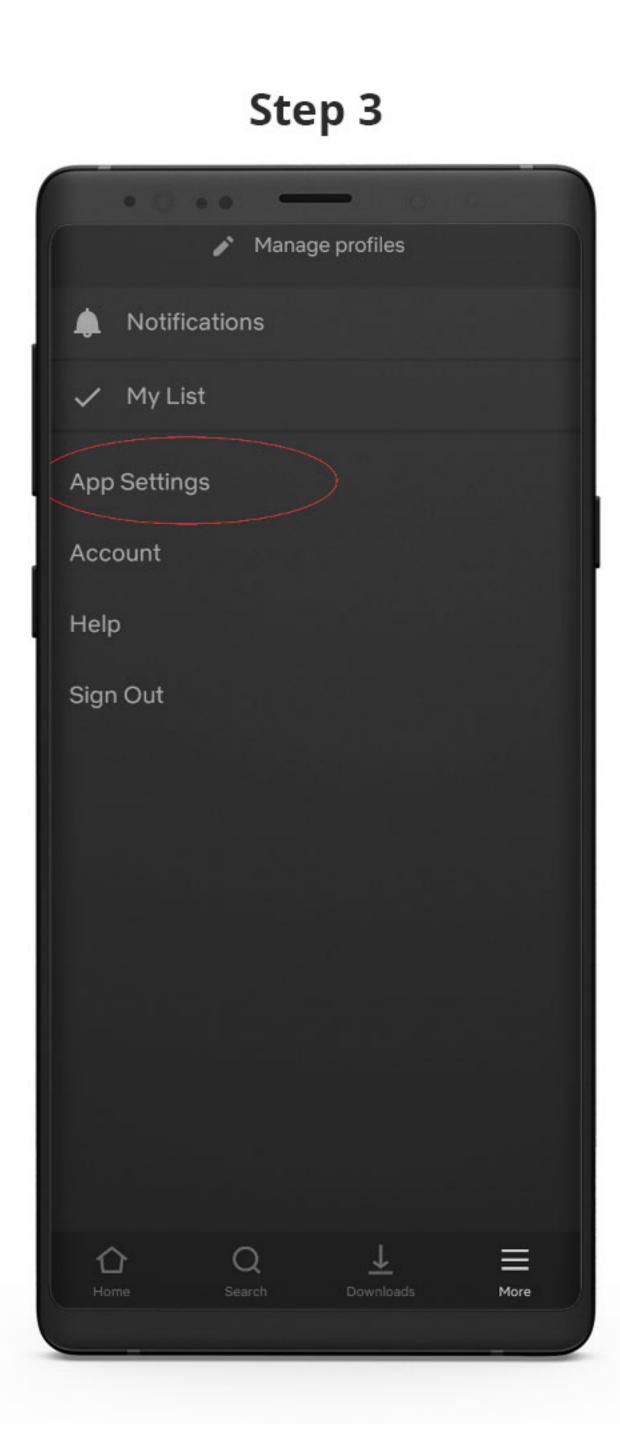
#### How to reduce Netlfix data usage when downloading TV shows or Movies

