

The  GNOME™ Conference
GUADEC

GTK Radio on GNOME 46

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Section 1

GTK Radio on GNOME 46

GTK Radio

National Public Radio broadcasts for GNOME 384

GTK Radio is available with Hawaii Public Radio (NPR) and 62 British Broadcasting Corporation (BBC) live audio broadcasts for GNOME 46. The latest GTK Radio 264.0 release during GUADEC 2024 (between July 19-24, 2024) features 200 international radio stations and 110 city map markers around the world, including National Public Radio, 62 BBC radio stations broadcasting live from United Kingdom, 4 SomaFM radio stations broadcasting live from San Francisco as well as KXSC from Los Angeles, California.

GTK Radio for GNOME 46

National Public Radio (NPR) broadcasts on GNOME 46

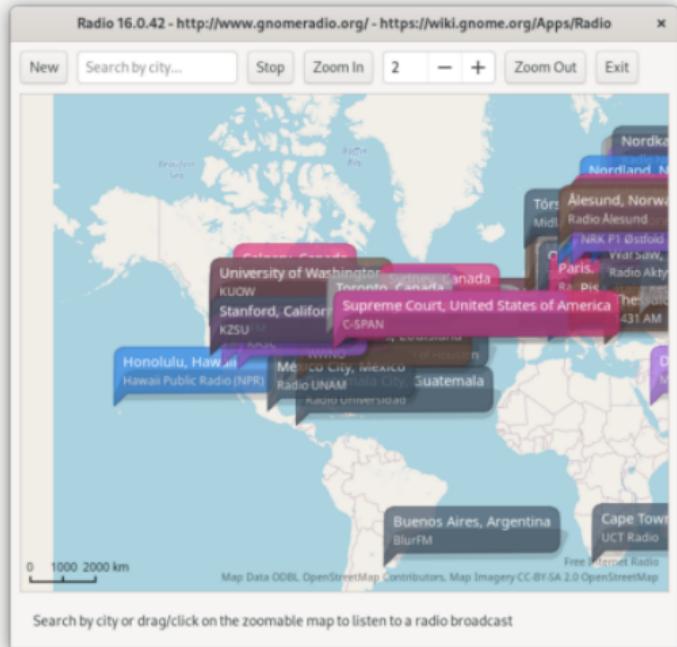
GTK Radio for GNOME 46 is available with National Public Radio (NPR) live audio broadcasts.

GTK Radio is the successor to GNOME Radio built for GNOME 46 with Cairo, Clutter, Champlain, Maps, GStreamer, and GTK.

GTK Radio for GNOME 46 is a Free Software program that allows you to easily locate Free Internet Radio stations by broadcasters on the Internet with the help of map and text search.

