

The  GNOME™ Conference
GUADDEC

GNOME Radio 64 on GNOME 44

Ole Aamot
Aamot Software
ole@aamotsoftware.no



Section 1

GNOME Radio 64 on GNOME 44

GNOME Radio 64

National Public Radio broadcasts for GNOME 44

GNOME Radio 64 is available with Hawaii Public Radio (NPR), Radio Punjab (India) and 62 British Broadcasting Corporation (BBC) live audio broadcasts for GNOME 44. The latest GNOME Radio 64.0 release during GUADEC 2023 features 214 international radio stations and 110 city map markers around the world, including Radio Punjab (India), National Public Radio, 62 BBC radio stations broadcasting live from United Kingdom and 4 SomaFM radio stations broadcasting live from San Francisco, California.

GNOME Radio 64 for GNOME 44

National Public Radio (NPR) broadcasts on GNOME 44

GNOME Radio 64 for GNOME 44 is available with National Public Radio (NPR) live audio broadcasts.

GNOME Radio 64 is the successor to GNOME Internet Radio Locator built for GNOME 44 with Cairo, Clutter, Champlain, Maps, GStreamer, and GTK+.

GNOME Radio 64 for GNOME 44 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.

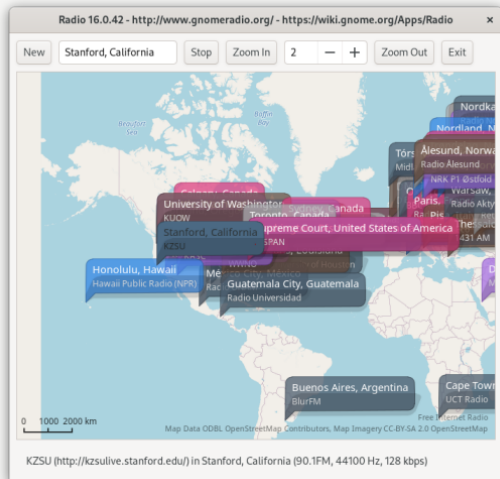
GNOME Radio 64 for GNOME 44

National Public Radio (NPR) broadcasts on GNOME 44



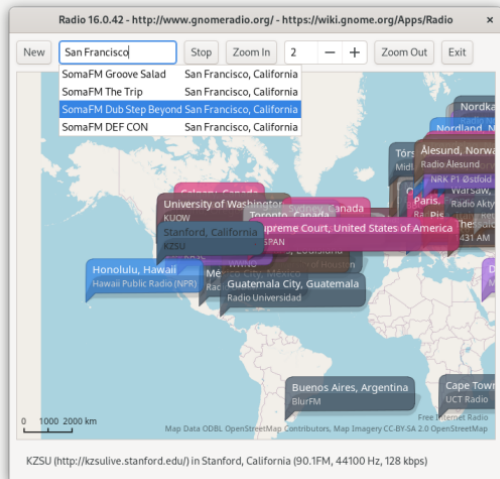
GNOME Radio 64 for GNOME 44

Stanford (KZSU) broadcasts on GNOME 44



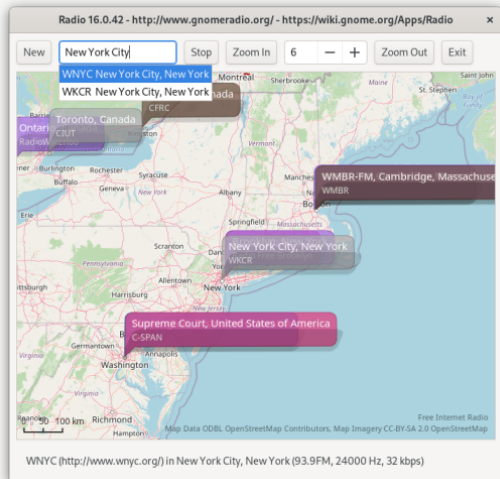
GNOME Radio 64 for GNOME 44

San Francisco (SomaFM) broadcasts on GNOME 44



GNOME Radio 64 for GNOME 44

New York Public Radio (WNYC) broadcasts on GNOME 44



Packaging

Fedora Core 38 software installation packages of GNOME Radio 64.0 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 dhf.

