

 hi!

- fp enthusiast and low-level hacker for half my life
- the smaller half of the Lustre core team



Installing Erlang

Gleam compiles to Erlang code, so Erlang needs to be installed to run Gleam code. Some of the above package managers (e.g. Homebrew) will install Erlang alongside Gleam automatically.

Precompiled builds for many popular operating systems can be downloaded from the [Erlang solutions website](#).

Once Erlang has been installed you can check it is working by typing `erl -version` in your computer's terminal. You will see version information like this if all is well:

```
erl -version
Erlang (SMP,ASYNC_THREADS) (BEAM) emulator version 12.1.5
```

Linux

Using Homebrew

[Homebrew](#) will install Erlang alongside Gleam automatically, though it can be manually installed by running the following:

```
brew update
brew install erlang
```

Alpine Linux (Community repository)

```
apk add erlang
```

Arch Linux (Community repository)

```
pacman -S erlang
```

Gentoo Linux (already installed after installing gleam through emerge)

```
emerge --ask dev-lang/erlang
```

Fedora

```
dnf install elixir erlang
```

Debian, Ubuntu

Add Erlang Solutions repo key:

```
wget -qO- https://binaries2.erlang-solutions.com/GPG-KEY-pmanager.asc | sudo tee  
/etc/apt/keyrings/erlang.asc
```

We are about to add APT source line in form of:

```
deb [signed-by=/etc/apt/keyrings/erlang.asc] http://binaries2.erlang-solutions.com/ubuntu/  
$DIST contrib
```

We need to determine `$DIST` first, based on our distro codename (found via `lsb_release -c`). Go to binaries2.erlang-solutions.com, then click to "debian" or "ubuntu", then "dist". We will see directories like "stretch-esl-erlang-27", "noble-esl-erlang-27". Pick one corresponding to our Debian/Ubuntu version and replace `$DIST` with it.

```
# Add as APT source
echo 'deb [signed-by=/etc/apt/keyrings/erlang.asc] http://binaries2.erlang-
solutions.com/ubuntu/ $DIST contrib' | sudo tee /etc/apt/sources.list.d/erlang.list

# Update apt and install esl-erlang
sudo apt update
sudo apt install esl-erlang
```



```
curl -L "$GITHUB_URL" | tar xz
```

**Could this all be
really simple?**

Statically compiling Erlang

```
./configure
```

```
-disable-pie \  
--enable-builtin-zlib \  
--disable-dynamic-ssl-lib \  
--with-ssl \  
--enable-static-nifs \  
--enable-static-drivers \  

