

## Streaming Media

Streaming media is an audio or video file that you listen to or watch while it is being delivered. You can stream any kind of audio or video file, as long as the downloading can happen fast enough. YouTube is a really well known example of streaming media. Technically, the user cannot save the file. Once it has been viewed, the computer discards the data.

So, streaming is a little different than simple downloading.

A media stream can be *on-demand* or *live*.

*On-demand* streams are files stored on a server, and are available to be downloaded at the user's request. The MP3 files on a band's myspace page are played on-demand when you click one of them. YouTube is also on-demand. You watch it when you ask for it. (Podcasts are a form of on-demand media. But they don't stream; instead they're downloaded).

*Live* streams are only available at one particular time, as in a video stream of a live sporting event, or the internet broadcast of a radio station.

Streaming media technology includes:

- Apple Quicktime
- Macromedia Flash (YouTube uses FLV, Flash Video)
- Microsoft Windows Media
- RealPlayer

## **BUFFERS**

When you stream an audio or video file, the file begins downloading into a little pocket of memory in your computer called a buffer. The computer waits for the buffer to fill to a certain point, then starts pulling data out of the buffer and playing it for you in your browser. While the computer is playing the first part of the file, it is streaming more into the buffer.

If your Internet connection is slow, the computer might empty the buffer faster than it can be filled up. Then the playback will stall, and wait for the buffer to fill. This is really annoying!