Fedora Core 38 x86_64 RPM installation

```
🐾 sudo dnf install http://people.gnome.org/~ole/fedora/RPMS/x86_64/  
gnome-radio-64.0-1.fc38.x86_64.rpm
```

Fedora Core 38 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://people.gnome.org/~ole/fedora/SRPMS/gnome-radio-64.0-1.fc38.src.rpm`
- 🐾 `sudo rpmbuild -ba /root/rpmbuild/SPECS/gnome-radio.spec`
- 🐾 `sudo rpm -Uvh /root/rpmbuild/RPMS/*/gnome-radio-64.0*.rpm`

Section 2

Compiling from Source

Compiling GNOME Radio 64 on GNOME 44

gnome-radio 64.0

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

GNOME Radio Future

org.gnome.Radio

The new application org.gnome.Radio is available with live audio broadcasts for GNOME 44.

org.gnome.Radio is developed on the GNOME 44 desktop platform with GNOME Maps, GeoClue, libchamplain and geocode-lib and it requires at least GTK4 and GStreamer 1.0 for audio playback.

The latest org.gnome.Radio release during GUADEC 2023 features BBC World Service from London, United Kingdom and is available from <https://www.gnomeradio.org/~ole/radio/>

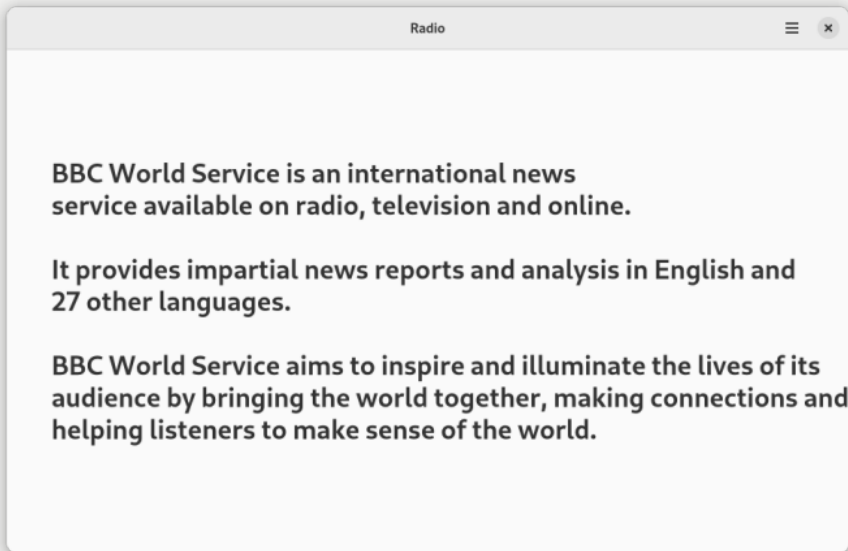
GNOME Radio 64 - org.gnome.Radio

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 44

BBC World News (BBC) broadcasts on GNOME 44



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 GNOME Radio 64 for GNOME 44 repository on Gitlab and built it.

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

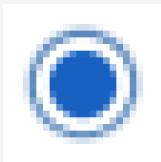
Running org.gnome.Radio on GNOME 44

gnome-radio 64.0 is available

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

1. Click on Activities and select the GNOME Radio icon.
2. Search for “gnome-radio” in the search box.
3. Type “gnome-radio” and hit Enter in GNOME Terminal if you are unable to find the Radio icon in GNOME 44 and GNOME Shell.

Questions?
ole@gnome.org



- 🐙 <https://gitlab.gnome.org/ole/gnome-radio.git>
- 🐙 <https://wiki.gnome.org/Apps/Radio>
- 🐙 <https://www.gnomeradio.org/~ole/radio/>