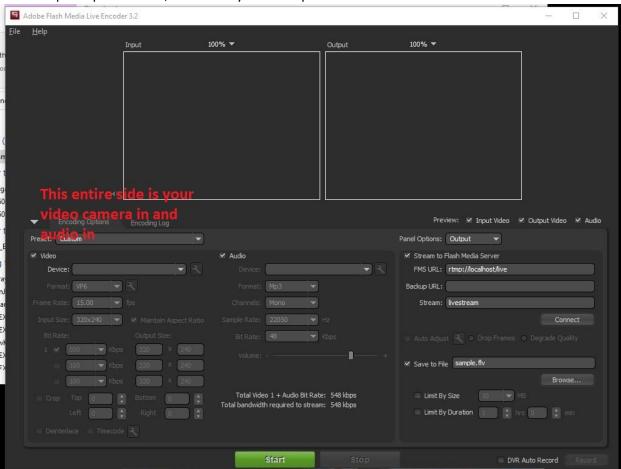
How to live stream to YouTube – note at the end of this document I have some computer interface equipment that we use at Bethany.

Download Adobe Flash Media Encoder – free
This web site has it with no extra attachments:
https://www.videohelp.com/software/Flash-Media-Live-Encoder

It is hard to find on the internet as it has been discontinued for a few years. Works for now, if you want higher definition, or other plugins, consider paying for a hosted encoder. This one works fine for Bethany right now.

After you download your encoder and install it, open it. The program should see your camera if it is hooked up and powered on, same with your microphone or line feed for sound.



On the video side configure:

Format: h264

Frame Rate: - depends on your internet speed, I have it set to somewhere in the middle of the list

Input size: I run ours at 720 X 480

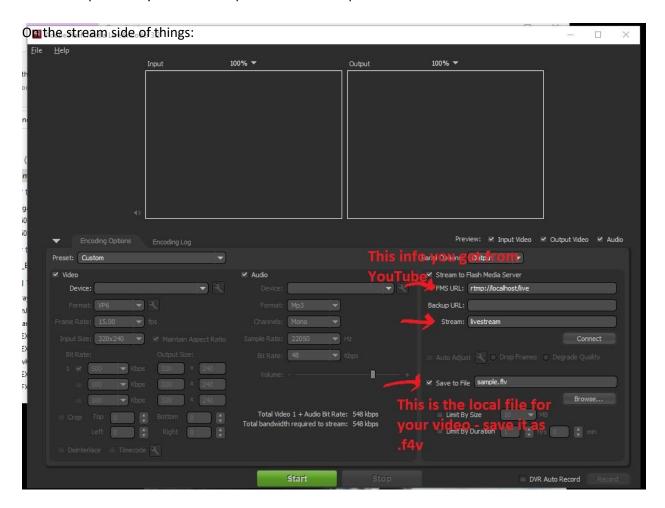
Bitrate: 1000 and I match the output size with the input size

On the Audio side:

Format: Mp3

Channels: we use stereo Sample rate: 44000 or 46000

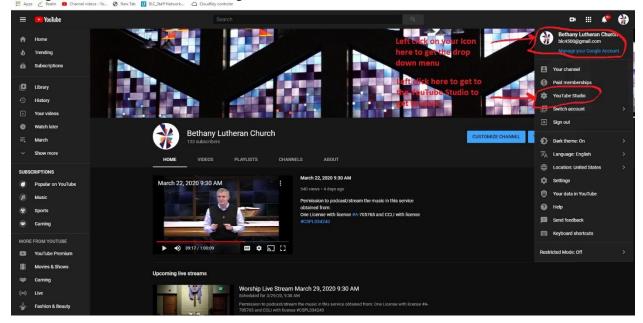
Bit rate: depends on your internet I push this to 120 kbps



