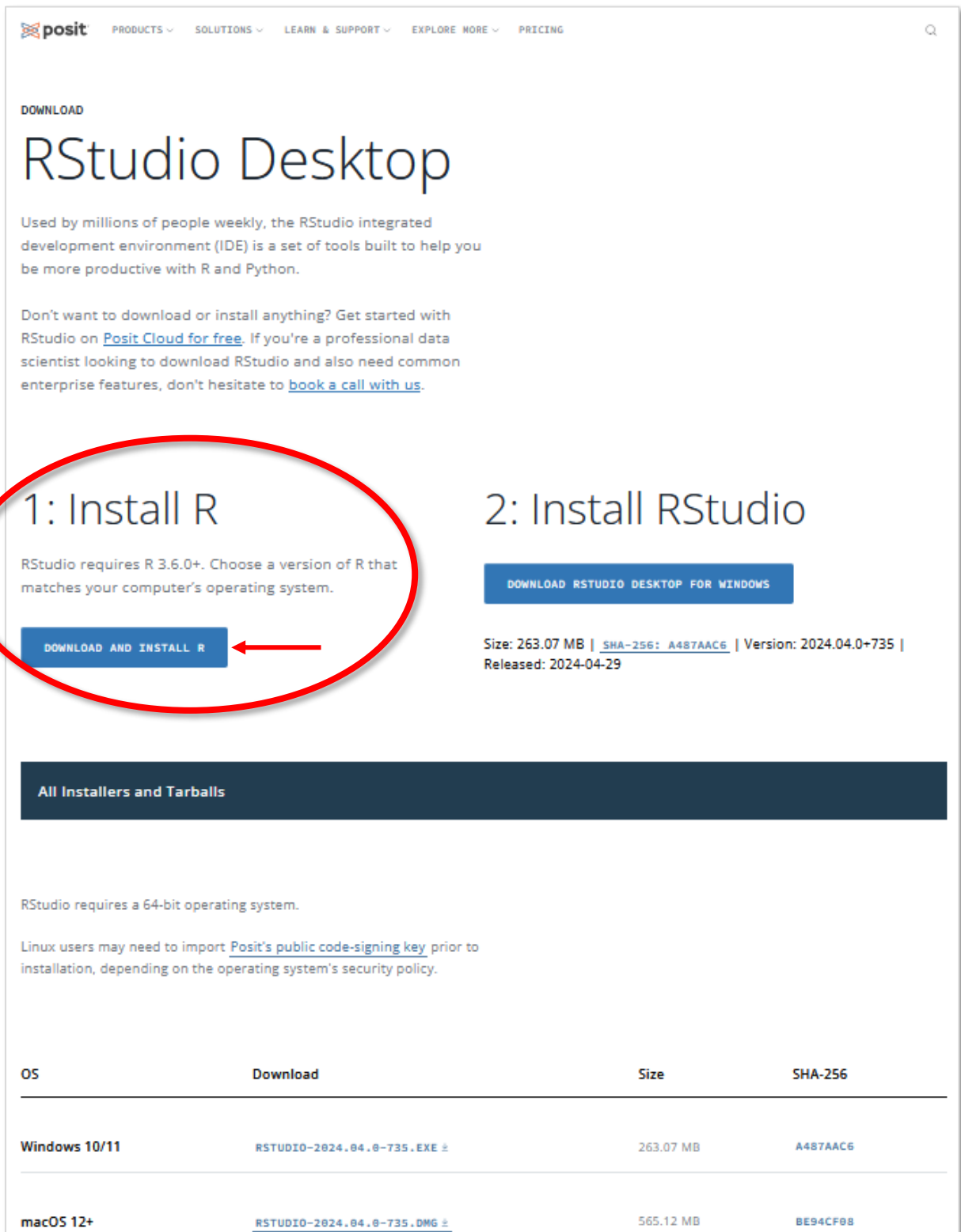


# Manual de instalação de software

## R, RStudio & RTools

### 1. Como instalar R (<https://posit.co/download/rstudio-desktop/#download>)

#### 1.1 Clicar em *Download and Install R*.



The screenshot shows the RStudio Desktop download page. The '1: Install R' section is circled in red, and a red arrow points to the 'DOWNLOAD AND INSTALL R' button. The '2: Install RStudio' section has a 'DOWNLOAD RSTUDIO DESKTOP FOR WINDOWS' button. Below these sections is a table of installers and tarballs for Windows and macOS.