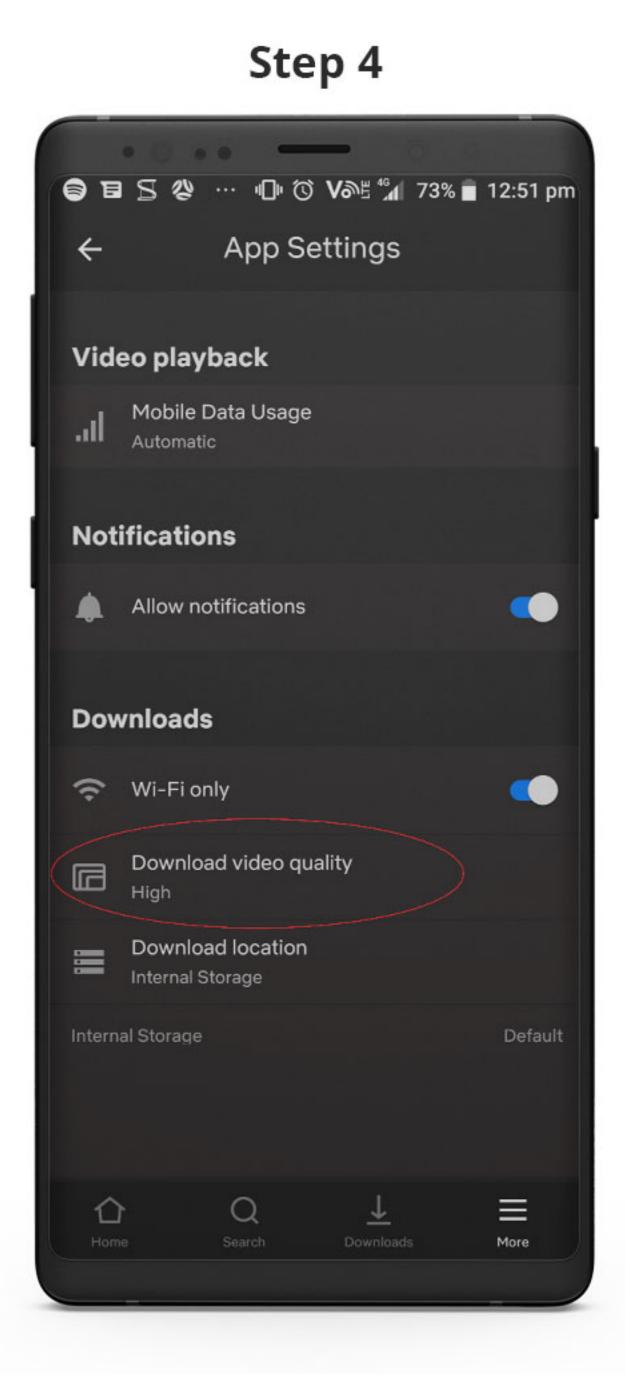
For mobile devices and tablets which use either Android or IOS, Netflix customers can download shows to watch on the go or during times when they won't be able to connect to their home internet. Some customers use the downloads to save data by downloading during off-peak times which is a good idea. But if you are getting close to your download limit on your current plan and want to download more of your favourite shows or movies, there is an option to reduce the download sizes.

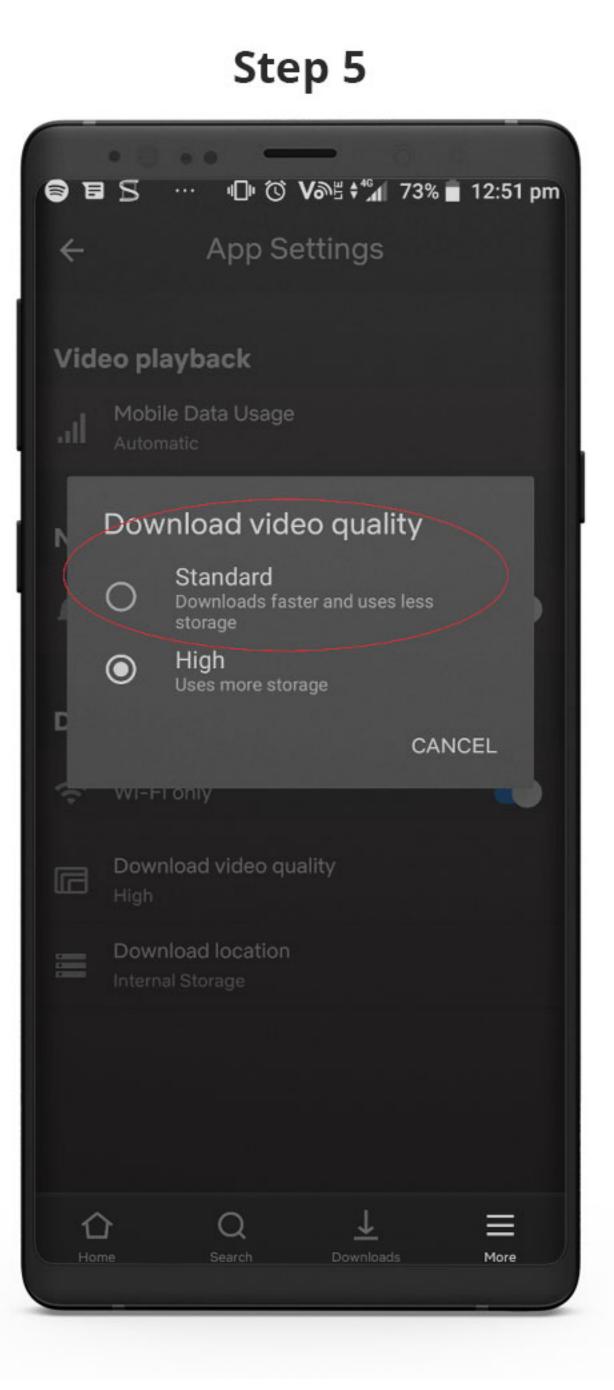
- Step 1: Sign into your Netflix account on your mobile or tablet
- Step 2: Click "More"
- Step 3: Click "App settings"
- Step 4: Click "Download Video Quality"
- Step 5: Select "Standard" instead of high

