

Instalación de R y RStudio

R (llamado “R” a secas) es el lenguaje de programación que vamos a utilizar en los cursos de Ciencia de Datos. Pueden visitar estos sitios para información sobre el lenguaje de programación: <https://www.r-project.org> o [https://en.wikipedia.org/wiki/R_\(programming_language\)](https://en.wikipedia.org/wiki/R_(programming_language))

Necesitamos en primer lugar instalar el lenguaje R.

Paso 1: instalación de R

Vamos a <https://cloud.r-project.org/> y hacer click en el link que corresponda a nuestro sistema: “Download R for Windows”, o “for Linux” o “for (Mac) OS X”.



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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 (2022-04-22, Vigorous Calisthenics) [R-4.2.0.tar.gz](#), read [what's new](#) in the latest version.
- Sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are [available here](#). Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#)

Questions About R

- If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.

Instalación en Windows

Al hacer click sobre “Download R for Windows” se abrirá la siguiente pantalla.

R for Windows

Subdirectories:

base	Binaries for base distribution. This is what you want to install R for the first time .
contrib	Binaries of contributed CRAN packages (for R >= 3.4.x).
old.contrib	Binaries of contributed CRAN packages for outdated versions of R (for R < 3.4.x).
Rtools	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 directly in case of questions / suggestions related to Windows binaries.

You may also want to read the [R FAQ](#) and [R for Windows FAQ](#).

Note: CRAN does some checks on these binaries for viruses, but cannot give guarantees. Use the normal precautions with downloaded executables.

En esa pantalla, deben hacer click en “install R for the first time”.
Se abre la pantalla para descargar el instalador.

R-4.2.0 for Windows

[Download R-4.2.0 for Windows](#) (79 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. On 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 distributed by CRAN, you can compare the [md5sum](#) of the .exe to the [fingerprint](#) on the master server.

Frequently asked questions

- [Does R run under my version of Windows?](#)
- [How do I update packages in my previous version of R?](#)

Please see the [R FAQ](#) for general information about R and the [R Windows FAQ](#) for Windows-specific information.

En esta pantalla elegir “Download R-4.2.0 for Windows”. Si aparece una versión posterior, ¡no panicar! R evoluciona con el tiempo, y es normal que aparezcan nuevas versiones. Elegir la versión que aparece, es la última y más estable.

Verificar en “Does R run under my version of Windows?” que la versión del sistema operativo sea suficiente. La versión R-4.2.0 funciona correctamente en Windows 10 y 11.

Al hacer click, se iniciará la descarga del instalador, ejecutarlo y completar los pasos de instalación.

Instalación en Mac

Al hacer click sobre “Download R for Mac” se abrirá la siguiente pantalla.

R for macOS

This directory contains binaries for a base distribution and packages to run on macOS. Releases for old Mac OS X systems (through Mac OS X 10.5) and PowerPC Macs can be found in the [old](#) directory.

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

Package binaries for R versions older than 3.2.0 are only available from the [CRAN archive](#) so users of such versions should adjust the CRAN mirror setting (<https://cran-archive.r-project.org>) accordingly.

R 4.2.0 "Vigorous Calisthenics" released on 2022/04/22

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

```
pkgutil --check-signature R-4.2.0.pkg
```

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

```
openssl sha1 R-4.2.0.pkg
```

Latest release:

[R-4.2.0.pkg](#) (notarized and signed)

SHA1-hash: 2a90fb8629e44f72f9a89d6a9bac9b71564587d7
(ca. 90MB) for Intel Macs

R 4.2.0 binary for macOS 10.13 (**High Sierra**) and higher, **Intel 64-bit** build, signed and notarized package. Contains R 4.2.0 framework, R.app GUI 1.78 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.

[R-4.2.0-arm64.pkg](#) (notarized and signed)

SHA1-hash: adc2602d245164d316967d24f5482b58c2d6daff
(ca. 89MB) for M1 Macs only!

R 4.2.0 binary for macOS 11 (**Big Sur**) and higher, **Apple silicon arm64** build, signed and notarized package. Contains R 4.2.0 framework, R.app GUI 1.78 for Apple silicon Macs (M1 and higher), Tcl/Tk 8.6.12 X11 libraries and Texinfo 6.8.

Important: this version does NOT work on older Intel-based Macs.

Elegir el instalador (.pkg) de acuerdo al procesador y versión del sistema operativo.
Ejecutar el instalador y seguir los pasos de instalación.

Paso 2: instalación de RStudio

RStudio es la interfaz gráfica que vamos a usar para trabajar con el lenguaje de programación R. Existen otras interfaces gráficas para trabajar con lenguajes de programación.

Para instalar RStudio, ingresar a:


<https://www.rstudio.com/products/rstudio/download/>

Hacer clic en el link de descarga para *RStudio Desktop*, versión *free*:

Choose Your Version

The RStudio IDE is a set of integrated tools designed to help you be more productive with R and Python. It includes a console, syntax-highlighting editor that supports direct code execution, and a variety of robust tools for plotting, viewing history, debugging and managing your workspace.

[LEARN MORE ABOUT THE RSTUDIO IDE](#)



RStudio's recommended professional data science solution for every team. **RStudio Team** is a bundle of RStudio's popular professional software for data analysis, package management, and sharing data products.

[Learn more about RStudio Team](#)

RStudio Desktop	RStudio Desktop Pro	RStudio Server	RStudio Workbench ¹
Open Source License	Commercial License	Open Source License	Commercial License
Free	\$995 /year	Free	\$4,975 /year (5 Named Users)
DOWNLOAD	BUY	DOWNLOAD	BUY
Learn more	Learn more	Learn more	Evaluation Learn more

Elegir la versión correspondiente al sistema operativo

RStudio Desktop 2022.02.2+485 - [Release Notes](#)

1. Install R. [RStudio requires R 3.3.0+](#)

2. Download RStudio Desktop. Recommended for your system:



Requires macOS 10.15+ (64-bit)



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-2022.02.2-485.exe	177.27 MB	74187a33
macOS 10.15+	RStudio-2022.02.2-485.dmg	217.09 MB	cda82e98
Ubuntu 18+/Debian 10+	rstudio-2022.02.2-485-amd64.deb	128.58 MB	508a6e9c
Fedora 19/Red Hat 7	rstudio-2022.02.2-485-x86_64.rpm	144.66 MB	7400234c
Fedora 34/Red Hat 8	rstudio-2022.02.2-485-x86_64.rpm	144.70 MB	ad00e2c5
Debian 9	rstudio-2022.02.2-485-amd64.deb	128.91 MB	8edcf614

Descargamos el instalador, lo ejecutamos, seguimos los pasos... y listo.
Ya estamos preparados para empezar a trabajar con R.