### Installing R and RStudio for OS and Windows

R is an open source programming language, meaning that you can install it for free on nearly any operating system. The steps here guide you through install the core R system, the RStudio IDE.

#### Download R

The first step is to download the R programming language. To do this go to https://cran.rproject.org/ and select your platform:



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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

- Download R for Linux
   Download R for (Mac) OS X
   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.

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 (2019-07-05, Action of the Toes) R-3.6.1.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

• 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.

### **For macOS**, just download R-3.6.1 (or whatever is the most recent):



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R for Mac OS X

This directory contains binaries for a base distribution and packages to run on Mac OS X (release 10.6 and above). Mac OS 8.6 to 9.2 (and Mac OS X 10.1) are no longer supported but you can find the last supported release of R for these systems (which is R 1.7.1) here. Releases for old Mac OS X systems (through Mac OS X 10.5) and PowerPC Macs can be found in the old directory.

Note: CRAN does not have Mac OS X systems and cannot check these binaries for viruses. Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

As of 2016/03/01 package binaries for R versions older than 2.12.0 are only available from the CRAN archive so users of such versions should adjust the CRAN mirror setting

R 3.6.1 "Action of the Toes" released on 2019/07/05

Important: since R 3.4.0 release we are now providing binaries for OS X 10.11 (El Capitan) and higher using non-Apple toolkit to provide support for OpenMP and C++17 standard features. To compile packages you may have to download tools from the tools directory and read the corresponding note below

Please check the MD5 checksum of the downloaded image to ensure that it has not been tampered with or corrupted during the mirroring process. For example type md5 R-3.6.1.pkg in the Terminal application to print the MD5 checksum for the R-3.6.1.pkg image. On Mac OS X 10.7 and later you can also validate the signature using

pkgutil --check-signature R-3.6.1.pkg

Latest release:

R-3.6.1.pkg MD5-hash: 279-6662103dfc6a625b4573143cb995 SHA1-hash: 4e932f8c5013870d2a9179b54caec277f41657b0 (ca. 76MB)

R 3.6.1 binary for OS X 10.11 (El Capitan) and higher, signed package. Contains R 3.6.1 framework, R.app GUI 1.70 in 64-bit for Intel Macs, Tcl/Tk 8.6.6 X11 libraries and Texinfo 5.2. The latter two components are optional and can be ommitted when choosing "custom install", they are only needed if you want to use the telek R package or build package documentation from sources.

Note: the use of X11 (including taltk) requires XQuartz to be installed since it is no longer part of OS X. Always re-install XQuartz when upgrading your macOS to a new major version.

Important: this release uses Clang 7.0.0 and GNU Fortran 6.1, neither of which is supplied by Apple. If you wish to compile R packages from sources, you will need to download and install those tools - see the tools

NEWS (for Mac GUI) News features and changes in the R.app Mac GUI

Mac-GUI-1.70.tar.gz MDS-bash-b1ef5f285524640680a22965bb8800f8

Sources for the R.app GUI 1.70 for Mac OS X. This file is only needed if you want to join the development of the GUI, it is not intended for regular users. Read the INSTALL file for further instructions.

Note: Previous R versions for El Capitan can be found in the el-capitan/base directory.

### For Windows, first select base



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#### R for Windows

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

Subdirectories:

Rtools

Binaries for base distribution. This is what you want to install R for the first time.

Binaries of contributed CRAN packages (for  $R \ge 2.13.x$ ; managed by Uwe Ligges). There is also information on <u>third party software</u> available for CRAN Windows services and corresponding environment and make variables. contrib

old contrib Binaries of contributed CRAN packages for outdated versions of R (for R < 2.13.x; managed by Uwe Ligges).

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.

#### And then Download R 3.6.1



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R-3.6.1 for Windows (32/64 bit)

Download R 3.6.1 for Windows (81 megabytes, 32/64 bit)

Installation and other instructions New features in this version

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. You will need a version of md5sum for windows: both graphical and command line versions are available.

Frequently asked questions

- Does R run under my version of Windows?
- How do I update packages in my previous version of R?
   Should I run 32-bit or 64-bit R?

Please see the RFAQ for general information about R and the RWindows FAQ for Windows-specific information.