Selecting "Standard" instead of "High" will mean that the files you download should now use less space and therefore less of your data.







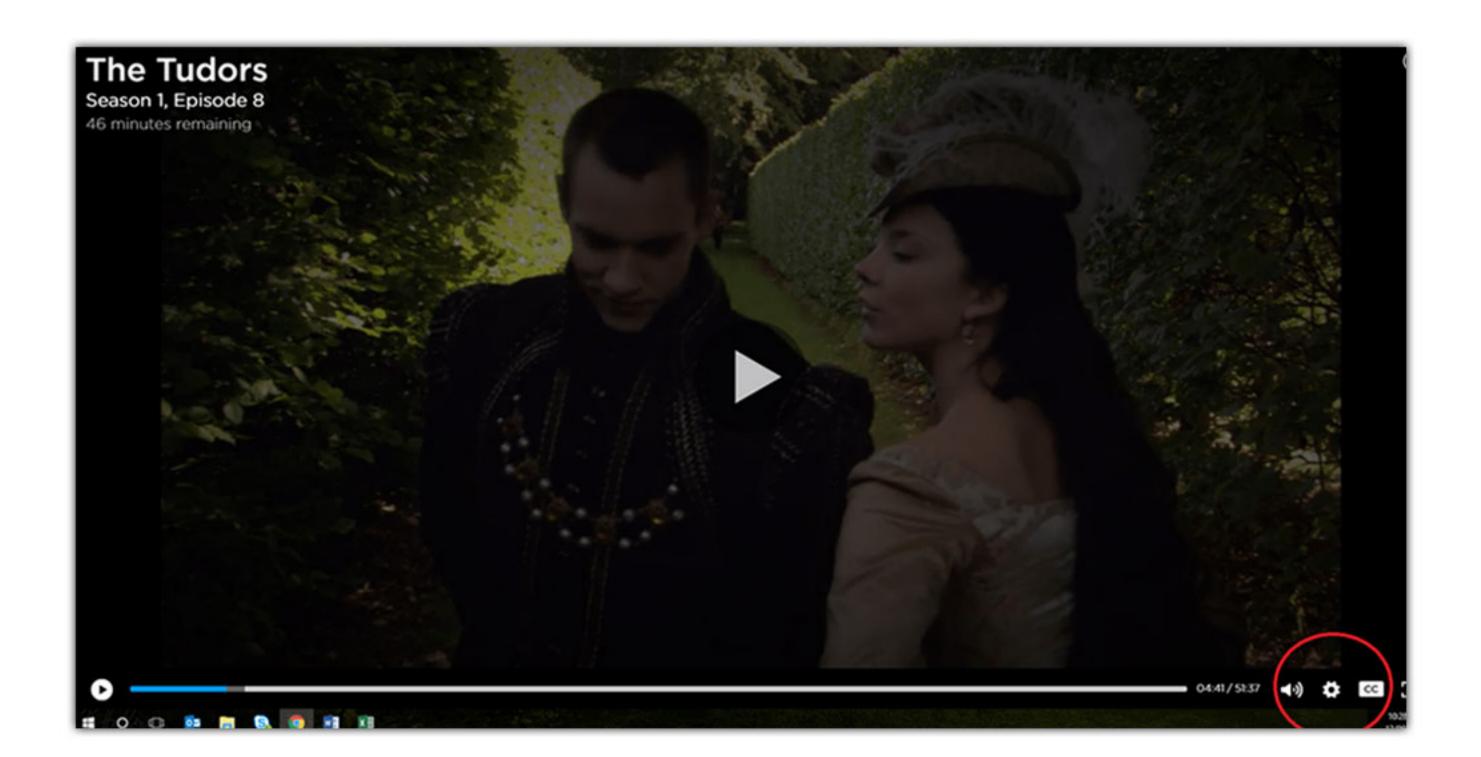


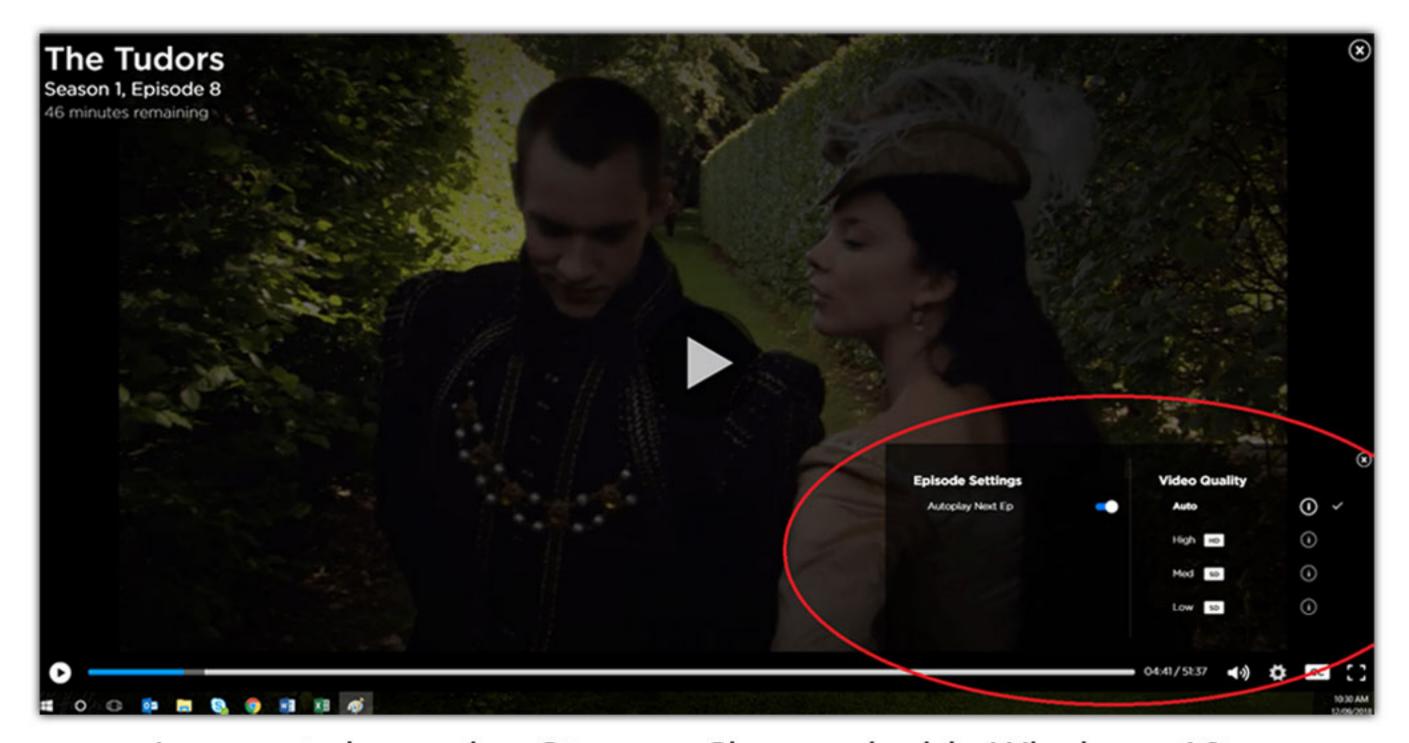


# How To Reduce Stan Data Usage

If you've been watching a lot of Stan lately, then you may have noticed your data usage sky rocketing after each session. With so many shows releasing on Stan each week, it's hard to resist watching them whilst simultaneously staying under your data usage limit for your plan at times. Luckily at IPSTAR we know the steps customers can take for how reduce Stan data usage.

