

Log on to the Straming Wizard at <u>nasta.streamingwizard.com</u>. The above screen will appear above as it is here. Enter your Username and password to take you to the following screen.

Select your preferred <b>stream name</b> (default "webcast"), width and height of your video, whether you want the video to start automatically and if you want a full screen option. Then press the <b>get code</b> button.	
Note: The stream name must be unique if you are running 2 or more webcast's at the same time. $ \\$	
Stream name	webcast
Width:	320
Height:	240
Automatic start	true   ‡
Full screen option	true   ‡
Create code using above details.	

At this stage, you are able to name what you want your stream to be, so for example, if broadcasting a Rugby match, you can name it Varsity Rugby. The width and height of the broadcast/livestream is dependant on the equipment you are using, ideally, you want to keep it as true to its originally pixel size as possible to reduce distortion and

compression errors. If I was doing a full HD broadcast, I would select 1920 by 1080 or smaller. As this is too large a player, I could select 1280 by 720 as this stays with the aspect ratio of the image. The automatic choices should be true if you want it to start immediately upon webpage loading. For the Full screen option, something like a webcam broadcast, I would choose this function as false, and true if it's a television broadcast.

Once all these option have been completed, create the code ready for embedding on your webpage and for the rtmp streaming server.

This will then produce a page like the one below.

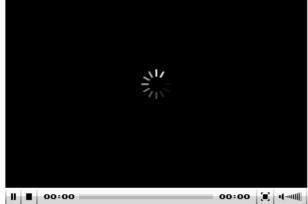
## Use the following details in your encoder:

```
FMS URL: rtmp://195.195.131.195/rave
Stream: webcast
Username: rave
Password: ******* (This should be provided to you)
```

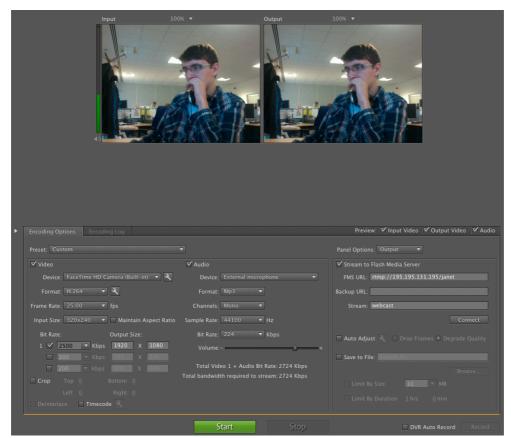
## Player code to cut and paste into your website:

```
<embed src='http://nasta.streamingwizard.com/player.swf'</pre>
 width='320'
 height='240'
 allowscriptaccess='always'
 allowfullscreen='true'
flashvars='streamer=rtmp://195.195.131.195:80/raveLive&file=webcast.flv&autostart
=true'
/>
```

This should look like:

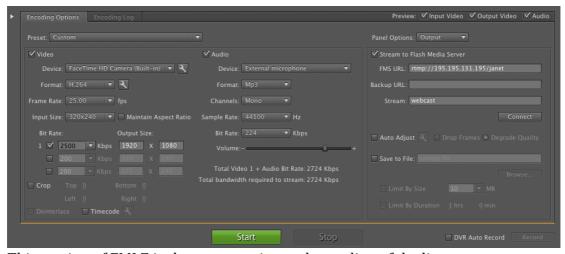


This page has all that is needed to stream onto the servers. It has the FMS URL, which will be needed later in this document, along with the Stream name. It contains the embed code for you to embed the player onto your website. At the bottom of the page, it shows the stream itself, so you can monitor the stream on this website instead of having to wait for the page to be created with the embed code.

