This paper shows how a PDA (Personal Digital Assistant) can be converted into an audio source within a private network or the web, providing capture, compression and streaming of audio as a real-time mobile service. Once the sound around the PDA has been captured and compressed to mp3 format, the service allows it to be broadcast to a Streaming Server. Once the audio reaches the Streaming Server, anyone with a network connection is able to receive and play it. The service provides different configuration parameters to control audio quality and broadcasting performance. For audio quality, different bitrate and frequency values can be chosen. For broadcasting performance, different packet-length values can also be chosen, and the bitrate mode can be automatically controlled. The paper also includes the performance tuning of the compressor and experimental results using both wired and wireless networks.

- Abstract -

- Audio compression -

- Service operation -

- Audio streaming -

- Implementation details -

- Experimentation -

- User interface -

- Application -