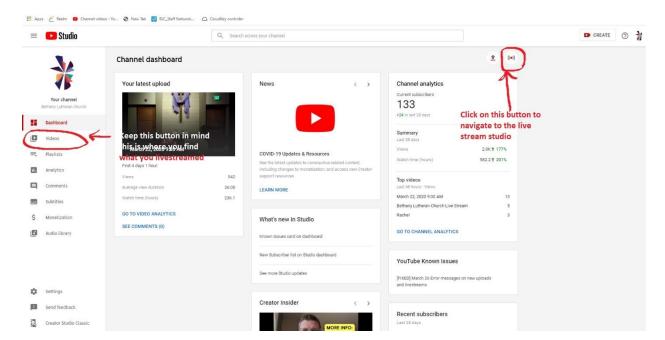
You get all the info you need from YouTube, will show later where In the "Save to File" pick a location on your computer in the dropdown save window (after clicking on "browse" Select .f4v for file format or it will not write to YouTube

Getting to know YouTube

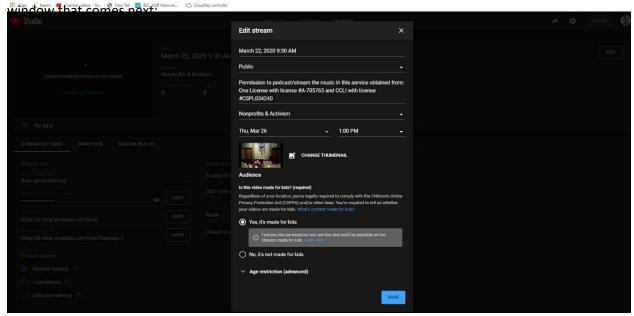
After you set up your YouTube account, you can access different areas of the account through your "Icon" in the top right corner of the screen. Left click on the icon to access the list of options and settings, choose "YouTube Studio" to get started:



After you open you YouTube Studio the page should look something like this: Your next click is on the icon that looks like a open circle.



When you click on the Live Stream Studio button you will be prompted to create a new stream or copy a existing. After you set up one, always copy that one, it will save time with your adobe encoder because it will use the same credentials every time (see further down about credentials) In the edit stream

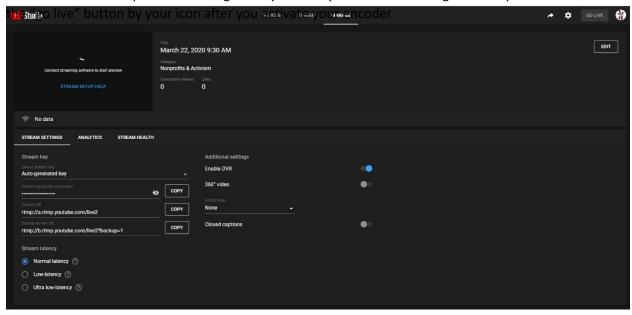


Few important points:

- 1. This is where you can schedule a start date and time (I set up a few at a time and post as the service comes on the calendar)
- 2. Set things to public
- 3. If you have a pod cast license put it in here
- 4. I upload a thumb nail picture from my computer
- 5. Yes, your service video is made for kids. I researched this new selection and have concluded it is the best setting for us. It uncomplicates a lot of things.

Here is how the YouTube Live studio looks:

You need to have it open and running when you have your service running because you need to click on



What you need off this page for your encoder:

Stream URL: on this page it is rtmp://a.rtmp.youtube.com/live2 needs to be copied onto the PMS URL: line of the adobe encoder on your computer (look at the right column of information)

Stream Key: Looks like dots unless you reveal it (click on the "eye" with the line through it) Copy it and paste it onto the "Stream" line of the encoder and then click on "connect" Note: the stream line says "livestream" by default replace that with the stream key.

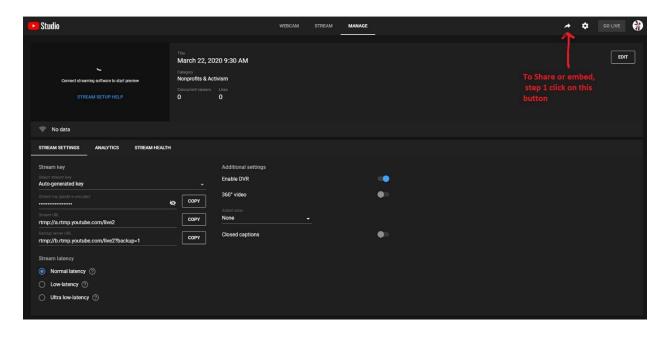
If you copy your YouTube Live studio each time you create a new player for posting you do not need to change these settings in your encoder.

