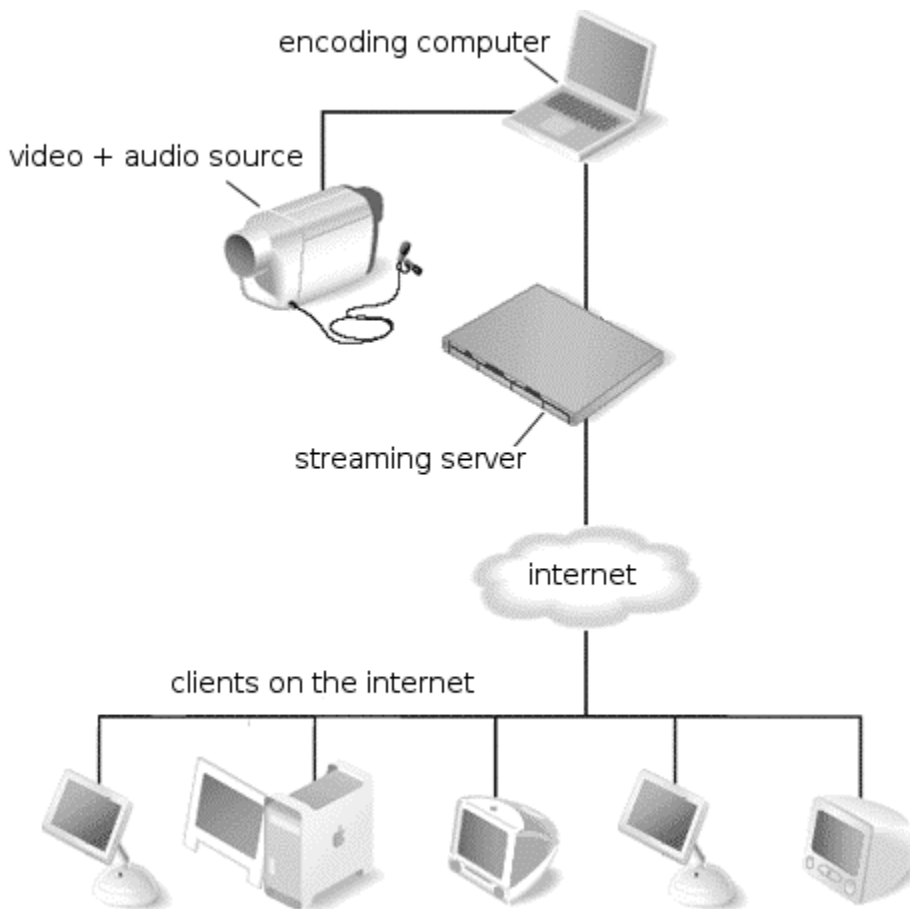# Audio and Video Streaming and Archiving

Technical overview

Streaming

Also called webcasting, streaming is the transmission of audio and video over the internet in real time. The schematic bellow illustrates the stages and equipment involved in a typical webcast:

A **video source** can be a camera or a video mixer, switching between multiple cameras. An **audio source** can be an on-camera microphone, a separately attached microphone, or an audio mixer that combines multiple audio sources.

An **encoding computer** digitizes and compresses the video and audio feed and sends the data stream (via the internet or a private network) to the streaming server.

The **streaming server** distributes the webcast to connected clients on the internet.

The webcast stream can be embedded in a web page or viewed directly through a media player such as Quicktime Player, Real Player, or Windows Media Player. All clients are receiving the same stream, live.

Online Archive

Much the same equipment can be used to digitize and archive video and audio material for an online archive as well as to view or listen to the archived material. A major difference between streaming and an online archive is that the later allows for an *asynchronous* communication: each client can watch or listen to any clip at any time. Live streaming and archiving can be combined to benefit from the specific advantages of each technology, to offer both the opportunity to witness a live event as well as the luxury to rewind and review.

Rebroadcasting and sharing programming between communities
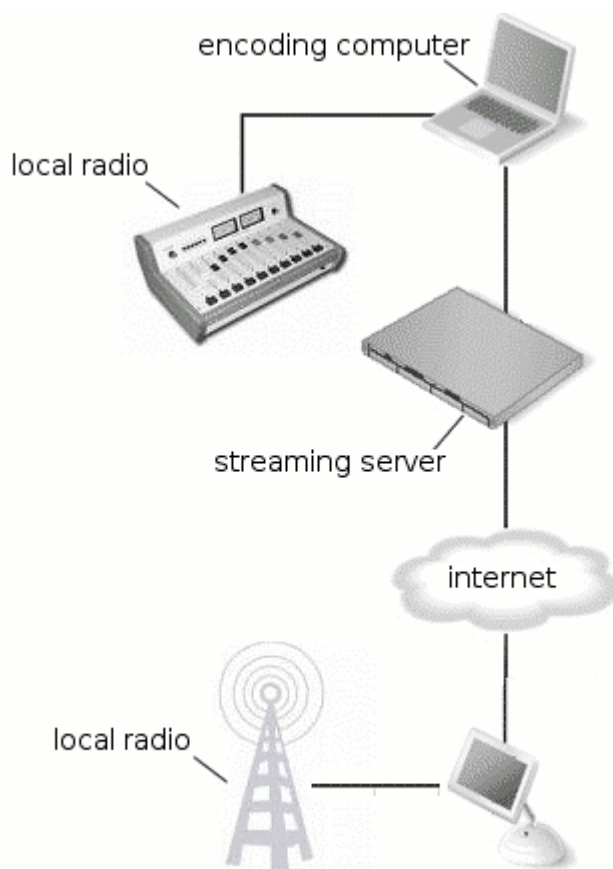
With the distribution infrastructure in place and the necessary bandwidth, special events can be broadcast live across Nunavut and Nunavik. Local stations can also supplement their programming with programs produced in other communities as well as share their programming with other communities. This can greatly increase the quantity and diversity of Inuktitut-language programming available in Nunavut and Nunavik.