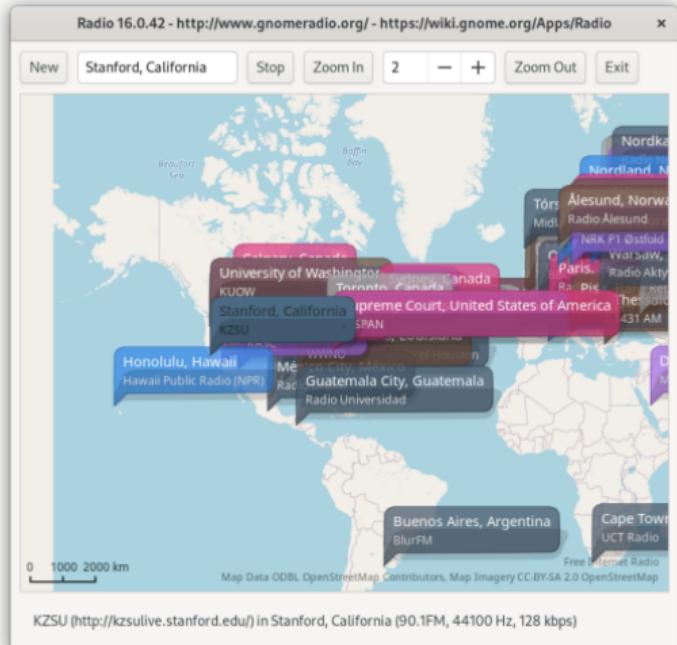
GTK Radio for GNOME 46

National Radio (NPR) broadcasts on GNOME 46



GTK Radio for GNOME 46

Stanford (KZSU) broadcasts on GNOME 46



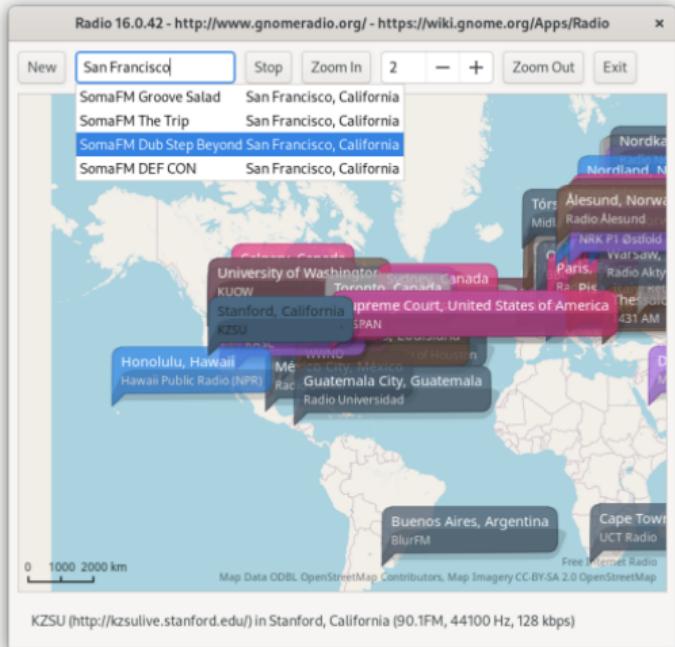
GTK Radio for GNOME 46

Los Angeles (KXSC) broadcasts on GNOME 46

gtk-radio-kxsc.pdf

GTK Radio for GNOME 46

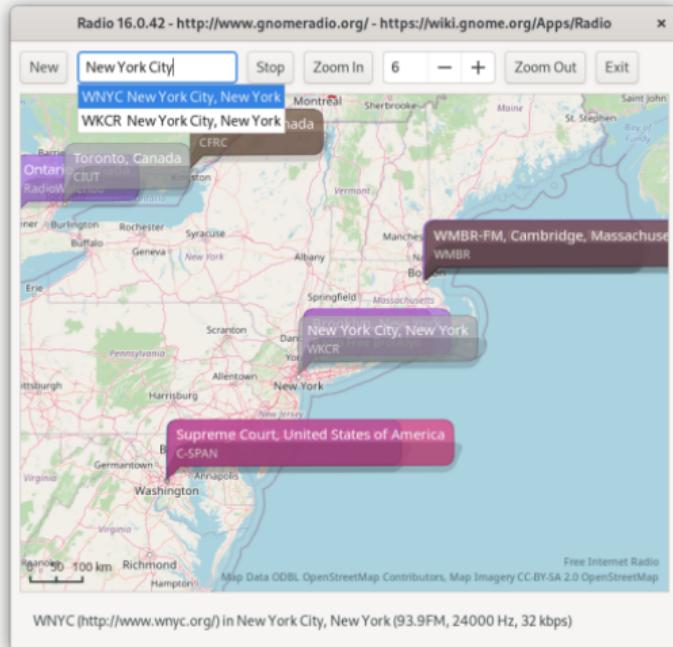
San Francisco (SomaFM) broadcasts on GNOME 46



KZSU (<http://kzsulive.stanford.edu/>) in Stanford, California (90.1FM, 44100 Hz, 128 kbps)

GTK Radio for GNOME 46

New York Public Radio (WNYC) broadcasts on GNOME 46



Packaging

Fedora Core 40 software installation packages of GTK Radio for GNOME 46 for the computer hardware architecture x86_64 and Source are now available for download and installation with the package management and network installation system tools rpm and dnf.