- Patches to this release are incorporated in the <u>r-patched snapshot build</u>.
   A build of the development version (which will eventually become the next major release of R) is available in the <u>r-devel snapshot build</u>.
   <u>Previous releases</u>

Note to webmasters: A stable link which will redirect to the current Windows binary release is <<u>CRAN MIRROR>/bin/windows/base/release.htm</u>.

Last change: 2019-07-05

Once you have the .pkg (macOS) or .exe (Windows) file, install this on your computer according to the default settings.

### **Download RStudio**

The files you just downloaded are the core R language files doing all the hard work of processing data. Next, we'll install integrated software that makes calling R easier.

Go to https://www.rstudio.com/. Click on Products => RStudio.



### **RStudio**

### Take control of your R code

RStudio is an integrated development environment (IDE) for R. It includes a console, syntax-highlighting editor that supports direct code execution, as well as tools for plotting, history, debugging and workspace management. Click here to see more RStudio features.

RStudio is available in **open source** and **commercial** editions and runs on the desktop (Windows, Mac, and Linux) or in a browser connected to RStudio Server or RStudio Server Pro (Debian/Ubuntu, Red Hat/CentOS, and SUSE Linux).

### There are two versions of RStudio:





### Scroll down to the **DOWNLOAD RSTUDIO DESKTOP** button and click on it.

# R Studio Desktop

	Open Source Edition	Commercial License
Overview	<ul> <li>Access RStudio locally</li> <li>Syntax highlighting, code completion, and smart indentation</li> <li>Execute R code directly from the source editor</li> <li>Quickly jump to function definitions</li> <li>Easily manage multiple working directories using projects</li> <li>Integrated R help and documentation</li> <li>Interactive debugger to diagnose and fix errors quickly</li> <li>Extensive package development tools</li> </ul>	All of the features of open source; plus:  A commercial license for organizations not able to use AGPL software  Access to priority support
Support	Community forums only	<ul> <li>Priority Email Support</li> <li>8 hour response during business hours (ET)</li> </ul>
License	AGPL v3	RStudio License Agreement
Pricing	Free	\$995/year
	DOWNLOAD RSTUDIO DESKTOP	BUY NOW

Scroll down again to the **Installers for Supported Platforms**. Choose Windows or macOS:

## Installers for Supported Platforms

Installers	Size	Date	MD5
RStudio 1.2.5001 - Ubuntu 18/Debian 10 (64-bit)	105.43 MB	2019-09-19	f108e4d5c1b6c19690378b3ca0990249
RStudio 1.2.5001 - Debian 9 (64-bit)	105.70 MB	2019-09-19	23dca12a5e0a0849522f05b4a8600ce8
RStudio 1.2.5001 - Fedora 28/Red Hat 8 (64-bit)	120.90 MB	2019-09-19	45eab0baf8d0504d183f09c8d40ae704
RStudio 1.2.5001 - macOS 10.12+ (64-bit)	126.86 MB	2019-09-19	a4d8ee737818158b272450eaad4bdc4f
RStudio 1.2.5001 - SLES/OpenSUSE 12 (64-bit)	99.04 MB	2019-09-19	ca94a9bb7e7f5474eedd233ddeef14d6
RStudio 1.2.5001 - OpenSUSE 15 (64-bit)	107.12 MB	2019-09-19	2a40768fdc5c5f97cd1d40628bf8aaad
RStudio 1.2.5001 - Fedora 19/Red Hat 7 (64-bit)	120.27 MB	2019-09-19	14bc52d6f78bc4ee22abff2298be919f
RStudio 1.2.5001 - Ubuntu 14/Debian 8 (64-bit)	96.93 MB	2019-09-19	c19b0ece90130bed7248c1bf6001c647
RStudio 1.2.5001 - Windows 10/8/7 (64-bit)	149.83 MB	2019-09-19	c54d8779f363ec9636c7831e577521bd
RStudio 1.2.5001 - Ubuntu 16 (64-bit)	104.88 MB	2019-09-19	4ff58a08c305207729feb65eb145a5a2

Now, install RStudio as any other software. RStudio should sink with the R version you just installed before.