- Step 1: Sign into your Netflix account
- Step 2: Select the TV show or film you would like to watch
- Step 3: Press play on your selected TV show or film
- Step 4: Pause the video, then take a look towards the bottom right of the video, you will see a 'gear' icon. Press on that icon to bring up the video quality settings
- Step 5: Choose from the list of different quality options. Choices available include 'Auto', 'High' 'Medium' and 'Low'. Depending on your internet plan and data allowance you will need to choose the option that suits your needs. Generally, the lower the quality, the lower the data it takes to stream it. The auto option is different in that it automatically chooses your video quality based on your internet speed. Auto will always try to stream at the highest/best quality that your connection can handle, but it is not focused on saving data, it's focused on speed and quality. Choosing either low or medium will work better to save your data on Stan.
- Step 6 (Optional): In the data settings tab there is also an option which you can either tick or untick regarding the auto playing of videos. If you leave the room often and have left Stan on while you were away, you





Images taken using Stan on Chrome inside Windows 10

might find that it's played a couple of episodes of your favourite show or the movie you were watching is now over. This means that a lot of data was used when you weren't even in the room at all. Turning this off will remove that problem right away and might save you quite a bit of data!

#### How do I know how much data each video quality option uses?

Stan's data usage settings vary greatly between video quality options. Ultra UHD is only available on the Stan premium plan and uses the most data compared to any other option. If you have a 4k setup and plan to stream Stan in UHD then be aware that it will go through your data, quite quickly.

Quality setting	Data usage per hour
Ultra (UHD)	7 GB per hour
High (HD)	2.89 GB per hour
Medium (SD)	1.13 GB per hour
Low (SD)	0.57 GB per hour



#### How to save Stan data usage when downloading

Many Stan users who use the service on a mobile or a tablet have the option to download their favourite TV shows or films to watch later or at a time when they're out and about. Downloading TV shows or films at home on a home internet connection on your phone, will save you data when out as you won't have to stream the show using your mobile internet plan's data allowance.

But some internet users' home connections do have data limits and if you are downloading a lot of content each week, it can still quickly eat up your data limit. An easy method to get around this is to change the downloadable video quality. Generally, the lower the quality the lower the download size and the less data you will use at home.

- Step 1: Open the Stan app on your phone on either Android or IOS and login.
- Step 2: Click the icon with the three lines on the top left
- Step 3: Click on the menu item called "App Settings"
- Step 4: Take a look at the download video quality section and choose the option you feel is right for you and suits you the most.