**1: Install R**

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

[DOWNLOAD AND INSTALL R](#)

**2: Install RStudio**

[DOWNLOAD RSTUDIO DESKTOP FOR WINDOWS](#)

Size: 263.07 MB | [SHA-256: A487AAC6](#) | Version: 2024.04.0+735 | Released: 2024-04-29

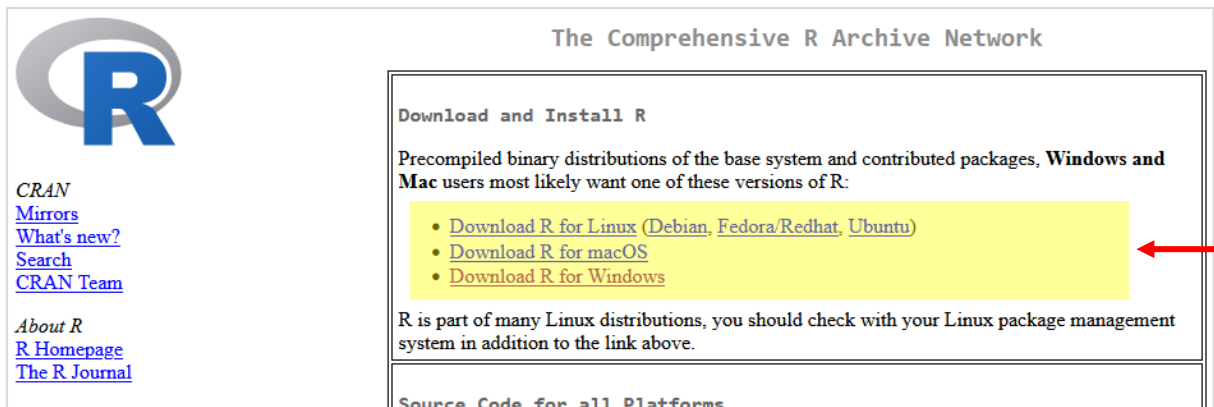
**All Installers and Tarballs**

RStudio requires a 64-bit operating system.

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

OS	Download	Size	SHA-256
Windows 10/11	<a href="#">RSTUDIO-2024.04.0-735.EXE</a>	263.07 MB	<a href="#">A487AAC6</a>
macOS 12+	<a href="#">RSTUDIO-2024.04.0-735.DMG</a>	565.12 MB	<a href="#">BE94CF08</a>

1.2 Clicar na versão para o sistema operativo pretendido (Linux, macOS ou Windows).



The Comprehensive R Archive Network

Download and Install R

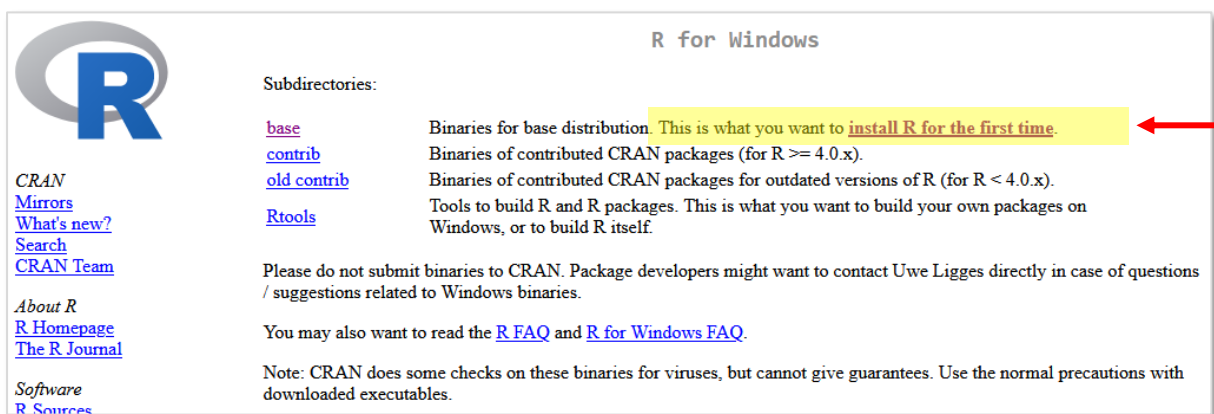
Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [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

1.3 Exemplo para instalação em Windows: clicar em *install R for the first time*.



R for Windows

Subdirectories:

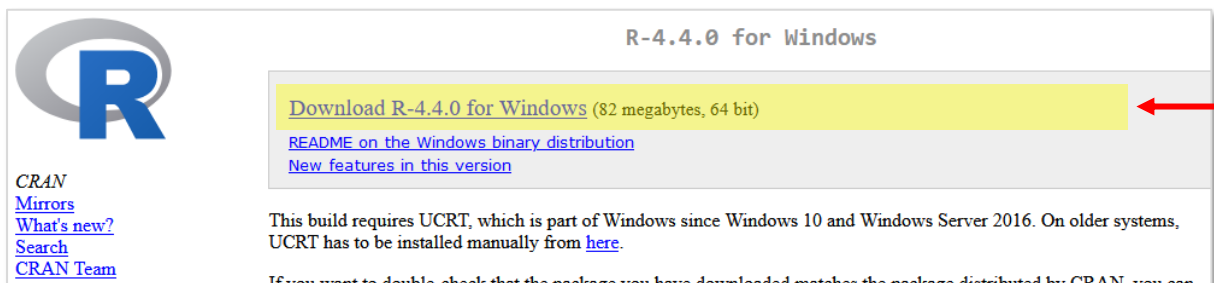
- [base](#): Binaries for base distribution. **This is what you want to install R for the first time.**
- [contrib](#): Binaries of contributed CRAN packages (for R >= 4.0.x).
- [old contrib](#): Binaries of contributed CRAN packages for outdated versions of R (for R < 4.0.x).
- [Rtools](#): Tools to 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.

