

Installing R and RStudio

Installing R

R can be downloaded from <https://cran.r-project.org>

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](#)
- [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.

Choose the version of R appropriate for your operating system

Note that R can be installed without administrator privileges on all operating systems

Accepting the default options should generally be fine

R for Windows

Subdirectories:

[base](#)

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

[contrib](#)

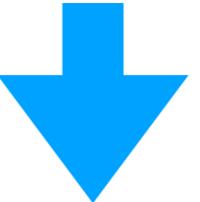
Binaries of contributed CRAN packages (for R >= 2.13.x; managed by Uwe Ligges). There is also information on [third party software](#) available for CRAN Windows services and corresponding environment and make variables.

[old contrib](#)

Binaries of contributed CRAN packages for outdated versions of R (for R 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

[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.



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.

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 accordingly.

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: 279e6662103dfe6a625b4573143cb9⁵
SHA1-hash: 4e932f8e5013870d2a9179b54eaed277f41657b0
(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 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 since it is no longer part of OS X. Always re-install XQuartz when upgrading your macOS to a new major version.

Installing RStudio

R Studio®

Products Resources Pricing About Us Blogs 🔎

RStudio

Shiny

R Packages

RStudio Team

RStudio Server Pro

RStudio Connect

RStudio Package Manager

shinyapps.io

Download RStudio

Discover Shiny

Discover RStudio Team

Discover RStudio Server Pro Standard and Enterprise

The screenshot shows the RStudio homepage. A red circle highlights the browser's address bar at the top, which contains the URL https://www.rstudio.com. Below the address bar, the RStudio logo is visible. To the right of the logo is a navigation bar with links for Products, Resources, Pricing, About Us, and Blogs. A magnifying glass icon is also present. A black arrow points to the 'Products' link. A dropdown menu is open under 'Products', listing several items: RStudio, Shiny, R Packages, RStudio Team, RStudio Server Pro, RStudio Connect, RStudio Package Manager, and shinyapps.io. The background of the page features a blue hexagonal pattern with various R package names like dplyr, knitr, and tidyverse.

Introducing RStudio Team

RStudio's recommended professional data science solutions for every team. RStudio Team includes:

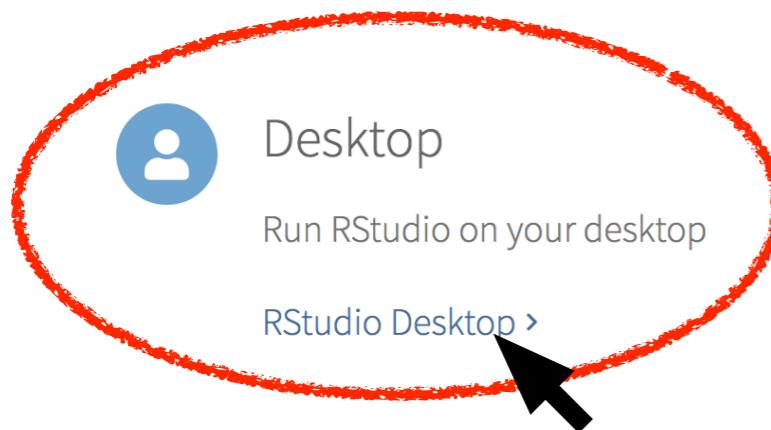


RStudio

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, RedHat/CentOS, and SUSE Linux).



Server

Centralize access and computation

RStudio Server >

Take a tour of RStudio's IDE



Products Resources Pricing About Us Blogs



RStudio Desktop

Open Source Edition

Commercial License

Overview

- Access RStudio locally
- Syntax highlighting, code completion, and smart indentation
- Execute R code directly from the source editor
- Quickly jump to function definitions
- Easily manage multiple working directories using projects
- Integrated R help and documentation
- Interactive debugger to diagnose and fix errors quickly
- Extensive package development tools

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

- Priority Email Support
- 8 hour response during business hours (ET)

License

AGPL v3

[RStudio License Agreement](#)

