

Immediate Graphical Audio Recording in GNOME Gingerblue 4.0.1 (May 1, 2022)

Ole Kr. Aamot
Department of Physics
University of Oslo, Norway

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Abstract

New technique for recording immediate audio waves is implemented with GStreamer in GNOME Gingerblue 4.0.1 available from www.gingerblue.org and wiki.gnome.org/Apps/Gingerblue

The full paper, Bachelor's thesis report, essay, conference talks and software downloads and updates for Debian GNU/Linux 11, Fedora 36 and Ubuntu 22.04 LTS are published on the GNOME Gingerblue Project's website at www.gingerblue.org and this author's homepage at oleaamot.no

Audio waves are air-pressures that provide the physical basis of recording these waves, discovered by Thomas Alva Edison in 1877.

Audio waves differ in their frequency and wavelength.

With the software GNOME Radio 16 on GNOME 42, audio waves are travelling from recording stations such as WMBR at M.I.T. in Cambridge, MA in Boston up to distances larger than five thousand kilometers between Boston and Oslo where we as listeners on computers in Oslo can listen to sound waves recorded with a microphone on a computer in Boston between two continents in the world due to audio waves and the products from work in electrical engineering.

Nyquist-Shannon Sampling Theorem is named after the American scientists Harry Nyquist and Claude Shannon and Nyquist's Law states that the recording frequency must be the double of the desired sampling frequency to reproduce a human-hearable signal.

145 years ago American engineer Thomas Alva Edison discovered the first evidence of the relationship of audio waves with mechanical sampling methods.

On May 1, 2022, based on the previous work towering in electrical engineering done by Anton Pryima, Wim Taymans, Miguel de Icaza, Federico Mena, Linus Torvalds, Richard M. Stallman, John von Neumann, Alan Turing, Thomas Alva Edison, James Clerk Maxwell, André-Marie Ampère, Hans Christian Ørsted and Michael Faraday, the immediate graphical audio recording technique in GNOME Gingerblue 4.0.1 was discovered.

The Immediate Graphical Audio Recording can be recorded and heard in time-space for a previous audio wave on a GNU/Linux computer from Hewlett Packard installed with Debian 11, Fedora 36 or Ubuntu 22.04 LTS operating system that is running the gingerblue software documented

in the Bachelor's thesis Public Audio Recording Software for Recording World Sounds (University of Oslo, May 2022) in the Bachelor of Science program in Electrical Engineering, Informatics and Technology at Department of Physics, University of Oslo.

The full paper, Bachelor's thesis report, essay, conference talks and software downloads and updates for Debian GNU/Linux 11, Fedora 36 and Ubuntu 22.04 LTS are published on the GNOME Gingerblue Project's website at www.gingerblue.org and this author's homepage at oleaamot.no

The experiments with the Immediate Graphical Audio Recording technique in GNOME Gingerblue that was discovered and observed on May 1, 2022, based on the previous work towering in electrical engineering done by Anton Pryima, Wim Taymans, Miguel de Icaza, Federico Mena, Linus Torvalds, Richard M. Stallman, John von Neumann, Alan Turing, Thomas Alva Edison, James Clerk Maxwell, André-Marie Ampère, Hans Christian Ørsted and Michael Faraday, was confirmed on Hewlett Packard hardware running Fedora Core 36 and Apple MacBook Air M1/8/256 2020) running MacPorts in Oslo, Norway on May 1st, 2022.

See www.gingerblue.org and wiki.gnome.org/Apps/Gingerblue for details on the Immediate Graphical Audio Recording efforts in GNOME Gingerblue.