Fedora Core 40 x86_64 RPM installation

👉 sudo dnf install http://www.aamotengineering.com/~ole/fedora/RPMS/x86_64/gtk-radio-264.0-1.fc40.x86_64.rpm

Fedora Core 40 Source RPM Installation

- 👉 sudo dnf install gnome-common
- 👉 sudo dnf install intltool libtool gtk-doc geoclue2-devel yelp-tools
- 👉 sudo dnf install gstreamer1-plugins-bad-free-devel geocode-glib-devel
- 👉 sudo dnf install libchamplain-devel libchamplain-gtk libchamplain geoclue2
- 👉 sudo rpm -Uvh <http://www.aamotengineering.com/~ole/fedora/SRPMS/> gtk-radio-264.0-1.fc40.src.rpm
- 👉 sudo rpmbuild -ba /root/rpmbuild/SPECS/gtk-radio.spec
- 👉 sudo rpm -Uvh /root/rpmbuild/RPMS/* gtk-radio-264.0*.rpm

Section 2

Compiling from Source

Compiling GTK Radio on GNOME 46

gtk-radio 264.0

```
git clone https://gitlab.gnome.org/olekaa/gtk4-radio.git
cd gtk4-radio
./autogen.sh
./configure
make
sudo make install
gtk-radio
```

GTK Radio Future

org.gnome.Radio

The new application org.gnome.Radio is available with live audio broadcasts for GNOME 46.

org.gnome.Radio is developed on the GNOME 46 desktop platform with GNOME Maps, GeoClue, libchamplain and geocode-lib and it requires at least GTK and GStreamer 1.0 for audio playback.

The latest org.gnome.Radio release during GUADEC 2022 (between July 20-25, 2022) features BBC World Service from London, United Kingdom and is available from <https://www.aamotengineering.com/~ole/radio/>

