

How to Install R and R Studio

MAC Users

Version Fall 2022

R is a free software for statistical computing and graphics. Its learning curve is a bit steep. But, fortunately for us, there is also R-Studio. R-Studio is a user interface that allows the user to run R in an environment that is much more friendly, especially for new users. **In this course, we will be using R from within R-Studio.**

R and R Studio are separate packages!
You must install R (and optionally XQuartz) first.

(Video) Before you begin:

Consider watching a video. I think the following one is good (duration: 3:01)

<https://www.youtube.com/watch?v=EmZqlcKkJMM>

Preliminary – Determine the version of your operating system (e.g., *I have MAC OS Catalina*)

Why? If your operating system happens to be an older one, then in installing R you may have to choose an older version of R because your operating system may or may not be able to accommodate the most recent version of R.



Example – This tells me that my operating system is macOS Catalina Version 10.15.7

PART I – Download and Install R and (optionally, but recommended) XQuartz

- ___1. Go to <https://www.r-project.org/>

In the first paragraph, “Getting Started”, Click on “Download R” or “CRAN mirror”.

- ___2. Under “CRAN mirrors”, choose one of the URLs from “USA”.

Under “The Comprehensive R Archive Network”,
in the box “Download and Install R”, click on “Download R for (MAC) OS X” .

- ___3. Under “R for MAC OS X”, take care to read the first paragraph

- ___4. **!!!!** Under the heading “Latest release”, check that the R package is suitable for your operating system. For most of you, the most recent release will be fine. But if you have an older MAC operating system, you may need to scroll down to find the appropriate R package for your operating system. **Click to download.**

- ___5. (Recommended for MAC users). Install **XQuartz** by clicking on the link and downloading and installing the dmg file.

Latest release:

[R-4.2.1.pkg](#) (notarized and signed)
SHA1-
hash: f83a6c96cedd19193255f94cb01381a273073a3a
(ca. 90MB) for Intel Macs

R 4.2.1 binary for macOS 10.13 (**High Sierra**) and higher, **Intel 64-bit** build, signed and notarized package.

Contains R 4.2.1 framework, R.app GUI 1.79 in 64-bit for Intel Macs, Tcl/Tk 8.6.6 X11 libraries and Texinfo 6.7. The latter two components are optional and can be omitted when choosing "custom install", they are only needed if you want to use the `tcltk` R package or build package documentation from sources.

Note: the use of X11 (including `tcltk`) requires [XQuartz](#) to be installed (version 2.7.11 or later) since it is no longer part of macOS. Always re-install XQuartz when upgrading your macOS to a new major version.

This release supports Intel Macs, but it is also known to work using Rosetta2 on M1-based Macs. For native Apple silicon arm64 binary see below.

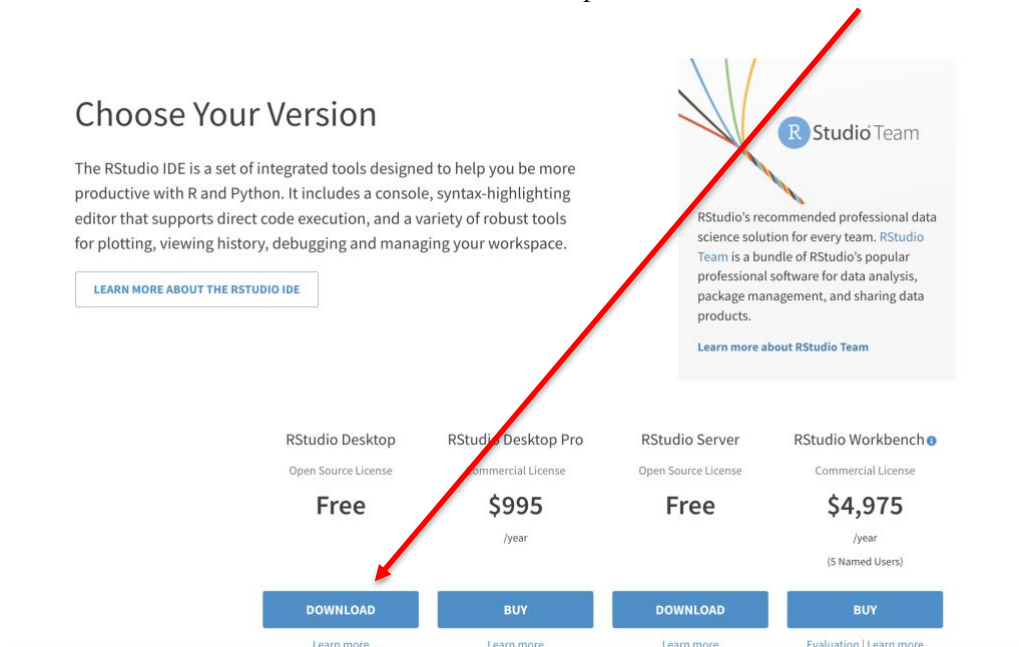
Important: this release uses Xcode 12.4 and GNU Fortran 8.2. If you wish to compile R packages from sources, you may need to download GNU Fortran 8.2 - see the [tools](#) directory.

All done? At this point you should see the R icon on your dock:



PART II – Download and Install R-Studio

- ___1. Go to <https://rstudio.com/products/rstudio/download/>
- ___2. At left, choose version RStudio Desktop. It is free. Click on DOWNLOAD



- ___3. At left, under Installers, click on the download corresponding to macOS 10.15+

All Installers

Linux users may need to [import RStudio's public code-signing key](#) prior to installation, depending on the operating system's security policy.

RStudio requires a 64-bit operating system. If you are on a 32 bit system, you can use an [older version of RStudio](#).

OS	Download	Size	SHA-256
Windows 10/11	RStudio-2022.07.1-554.exe	190.14 MB	5ab6215b
macOS 10.15+	RStudio-2022.07.1-554.dmg	221.04 MB	7b1a2285
Ubuntu 18+/Debian 10+	rstudio-2022.07.1-554-amd64.deb	132.91 MB	74b9e751
Ubuntu 22	rstudio-2022.07.1-554-amd64.deb	145.33 MB	92f2ab75
Fedora 19/Red Hat 7	rstudio-2022.07.1-554-x86_64.rpm	103.29 MB	0fc15d16
Fedora 34/Red Hat 8	rstudio-2022.07.1-554-x86_64.rpm	149.77 MB	0c4ef334
OpenSUSE 15	rstudio-2022.07.1-554-x86_64.rpm	133.76 MB	45f277d0

Put the R-Studio shortcut onto your dock, if it is not already there



- * From the Applications folder:
- * Scroll to find the icon for **RStudio**
- * Click and drag it to your dock.

USING R AND R STUDIO

To use R and R-Studio, simply click on the R-Studio icon.
It is **not** necessary to click on the R icon, too.

EXITING R AND R STUDIO

You can exit both at the same time from the menu bar “RStudio” at top:

RStudio → Quit RStudio

Upgrading R on Mac

On Mac you need to go to the CRAN website, <https://www.r-project.org/> to install the newer package installer.

Updating RStudio on Mac

Updating RStudio is easy, just go to Help > Check for Updates to install newer version.