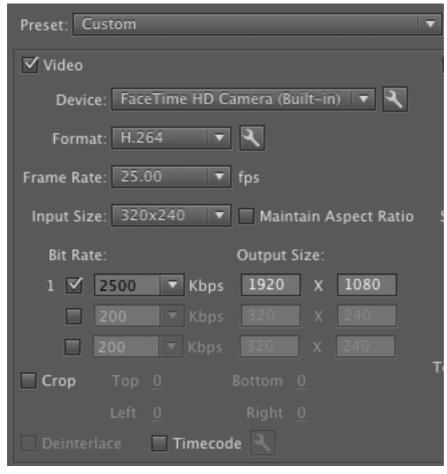


This is a screen capture of Flash Media Live Encoder or FMLE for short. It displays two screens, the one on the left being the input into FMLE and the right being the intended stream output. This can be seen clearer in the image below.





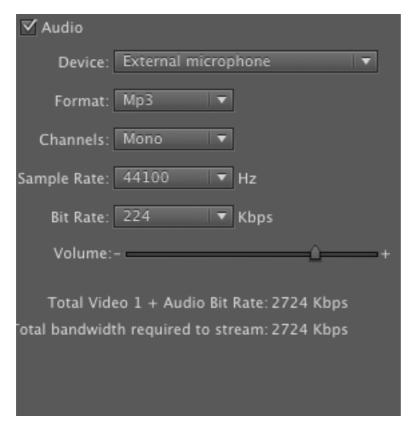
This section of FMLE is the compressing and encoding of the live stream.



Here is the video side of the settings. For this example, the selected input chosen is the inbuilt webcam. Dependent on what you have available and are using for the stream, this will be different. If the input is from a tape deck or a camera, then select the name of the device as it appears on the drop down menu. There are two different

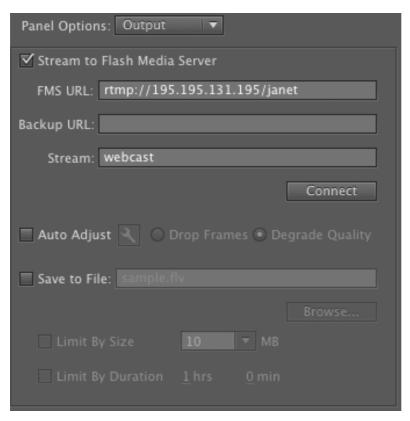
formats that can be chosen for the stream. H.264 and VP6. The one you use is down to you and the imagery you want to get from it. The Frame rate is interchangeable as well. The range is from 1 frame per second to 60 frames per second. It even allows for drop framed settings such as 29.97. The input size is very interchangeable, The input size varys from 80x60 to 1920x1080. This is a very small image of SD quality all the way up to Full HD quality. The maintain aspect ratio will ensure that the image is not stretched or squashed as it will allow for the image to not loose its aspect ratio. However, in some circumstances you may want to alter the image's aspect ratio. The output size is determinable

by you. But make sure that you have selected the same output size as of that you have put for the Streaming Wizard; otherwise the stream will not work properly. Alongside this, choose the Bit Rate that will suit the internet speed at the time. Best way to determine this is to do a speed test using speedtest.net.



The next step is to set up the audio for the broadcast. The device is chosen similarly to the video. Choose the audio input in which you will use. I.e. external microphone. or line input., choose the desired format, and the amount of channels being used, mono or stereo. The sample rate and bit rate need to be chosen carefully aswell dependent upon the nature of the broadcast, anything containing music should be streamed at 44100Hz with as high a bit rate as possible.

This will reduce the amount of compression errors that may occur during the encoding. Lastly, choose the volume in which to set the incoming Audio.



To the Left is the input area for the flash media servers that streaming wizard uses. This is where the FMS URL given earlier by streaming Wizard is needed. Enter this into the FMS URL slot and then enter the exact same stream name that you used for Streaming Wizard, if the name is different. then the streaming will not work! Once this has been inputted, click

Connect. This will then prompt you for your username and password. The username and password is the ones that are used for Streaming Wizard. Not the ones on the computer as I myself did when I first started.

Once All of this has been completed, Press the Green start button at the bottom of the screen and you will be streaming live to this internet. (As long as you embed your player on a webpage. A mistake I also made when I first started.)

Below is a screen shot of what appears after the streaming has commenced. This is a monitoring system that allows you to see any errors that have happened with the streaming itself.

