

The LSD Lab

Guide for:

Installing Base R and RStudio



If you're new to R, the first step is getting the software set up on your computer. R comes in two pieces:

- **Base R** — the underlying programming language that does the statistical work.
- **RStudio** — a user-friendly interface (an IDE) that makes R much easier to write, run, and organize.



Think of Base R as the engine and RStudio as the dashboard.

Step 1: Install Base R

A. Go to the official R website

<https://cran.r-project.org>

CRAN (the Comprehensive R Archive Network) hosts safe, official downloads for all operating systems.



CRAN
[Mirrors](#)
[What's new?](#)
[Search](#)
[CRAN Team](#)

[About R](#)
[R Homepage](#)
[The R Journal](#)

[Software](#)
[R Sources](#)
[R Binaries](#)
[Packages](#)
[Task Views](#)
[Other](#)

[Documentation](#)

The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [Download R for Linux \(Debian, Fedora/Redhat, Ubuntu\)](#)
- [Download R for macOS](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2025-10-31, [Not] Part in a Rumble) [R-4.5.2.tar.gz](#), read [what's new](#) in the latest version.

B. Choose your operating system

At the top of the page, you'll see options for:

- Download R for macOS
- Download R for Windows
- Download R for Linux

Select the one that matches your computer.

Step 1: Install Base R

C. Download the installer

Once you click your operating system:

Windows: Click the link titled *base* and then download the latest *R-x.x.x-win.exe* file.

macOS: Choose the *.pkg* file for the latest release (usually the first link).

Linux: Follow the instructions for your specific distribution.

Subdirectories:

[base](#)

[contrib](#)

[old contrib](#)

[Rtools](#)

Binaries for base distribution. This is what you want to [install R for the first time](#).

Binaries of contributed CRAN packages (for R >= 4.0.x).

Binaries of contributed CRAN packages for outdated versions of R (for R < 4.0.x).

Tools to build R and R packages. This is what you want to build your own packages on Windows, or to build R itself.

Please do not submit binaries to CRAN. Package developers might want to contact Uwe Ligges direct case of questions / suggestions related to Windows binaries.

R-4.5.2 for Windows

[Download R-4.5.2 for Windows](#) (87 megabytes, 64 bit)

[README on the Windows binary distribution](#)

[New features in this version](#)

This build requires UCRT, which is part of Windows since Windows 10 and Windows Server 2016 older systems, UCRT has to be installed manually from [here](#).

If you want to double-check that the package you have downloaded matches the package distribute CRAN, you can compare the [md5sum](#) of the .exe to the [fingerprint](#) on the master server.

Note: This is the latest version as of 9 Dec 2025.

Step 1: Install Base R

C. Download the installer

Once you click your operating system:

Windows: Click the link titled *base* and then download the latest *R-x.x.x-win.exe* file.

macOS: Choose the *.pkg* file for the latest release (usually the first link).

Linux: Follow the instructions for your specific distribution.

R for macOS

This directory contains binaries for the base distribution and of R and packages to run on macOS. R and package binaries for R versions older than 4.0.0 are only available from the [CRAN archive](https://cran-archival.r-project.org) so users of such versions should adjust the CRAN mirror setting (<https://cran-archival.r-project.org>) accordingly.

Note: Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

R 4.5.2 "[Not] Part in a Rumble" released on 2025/10/31

Please check the integrity of the downloaded package by checking the signature:

`pkgutil --check-signature R-4.5.2-arm64.pkg`

in the *Terminal* application. If Apple tools are not available you can check the SHA1 checksum of the downloaded image:

`openssl sha1 R-4.5.2-arm64.pkg`

Latest release:

For Apple silicon (M1,2,...) Macs: **R 4.5.2** binary for macOS 11 (**Big Sur**) and higher, signed and notarized packages.

[R-4.5.2-arm64.pkg](#)

SHA1-
hash: 1cc0b3d78bc3b3857c6bf3128a9d414b130d938e
(ca. 97MB, notarized and signed)

Contains R 4.5.2 framework, R.app GUI 1.82, Tcl/Tk 8.6.12

Note: This is the latest version as of 9 Dec 2025.

Step 1: Install Base R

C. Download the installer

Once you click your operating system:

Windows: Click the link titled *base* and then download the latest *R-x.x.x-win.exe* file.

macOS: Choose the *.pkg* file for the latest release (usually the first link).

Linux: Follow the instructions for your specific distribution.

The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [Download R for Linux](#) ([Debian](#), [Fedora/Redhat](#), [Ubuntu](#))
- [Download R for macOS](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2025-10-31, [Not] Part in a Rumble) [R-4.5.2.tar.gz](#), read [what's new](#) in the latest version.

