

# Prerequisites

MacOS installation steps were not tested, proceed at your own risk!

## Rust

Install Rust via rustup — the official Rust toolchain installer.

**All platforms:** go to <https://rustup.rs> and follow the instructions, or run:

```
curl --proto '=https' --tlsv1.2 -sSf https://sh.rustup.rs | sh
```

After installation, restart your terminal and verify:

```
rustc --version  
cargo --version
```

## Bun

Bun is the JavaScript runtime and package manager used for the frontend.

Using npm or yarn will **not** work with the current setup, there are scripts that specifically call for bun.

**Linux / macOS:**

```
curl -fsSL https://bun.sh/install | bash
```

**Windows:** download the installer from <https://bun.sh>

Verify:

```
bun --version
```

## Tauri CLI prerequisites

Tauri requires some OS-level dependencies in addition to Rust.

### Linux (Ubuntu/Debian):

```
sudo apt update
sudo apt install libwebkit2gtk-4.1-dev libgtk-3-dev \
  libayatana-appindicator3-dev librsvg2-dev patchelf
```

**Windows:** install the [Microsoft C++ Build Tools](#) and [WebView2](#) (usually already present on Windows 10/11).

### macOS:

```
xcode-select --install
```

## GStreamer

GStreamer handles video decoding and streaming. Version **1.22.x** is required to match the Rust crate versions (`gstreamer = "0.22"` maps to GStreamer 1.22).

### Linux (Ubuntu/Debian):

```
sudo apt install \
  libgstreamer1.0-dev \
  libgstreamer-plugins-base1.0-dev \
  libgstreamer-plugins-bad1.0-dev \
  gstreamer1.0-plugins-base \
  gstreamer1.0-plugins-good \
  gstreamer1.0-plugins-bad \
  gstreamer1.0-plugins-ugly \
  gstreamer1.0-libav \
  gstreamer1.0-tools
```

Verify:

```
gst-launch-1.0 --version
```

### Windows:

1. Download the **MSVC 64-bit** installer for GStreamer 1.22.x from <https://gstreamer.freedesktop.org/download/>
2. Download both the **runtime** and **development** installers

3. Install both to the default path: `C:\gstreamer\1.0\msvc_x86_64\`
4. Add the GStreamer bin directory to your system PATH:

```
C:\gstreamer\1.0\msvc_x86_64\bin
```

Verify in a new terminal:

```
gst-launch-1.0 --version
```

The `GST_PLUGIN_PATH` environment variable is set automatically by the app at runtime (in `lib.rs`), so you do not need to set it manually.

## macOS:

```
brew install gstreamer gst-plugins-base gst-plugins-good \
  gst-plugins-bad gst-plugins-ugly gst-libav
```

Revision #10

Created 2026-04-15 08:51:44 UTC by Candela Cimadevilla Gonzalez

Updated 2026-04-15 14:14:42 UTC by Dmytro Khorsun