

# The GNOME™ Conference GUADEC

GNOME Radio 16 on GNOME 42

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## Section 1

# GNOME Radio 16 on GNOME 42

# GNOME Radio 16

## National Public Radio broadcasts for GNOME 42

GNOME Radio 16 is available with Hawaii Public Radio (NPR) and 62 British Broadcasting Corporation (BBC) live audio broadcasts for GNOME 42. The latest GNOME Radio 16.0.43 release during GUADEC 2022 (between July 20-25, 2022) 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 and 4 SomaFM radio stations broadcasting live from San Francisco, California.

# GNOME Radio 16 for GNOME 42

## National Public Radio (NPR) broadcasts on GNOME 42

GNOME Radio 16 for GNOME 42 is available with National Public Radio (NPR) live audio broadcasts.

GNOME Radio 16 is the successor to GNOME Internet Radio Locator built for GNOME 42 with Cairo, Clutter, Champlain, Maps, GStreamer, and GTK+.

GNOME Radio 16 for GNOME 42 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.

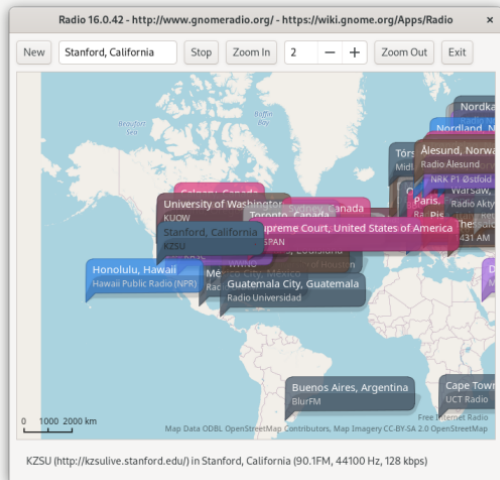
# GNOME Radio 16 for GNOME 42

National Public Radio (NPR) broadcasts on GNOME 42



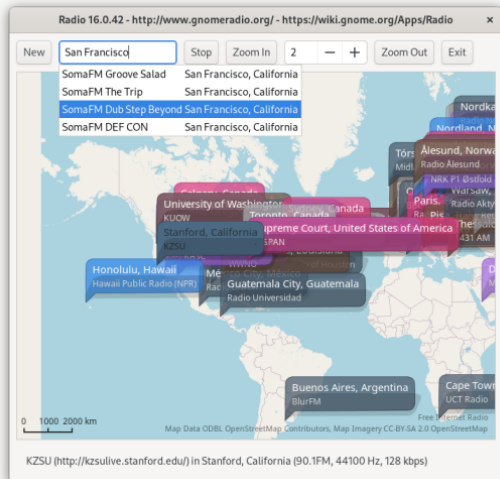
# GNOME Radio 16 for GNOME 42

## Stanford (KZSU) broadcasts on GNOME 42



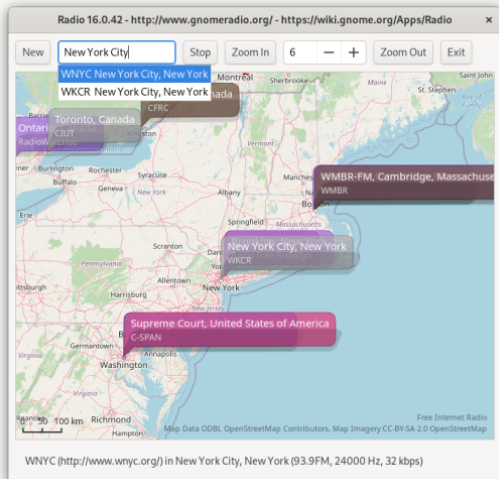
# GNOME Radio 16 for GNOME 42

## San Francisco (SomaFM) broadcasts on GNOME 42



# GNOME Radio 16 for GNOME 42

New York Public Radio (WNYC) broadcasts on GNOME 42





# Packaging

Fedora Core 36 software installation packages of GNOME Radio 16.0.43 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 36 x86\_64 RPM installation

```
🐾 sudo dnf install http://people.gnome.org/~ole/fedora/RPMS/x86_64/  
gnome-radio-16.0.43-1.fc36.x86_64.rpm
```

# Fedora Core 36 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-16.0.43-1.fc36.src.rpm`
- 🐾 `sudo rpmbuild -ba /root/rpmbuild/SPECS/gnome-radio.spec`
- 🐾 `sudo rpm -Uvh /root/rpmbuild/RPMS/*/gnome-radio-16.0.43*.rpm`

## Section 2

### Compiling from Source

# Compiling GNOME Radio 16 on GNOME 42

gnome-radio 16.0.43

```
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 42.

org.gnome.Radio is developed on the GNOME 43 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 2022 (between July 20-25, 2022) features BBC World Service from London, United Kingdom and is available from <https://www.gnomeradio.org/~ole/radio/>

# GNOME Radio 43 - org.gnome.Radio

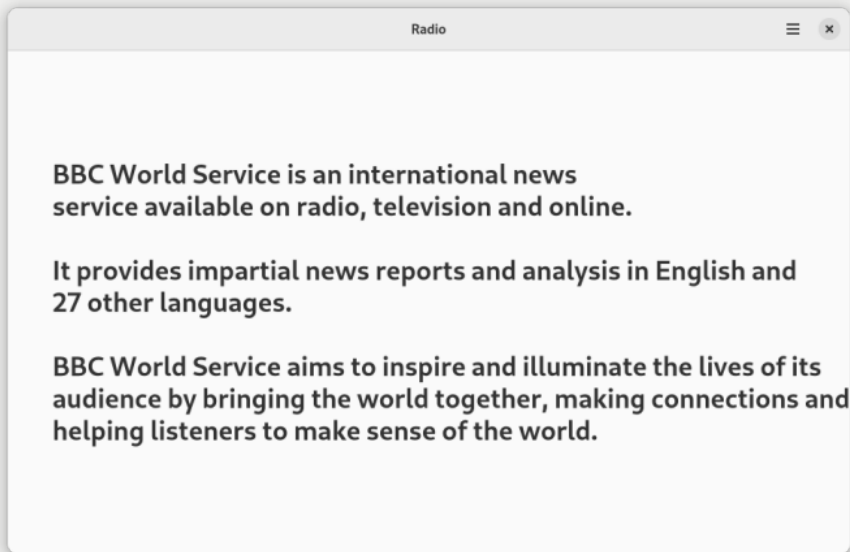
## org.gnome.Radio.c

```
#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 43

BBC World News (BBC) broadcasts on GNOME 43





# 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 45 for GNOME 42 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 43

gnome-radio 45.0 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 43 and GNOME Shell.

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