# Install Nginx RTMP for live streaming (ubuntu 20.4)

<https://www.servermania.com/kb/articles/nginx-rtmp/>

<https://www.nginx.com/blog/video-streaming-for-remote-learning-with-nginx/#configure>

1. Install the build tools

Sudo apt update

Sudo apt install build-essential git

1. Install dependencies

Sudo apt install **libpcre3-dev libssl-dev zlib1g-dev**

1. Compile nginx with the RTMP module

$**cd /path/to/build/dir**

$**git clone** <https://github.com/arut/nginx-rtmp-module.git>

$**git clone** <https://github.com/nginx/nginx.git>

$**cd nginx**

$**./auto/configure --add-module=../nginx-rtmp-module**

$**make**

$**sudo make install**

**Added —with-cc-opt=”-Wimplicit-fallthrough=0” when compiling errors.**

./configure --prefix=/usr/local/nginx --with-http\_ssl\_module --add-module=../nginx-rtmp-module  
make -j 1  
make install

1. Configure Nginx

The way **nginx** and its modules work is determined in the **configuration file**. By default, the **configuration file** is named **nginx**. **conf** and placed in the **directory** /usr/local/**nginx**/**conf** , /etc/**nginx** , or /usr/local/etc/**nginx**.

\*\* Nginx with RTMP is located at /usr/local/nginx/sbin/nginx by default. It loads the config files in /usr/local/nginx/conf.

Test the configuration file

|  |  |
| --- | --- |
| 1 | $ sudo /usr/local/nginx/sbin/nginx -t |

Start nginx in the background

|  |  |
| --- | --- |
| 1 | /usr/local/nginx/sbin/nginx |

Start nginx in the foreground

|  |  |
| --- | --- |
| 1 | /usr/local/nginx/sbin/nginx -g 'daemon off;' |

Reload the config on the go

|  |  |
| --- | --- |
| 1 | /usr/local/nginx/sbin/nginx -t && nginx -s reload |

Kill nginx

|  |  |
| --- | --- |
| 1 | /usr/local/nginx/sbin/nginx -s stop |

## **4. Pushing live stream to nginx using rtmp[¶](https://docs.peer5.com/guides/setting-up-hls-live-streaming-server-using-nginx/" \l "4-pushing-live-stream-to-nginx-using-rtmp" \o "Permanent link)**

nginx accepts rtmp stream as input. For a proper HLS stream the video codec should be [x264](https://en.wikipedia.org/wiki/H.264/MPEG-4_AVC) and audio codec aac/mp3/ac3 most commonly being aac.

### **Options 1: From existing rtmp stream already in h264**[**¶**](https://docs.peer5.com/guides/setting-up-hls-live-streaming-server-using-nginx/#options-1-from-existing-rtmp-stream-already-in-h264)

if you have an existing rtmp stream in the correct codec, you can skip ffmpeg and tell nginx to pull the stream directly. In order to do so add a pull directive under application section in nginx.conf like so:

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8 | application show {  live on;  pull rtmp://example.com:4567/sports/channel3 live=1;  # to change the local stream name use this syntax: ... live=1 name=ch3;  # other directives...  # hls\_...  } |

FFMEG <https://johnathan.org/attempting-to-stream-a-webcam-to-an-rtmp-server/>

Install ffmpeg: sudo apt install ffmpeg