

# Install the Solana CLI

There are multiple ways to install the Solana tools on your computer depending on your preferred workflow:

- [Use Solana's Install Tool \(Simplest option\)](#)
- [Download Prebuilt Binaries](#)
- [Build from Source](#)
- [Use Homebrew](#)

## Use Solana's Install Tool

### MacOS & Linux

- Open your favorite Terminal application
- Install the Solana release [v1.18.4](#)
- on your machine by running:

```
sh -c "( curl -sSL https://release.solana.com/v1.18.4/install )" * You can replace v1.18.4 * with the release tag matching * the software version of your desired release, or use one of the three symbolic * channel names: stable * , beta * , or edge * . *
```

The following output indicates a successful update:

```
downloading v1.18.4 installer Configuration: /home/solana/.config/solana/install/config.yml Active release directory: /home/solana/.local/share/solana/install/active_release * Release version: v1.18.4 * Release URL: https://github.com/solana-labs/solana/releases/download/v1.18.4/solana-release-x86_64-unknown-linux-gnu.tar.bz2 Update successful * Depending on your system, the end of the installer messaging may prompt you to
```

Please update your PATH environment variable to include the solana programs: \* If you get the above message, copy and paste the recommended command below it \* to update PATH \* Confirm you have the desired version of solana \* installed by running:

`solana --version` \* After a successful install, `solana-install update` \* may be used to easily \* update the Solana software to a newer version at any time.

### Windows

- Open a Command Prompt (cmd.exe)
- ) as an Administrator
- - Search for Command Prompt in the Windows search bar. When the Command Prompt
- - app appears, right-click and select "Open as Administrator". If you are
- - prompted by a pop-up window asking "Do you want to allow this app to make
- - changes to your device?", click Yes.
- Copy and paste the following command, then press Enter to download the Solana
- installer into a temporary directory:

```
cmd /c "curl https://release.solana.com/v1.18.4/solana-install-init-x86_64-pc-windows-msvc.exe --output C:\solana-install-tmp\solana-install-init.exe --create-dirs" * Copy and paste the following command, then press Enter to install the latest * version of Solana. If you see a security pop-up by your system, please select * to allow the program to run.
```

C:\solana-install-tmp\solana-install-init.exe v1.18.4 \* When the installer is finished, press Enter. \* Close the command prompt window and re-open a new command prompt window as a \* normal user \* \* Search for "Command Prompt" in the search bar, then left click on the \* \* Command Prompt app icon, no need to run as Administrator) \* Confirm you have the desired version of solana \* installed by entering:

`solana --version` \* After a successful install, `solana-install update` \* may be used to easily \* update the Solana software to a newer version at any time.

## Download Prebuilt Binaries

If you would rather not use `solana-install` to manage the install, you can manually download and install the binaries.

### Linux

Download the binaries by navigating to <https://github.com/solana-labs/solana/releases/latest> , download `solana-release-`

x86\_64-unknown-linux-gnu.tar.bz2 , then extract the archive:

```
tar jxf solana-release-x86_64-unknown-linux-gnu.tar.bz2 cd solana-release/ export
```

## PATH

PWD /bin: PATH

### MacOS

Download the binaries by navigating to <https://github.com/solana-labs/solana/releases/latest> , download solana-release-x86\_64-apple-darwin.tar.bz2 , then extract the archive:

```
tar jxf solana-release-x86_64-apple-darwin.tar.bz2 cd solana-release/ export
```

## PATH

PWD /bin: PATH

### Windows

- Download the binaries by navigating to <https://github.com/solana-labs/solana/releases/latest>
- ,
- download solana-release-x86\_64-pc-windows-msvc.tar.bz2
- , then extract the
- archive using WinZip or similar.
- Open a Command Prompt and navigate to the directory into which you extracted
- the binaries and run:

```
cd solana-release/ set
```

## PATH

```
%cd%/bin ; % PATH %
```

## Build From Source

If you are unable to use the prebuilt binaries or prefer to build it yourself from source, follow these steps, ensuring you have the necessary prerequisites installed on your system.

### Prerequisites

Before building from source, make sure to install the following prerequisites:

#### For Debian and Other Linux Distributions:

Rust Programming Language: Check "Install Rust" at <https://www.rust-lang.org/tools/install> , which recommends the following command.

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

sh Install build dependencies:

- Build essential
- Package config
- Udev & LLVM & libclang
- Protocol buffers

```
apt-get
```

```
install
```

```
\ build-essential \ pkg-config \ libudev-dev llvm libclang-dev \ protobuf-compiler
```

#### For Other Linux Distributions:

Replaceapt with your distribution's package manager (e.g.,yum ,dnf ,pacman ) and adjust package names as needed.

### For macOS:

Install Homebrew (if not already installed), check "Install Homebrew" at<https://brew.sh/> , which recommends the following command:

```
/bin/bash -c " ( curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh ) " Install the necessary tools and libraries using Homebrew:
```

brew install rust pkg-config libudev protobuf llvm coreutils Follow the instructions given at the end of the brew install command aboutPATH configurations.

### For Windows:

Rust Programming Language: Check "Install Rust" at<https://www.rust-lang.org/tools/install> , which recommends the following command.

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

sh \* Download and install the Build Tools for Visual Studio (2019 or later) from \* the[Visual Studio downloads page](#) \* . \* Make sure to include the C++ build tools in the installation. \* Install LLVM: Download and install LLVM from the[official LLVM download page](#) \* . \* Install Protocol Buffers Compiler (protoc): Downloadprotoc \* from the[GitHub releases page of Protocol Buffers](#) \* , \* and add it to yourPATH \* .

info Users on Windows 10 or 11 may need to install[Windows Subsystem for Linux](#) (WSL) in order to be able to build from source. WSL provides a Linux environment that runs inside your existing Windows installation. You can then run regular Linux software, including the Linux versions of Solana CLI.

After installed, runwsl from your Windows terminal, then continue through the[Debian and Other Linux Distributions](#) above.

## Building from Source

After installing the prerequisites, proceed with building Solana from source, navigate to[Solana's GitHub releases page](#) , and download theSource Code archive. Extract the code and build the binaries with:

```
./scripts/cargo-install-all.sh . export
```

# PATH

PWD /bin: PATH You can then run the following command to obtain the same result as with prebuilt binaries:

```
solana-install init
```

## Use Homebrew

This option requires you to have[Homebrew](#) package manager on your MacOS or Linux machine.

### MacOS & Linux

- Follow instructions at:<https://formulae.brew.sh/formula/solana>

[Homebrew formulae](#) is updated after eachsolana release, however it is possible that the Homebrew version is outdated.

- Confirm you have the desired version ofsolana
- installed by entering:

```
solana --version Previous Solana CLI Tool SuiteNext Introduction to the Solana CLI
```