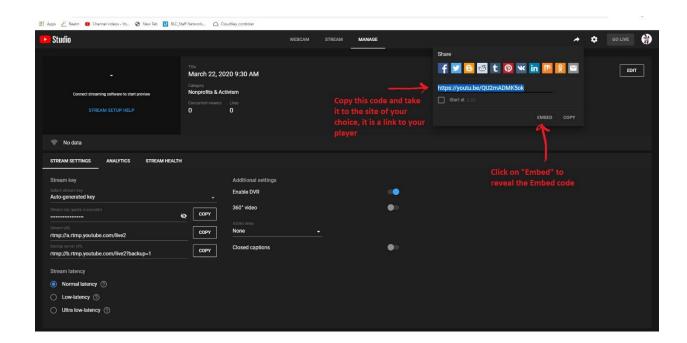
When you start your encoder (first step) give it up to 45 seconds to catch up to the YouTube Studio. When you see things active on the YouTube studio and you are ready to start Click on the GO LIVE button in the top right corner (will be red when ready) and things should start.

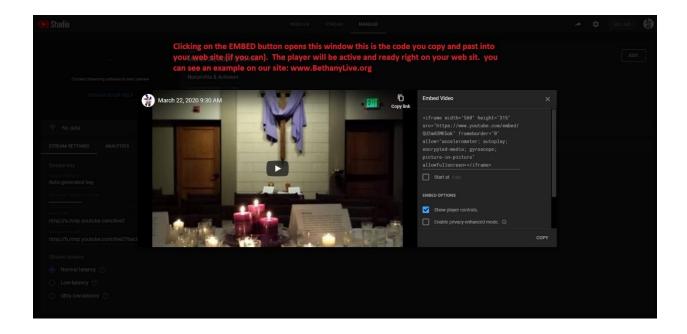
YouTube automatically creates a video from your live stream that can be saved to a playlist or just let it sit on the site.

Another little tip, if you do not have the ability to embed videos on a 3rd party site, you can develop a YouTube channel and manage videos and play lists there. Keeps it all in one place.

How to embed and share:







That should cover how to get things going on YouTube. You should be able to create playlists of archives, channels, upload videos, all in one place.

Here are some ways to get video and audio to your computer. The Adobe Encoder will probably pick up your devices if the computer can:

Video

First pass on the internet, bad news I do not see where they are manufacturing the type of analog to digital video capture device I use all over our church. You can find them used though: https://www.amazon.com/Canopus-ADVC-100-Advanced-Digital-Converter/dp/B00007L68E

We use Canopus ADVC-100 converters like the one on the Amazon.com link above. Might find some on Ebay. This will also take analog audio in the same device, we do not do that as I take a feed directly from our audio board and let the encoder mix the two together. This connects via 1394 firewire. If your computer does not have that onboard the cards are cheap and easy to install (less than \$20) Here is a search I did on Microcenter.com, there are a lot of choices:

https://www.microcenter.com/search/search_results.aspx?Ntt=1394+firewire+card&searchButton=search_ne

Audio

I use the Focusrite Scarlett USB audio interface to take a sound directly from my sound board to the computer. Use AUX out or Monitor out to interface with this. I can then mix a good quality sound before it hits the internet.

This link is through Sweetwater:

 $\underline{https://www.sweetwater.com/store/detail/Scarlet2i2G3--focusrite-scarlett-2i2-3rd-gen-usb-audio-interface}$

I have had great luck producing good quality sound from this device to my computers and laptops. It interfaces via USB

I will answer questions about configurations. I am good about returning email quickly at: Laura@bethany-denver.org