```

Statically compiling Erlang

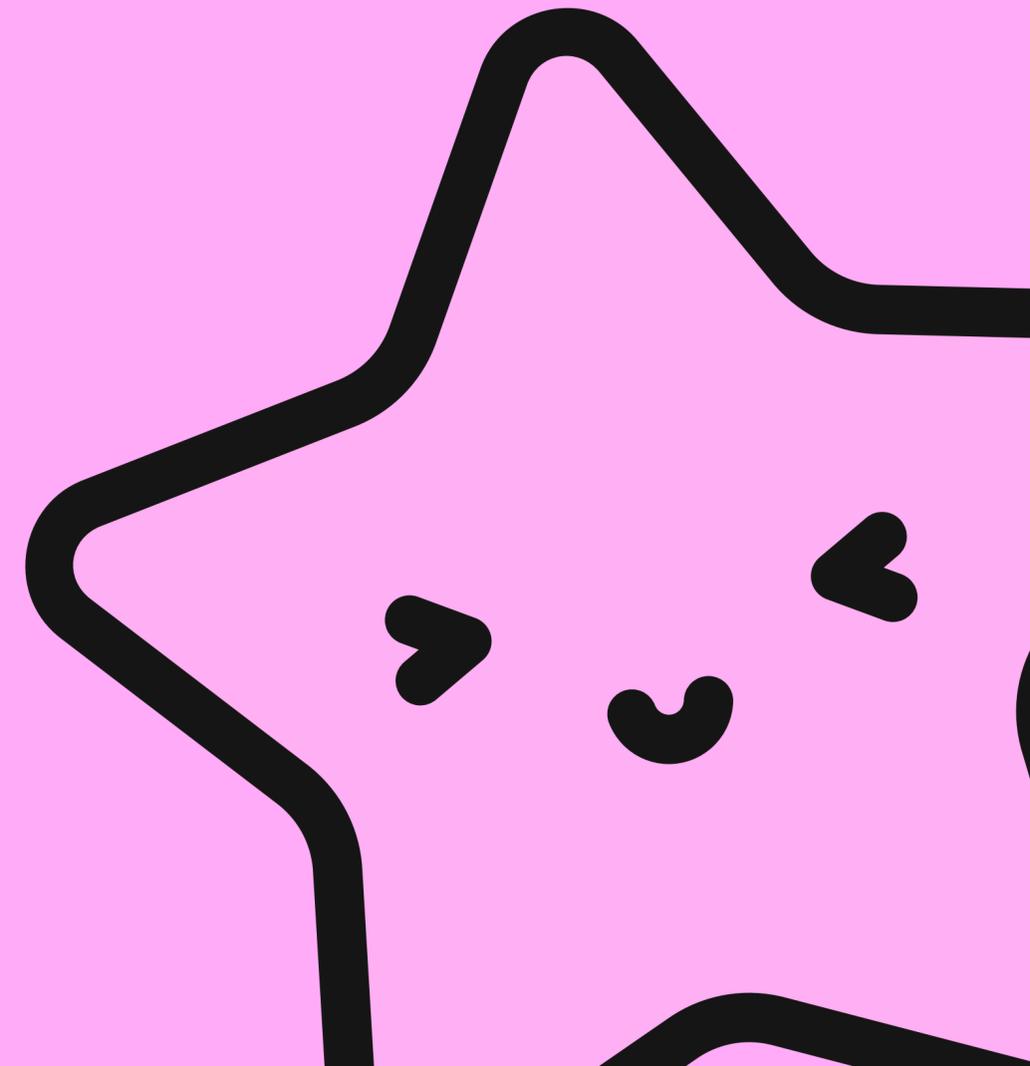
```
./configure  
LIBS="-lcursesw -ltinfo -lcrypto -lssl -lstdc++" \  
LDFLAGS="-static -static-libgcc -static-libstdc++" \  
-disable-pie \  
--enable-builtin-zlib \  
--disable-dynamic-ssl-lib \  
--with-ssl \  
--enable-static-nifs \  
--enable-static-drivers \  

```

Statically compiling Erlang

```
./configure CC=clang CXX=clang \  
    LIBS="-lcursesw -ltinfo -lcrypto -lssl -lstdc++" \  
    LDFLAGS="-static -static-libgcc -static-libstdc++" \  
-disable-pie \  
--enable-builtin-zlib \  
--disable-dynamic-ssl-lib \  
--with-ssl \  
--enable-static-nifs \  
--enable-static-drivers \  
--enable-static-libs
```

**Statically compiled
Erlang!**



gleepack?

Self-Extracting Archive

gleepack?

Self-Extracting Archive

Static Erlang

gleepack?

Self-Extracting Archive

Static Erlang

Gleam App Release

Burrito?



How Escripts get run

- Self-extracting archive

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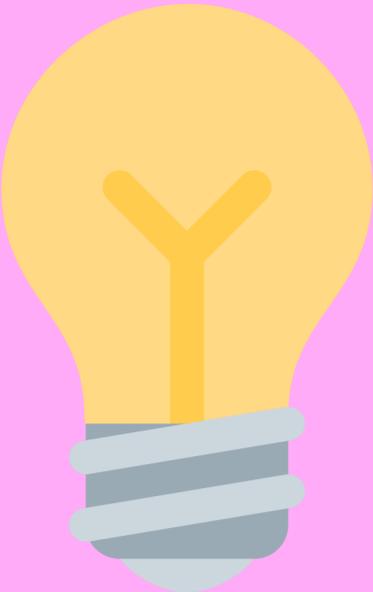
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- Self-extracting archive
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- Self-extracting archive
- escript
- erl
- erlexec
- beam.smp





Gleepack!

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