

AUDIO STREAMING how does it work

Streaming has the advantage that it is not necessary to download the entire broadcast. The audio stream can be listened to with well-known players such as [Winamp](#), [Itunes](#) and [Mediaplayer](#).

Audio streaming works as follows for internet radio stations:

You have to use streaming software, this software converts the audio into a streaming format and connects to a streaming server. All your listeners are connected to this streaming server.

Streaming software

The streaming software can convert the audio into a streaming format. This could be the audio that comes into your PC through an audiocard (or Aux line in) Or you can run a music play-out system on your PC like our AIRCAST software.

In the streaming software application you select a streaming type that can connect to a server. Streaming servers are offered by streaming providers, if you need more info on this subject please click [hier](#)

Streaming servers

The streaming server is a kind of remote server to which many listeners can connect to at the same time. These servers are located in datacenters where bandwidth is no issue. There are several types of streaming servers mostly known are the following names [SHOUTcast server](#), [Icecast server](#), [Windows Media server](#) and [Wowza server](#).

I WANT TO START AN INTERNET STATION, HOW DO I DO THIS

When setting up an Internet station, first start with a wish list of what you want Things like radio format, what kind programs, budget, which listeners you want to reach (national, international, young, old etc.)

Broadcast time Scheduling, (24/7, weekend only, non-stop, live streams, or any combination of it. If you have made your choice you could follow below roadmap

1. What is the cost of Music licenses (www.sena.nl, www.bumastemra.nl)
See page [costs](#) and [faq](#) for costs overall (beginning stations)
2. Which streaming program, see overview [radio programs](#)
3. Chose the streaming format: mp3, aac+, wma, mp3pro, OGG
Mostly used audio streaming format is mp3 on a SHOUTcast server
4. Chose the type of stream server (at your streaming provider)
mp3 = SHOUTcast, Icecast
aac+ = SHOUTcast, Icecast

wma = Windows media streaming

mp3pro = SHOUTcast, Icecast

OGG = Icecast

5. Chose a reliable streaming provider and its costs

Tip: look here www.live-streams.nl

6. Make a clear and professional website and subscribe on a search engine.

7. Publish your internet radio station. See [here](#)

COSTS

Below is an estimate of the costs. Dependent upon your choices of course:

WHAT YOU NEED IS:

1. [Streaming software](#) (radio play-out software)
2. Music mp3 format on 320kbps
3. [Jingles](#)
4. Hardware to run your play-out software on
5. [Streaming server media hosting](#)
6. [Website](#) + [hosting](#)
7. Internet connection for streaming on location/studio

ONE TIME ONLY COSTS (example)

1. [Streaming software](#) (Sam Broadcaster 230,- euro excl. VAT or AIRCAST € 595,- excl VAT)
2. Hardware pc, without audio card (HP € 600,- excl. Btw)
3. Website development
4. [Jingles](#)

Costs per month/year (example)

- [Streaming account 25 slots x 128k = 7,- euro incl. Btw](#)
- [Costs music license minimal](#) (<- 10% korting via link) € 577,- per year for Sena and € 317,- for Buma-Stemra per year
- [Radio webhosting](#) € 5.95 per month php/mysql cms (excl. VAT)
- Internet connection adsl/glasfiber, about € 27,- per month 3 mbit up / 20 mbit download [xs4all](#)

FAQ

Below are the most asked questions for internet radio stations:

- 1) What are the costs for [Sena](#) and [Bumastemra](#)?**
- 2) Costs are dependent upon the number of listeners and the amount of songs in your play-list.
- 3) Minimal costs are about € 430,- - per year for Sena and € 27,- per month for Buma-Stemra.

2) What is Pull and what is Push?

The words Pull and Push are mostly used with [Windows Media Streaming](#).

Push is sending data of an encoder program to a Windows Media Streaming server and you need an users account for that.

Pull is that the Windows Media Server with a public ip adres and port nummer (tcp en udp) pulls the signal.

3) What is best Pull or Push?

Pull is de best way, if [Windows Media Streaming](#) has no clients (listeners) the server will stop collecting data, the moment a listener connects to your station the server will pull your data again.

The most important reason to use Pull instead of Push is that when in the push mode the network interrupts the program stops. ([windows media encoder](#)).

You need then to restart the encoder.

We have hoped to give you some more info and the ins and outs of starting an Internet radio station.

We would like to thank <http://www.radio-streams.net> for their valuable info that we have translated.