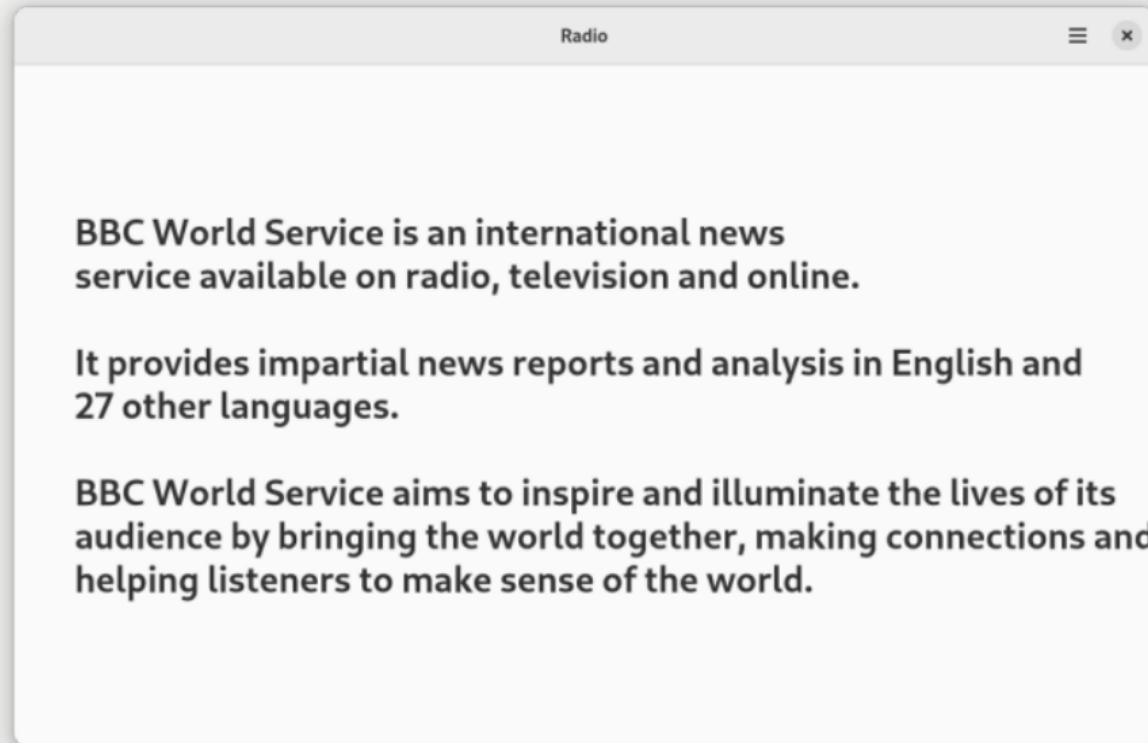
GTK Radio 46 - org.gnome.Radio

org.gnome.Radio.c

```
#include <gst/player/player.h>
#include <gtk/gtk.h>
static void activate(GtkApplication * app, gpointer user_data) {
    GtkWidget *window; GstPlayer *player;
    window = gtk_application_window_new(app);
    gtk_window_set_application(GTK_WINDOW(window),
        GTK_APPLICATION(app));
    gtk_window_set_title(GTK_WINDOW(window), "Radio");
    gtk_window_set_default_size(GTK_WINDOW(window), 800, 600);
    gtk_widget_show(window);
    player = gst_player_new (NULL,
        gst_player_g_main_context_signal_dispatcher_new(NULL));
    gst_player_set_uri (GST_PLAYER (player),
        "http://stream.live.vc.bbcmedia.co.uk/bbc_world_service");
    gst_player_play (GST_PLAYER (player));
}
int main(int argc, char **argv) {
    GtkApplication *app;
    int status;
    gst_init(&argc, &argv);
    gst_init(NULL, NULL);
    app = gtk_application_new("org.gnome.Radio",
        G_APPLICATION_FLAGS_NONE);
        g_signal_connect(app, "activate",
            G_CALLBACK(activate), NULL);
    status = g_application_run(G_APPLICATION(app), argc, argv);
    g_object_unref(app);
    return status;
}
```

org.gnome.Radio for GNOME 46

BBC World News (BBC) broadcasts on GNOME 46



Compiling org.gnome.Radio in GNOME Builder

org.gnome.Radio is available with meson build system

GNOME Builder is a Graphical Development Tool released by Christian Hergert who presented it at GUADEC 2015.

See <https://wiki.gnome.org/Apps/Builder> for details on how to install it. After you have installed GNOME Builder, you can clone the GTK Radio for GNOME 46 repository on Gitlab and built it.

- ⌚ git clone <https://gitlab.gnome.org/olekaa/gtk4-radio.git>
- ⌚ cd gtk4-radio
- ⌚ meson build .
- ⌚ cd build/
- ⌚ sudo ninja install
- ⌚ org.gnome.Radio

Running org.gnome.Radio on GNOME 46

gtk-radio is available for GNOME 46

Three options for running the new application gtk-radio from GNOME Shell and GNOME Terminal:

1. Click on Activities and select the GTK Radio icon.
2. Search for “gtk-radio” in the search box.
3. Type “gtk-radio” and hit Enter in GNOME Terminal if you are unable to find the Radio icon in GNOME 46 and GNOME Shell.

Questions?

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gtk4-radio.pdf

- 🔗 <https://gitlab.gnome.org/olekaa/gtk4-radio.git>
- 🔗 <https://wiki.gnome.org/Apps/Radio>
- 🔗 <https://www.aamotengineering.com/~ole/radio/>