1.4 Exemplo para instalação em Windows: clicar em *Download R-4.4.0 for Windows*.



R-4.4.0 for Windows

[Download R-4.4.0 for Windows \(82 megabytes, 64 bit\)](#)

[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

## 2. Como instalar o RStudio (<https://posit.co/download/rstudio-desktop/#download>)

### 2.1 Clicar em *Download and Install R*.

**DOWNLOAD**

# RStudio Desktop

Used by millions of people weekly, the RStudio integrated development environment (IDE) is a set of tools built to help you be more productive with R and Python.

Don't want to download or install anything? Get started with RStudio on [Posit Cloud for free](#). If you're a professional data scientist looking to download RStudio and also need common enterprise features, don't hesitate to [book a call with us](#).

## 1: Install R

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

[DOWNLOAD AND INSTALL R](#)

## 2: Install RStudio

[DOWNLOAD RSTUDIO DESKTOP FOR WINDOWS](#)

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### All Installers and Tarballs

RStudio requires a 64-bit operating system.

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

OS	Download	Size	SHA-256
Windows 10/11	<a href="#">RSTUDIO-2024.04.0+735.EXE</a>	263.07 MB	<a href="#">A487AAC6</a>
macOS 12+	<a href="#">RSTUDIO-2024.04.0+735.DMG</a>	565.12 MB	<a href="#">BE94CF08</a>


### 3. Como instalar o RTools (<https://cran.r-project.org/bin/windows/Rtools/>)

3.1 Clicar na versão mais recente (compatível com a versão de R previamente instalada).

**RTools: Toolchains for building R and R packages from source on Windows**

Choose your version of Rtools:

<a href="#">RTools 4.4</a>	for R versions from 4.4.0 (R-release and R-devel)
<a href="#">RTools 4.3</a>	for R versions 4.3.x (R-oldrelease)
<a href="#">RTools 4.2</a>	for R versions 4.2.x
<a href="#">RTools 4.0</a>	for R from version 4.0.0 to 4.1.3
<a href="#">old versions of RTools</a>	for R versions prior to 4.0.0



3.2 Clicar em *RTools44 installer* ou em *64-bit ARM Rtools44 installer*.

**Rtools44 for Windows**

Rtools is a toolchain bundle used for building R packages from source (those that need compilation of C/C++ or Fortran code) and for building R itself. Rtools44 is currently used for R 4.4 and R-devel, the development version of R, to become R 4.5.0.

Rtools44 consists of Msys2 build tools, GCC 13/MinGW-w64 compiler toolchain, libraries built using the toolchain, and QPDF. Rtools44 supports 64-bit Windows and UCRT as the C runtime.

Compared to Rtools43, Rtools44 for 64-bit Intel machines has newer versions of three core components: GCC, MinGW-w64, and binutils. It is therefore recommended to re-compile all code with the new toolchain to avoid problems. The code compiled by Rtools older than Rtools42 is incompatible due to use of MSVCRT and has to be recompiled with Rtools44 for use in R packages.

Rtools44 is also available for 64-bit ARM machines (aarch64): it includes Msys2 build tools (64-bit Intel builds running via emulation) and aarch64 builds of LLVM 17/MinGW-w64 compiler toolchain, libraries built using the toolchain, and again QPDF. The 64-bit ARM version of Rtools44 is experimental: a number of CRAN packages don't work with it and the Fortran compiler (flang-new) is not yet able to compile Fortran code of all CRAN packages. A number of CRAN packages doesn't work because they require not-yet-available 64-bit ARM versions of external software.

**Installing Rtools44**

Rtools is only needed for installation of R packages from source (those that need compilation of C/C++ or Fortran code) or building R from source. R can be installed from the R binary installer and by default will install binary versions of CRAN packages, which does not require Rtools44.

Moreover, online build services are available to check and build R packages for Windows, for which again one does not need to install Rtools44 locally. The [Winbuilder](#) check service uses identical setup as the CRAN incoming packages checks and has already all CRAN and Bioconductor packages pre-installed.

Rtools44 may be installed from the [Rtools44 installer](#) or [64-bit ARM Rtools44 installer](#). It is recommended to use the defaults, including the default installation location of C:\rtools44.