Note: This is the latest version as of 9 Dec 2025.

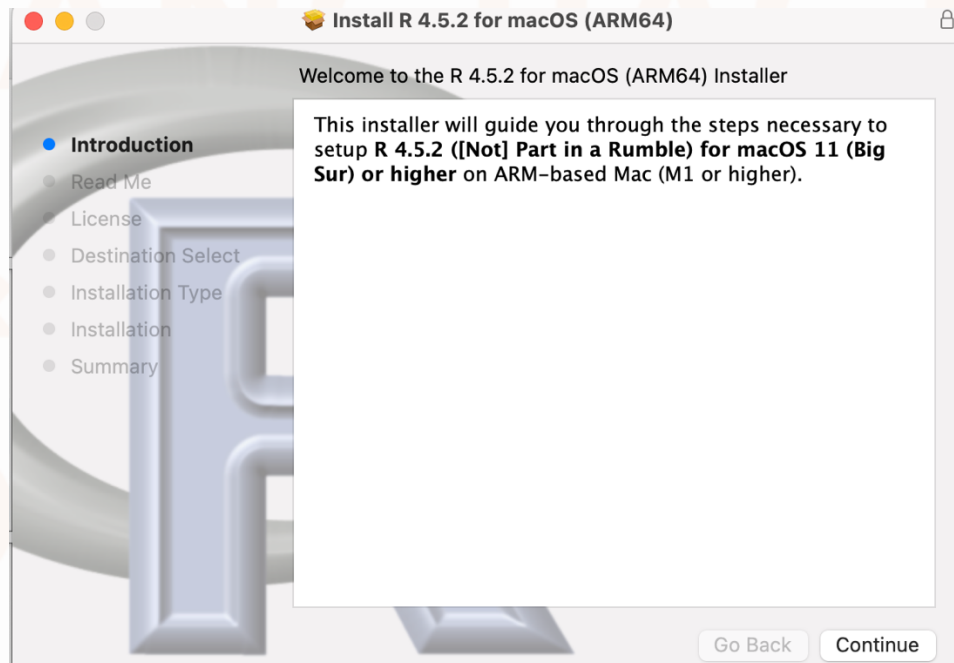
Step 1: Install Base R

D. Run the installer

Open the downloaded file & follow the installation steps:

- Accept defaults unless you have a reason to change them
- Approve license agreement
- Click *Next* until installation finishes

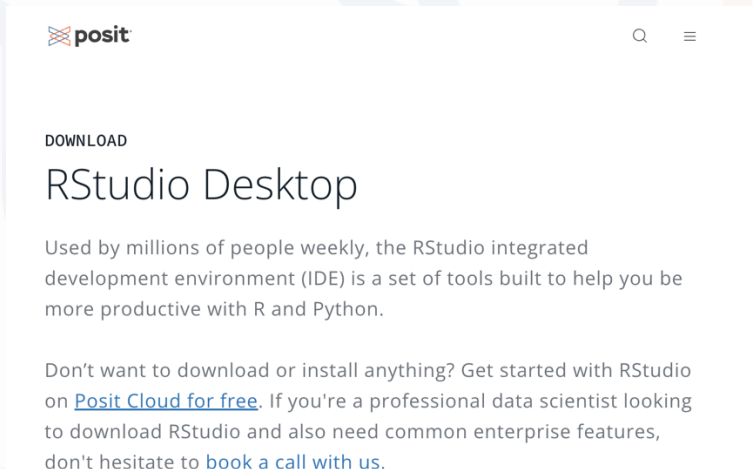
After installation, Base R is ready. However, most people don't use Base R—they use RStudio (which requires Base R). Why? RStudio gives you a cleaner interface and has panels for your code, plots, environment variables, files, and more. It makes working in R way easier.



Step 2: Install RStudio

A. Go to the RStudio download page

<https://posit.co/download/rstudio-desktop/>



B. Download RStudio Desktop

- Scroll to Install RStudio & select your operating system version.
- Click Download RStudio Desktop.

2: Install RStudio

macOS 13+ (macOS 13 and higher)

DOWNLOAD RSTUDIO DESKTOP FOR MACOS 13+

Step 2: Install RStudio

C. Install RStudio

Once the file downloads, open it & follow the installation instructions:

- Accept defaults
- Click through the setup prompts
- Wait for installation to complete

D. Open RStudio

After installation, launch RStudio. If Base R was installed correctly, RStudio will automatically detect it and open the R Console inside the interface.



Photos



Podcasts



Preview

This is Base R,
not RStudio.



R



Reminders



RStudio



This is RStudio,
not Base R.

You're all set!

You now have installed:

- Base R and
- RStudio

Next, go to [The LSD Lab Guide for: Navigating RStudio](#).