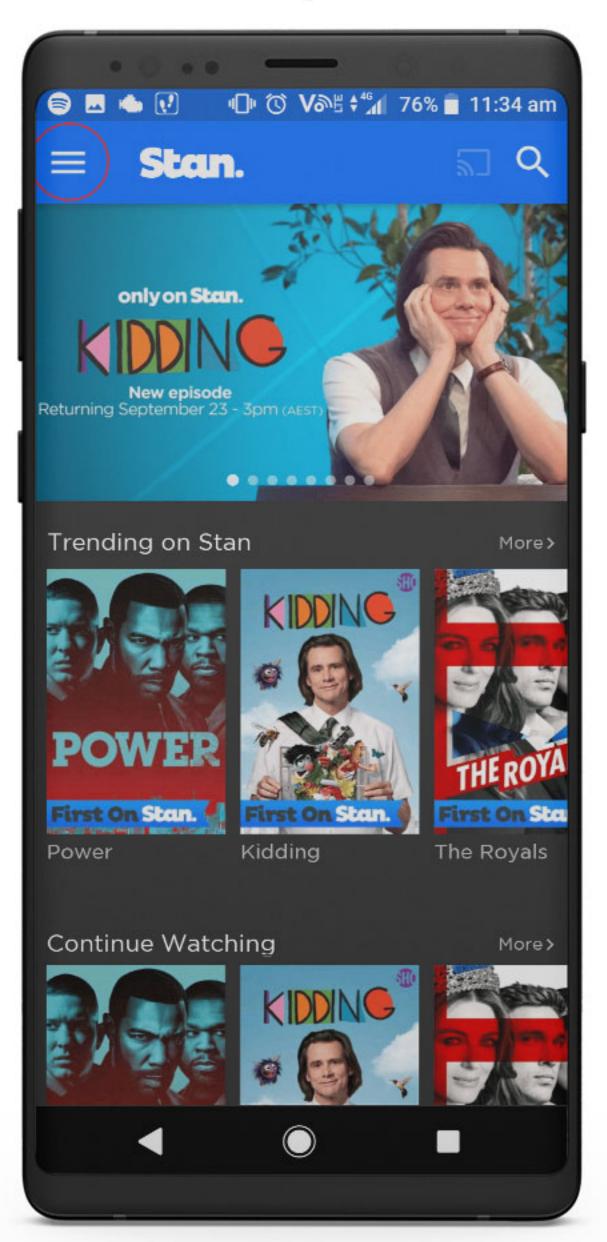
Stan has three options to choose from, these include:

**Quick and dirty:** The file is the smallest. As this is the smallest file size option, this option uses the least data. It does have lower video quality than the other two options though.

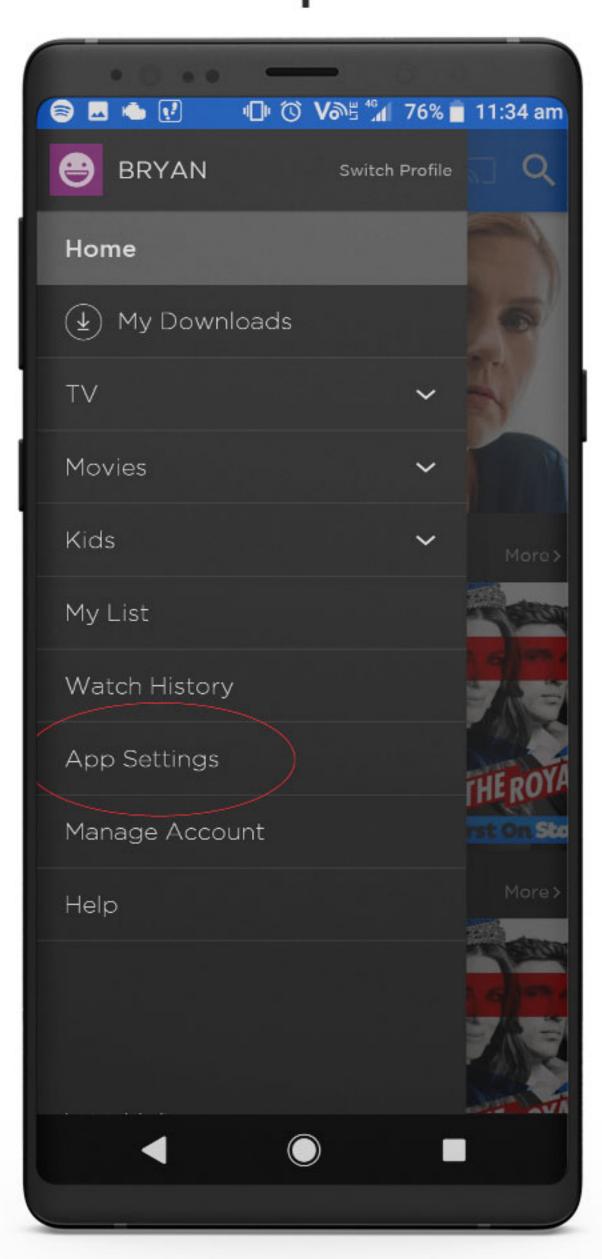
Standard: Bigger file size than 'Quick and Dirty', better quality video

Best: Highest quality video, but therefore the biggest file to download.

Step 2



Step 3



Step 4