Pricing

Free

\$995/year

[DOWNLOAD RSTUDIO DESKTOP](#)

[BUY NOW](#)





Products

Resources

Pricing

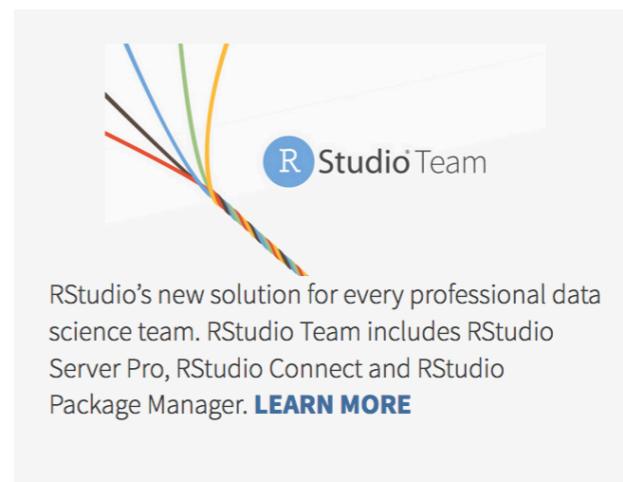
About Us

Blogs



Choose Your Version of RStudio

RStudio is a set of integrated tools designed to help you be more productive with R. 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 RStudio features.](#)



RStudio's new solution for every professional data science team. RStudio Team includes RStudio Server Pro, RStudio Connect and RStudio Package Manager. [LEARN MORE](#)

RStudio Desktop

Open Source License

FREE

[DOWNLOAD](#)

[Learn More](#)

RStudio Desktop

Commercial License

\$995 per year

[BUY](#)

[Learn More](#)

RStudio Server

Open Source License

FREE

[DOWNLOAD](#)

[Learn More](#)

RStudio Server Pro

Commercial License

\$4,975 per year
(5 Named Users)

[BUY](#)

[Evaluation | Learn More](#)

Integrated Tools for R



Choose the version corresponding to your operating system

Installers for Supported Platforms

Installers	Size	Date	MD5
RStudio 1.2.1335 - Windows 7+ (64-bit)	126.9 MB	2019-04-08	d0e2470f1f8ef4cd35a669aa323a2136
RStudio 1.2.1335 - macOS 10.12+ (64-bit)	121.1 MB	2019-04-08	6c570b0e2144583f7c48c284ce299eef
RStudio 1.2.1335 - Ubuntu 14/Debian 8 (64-bit)	92.2 MB	2019-04-08	c1b07d0511469abfe582919b183eee83
RStudio 1.2.1335 - Ubuntu 16 (64-bit)	99.3 MB	2019-04-08	c142d69c210257fb10d18c045fff13c7
RStudio 1.2.1335 - Ubuntu 18/Debian 10 (64-bit)	100.4 MB	2019-04-08	71a8d1990c0d97939804b46cfb0aea75
RStudio 1.2.1335 - Fedora 19/RedHat 7 (64-bit)	114.1 MB	2019-04-08	296b6ef88969a91297fab6545f256a7a
RStudio 1.2.1335 - Debian 9 (64-bit)	100.6 MB	2019-04-08	1e32d4d6f6e216f086a81ca82ef65a91
RStudio 1.2.1335 - OpenSUSE 15 (64-bit)	101.6 MB	2019-04-08	2795a63c7efd8e2aa2dae86ba09a81e5
RStudio 1.2.1335 - SLES/OpenSUSE 12 (64-bit)	94.4 MB	2019-04-08	c65424b06ef6737279d982db9eefcae1

- Make sure you make a shortcut to RStudio on your Desktop (Windows) or Dock (Mac). This is what we'll be using all the time

Installing some default R packages

The screenshot shows the RStudio interface with several panes:

- File Menu:** RStudio, File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Window, Help.
- Top Bar:** Go to file/function, Addins, Project: (None).
- Left Sidebar:** A list of file types: R Script, Create a new R script, R Markdown..., Shiny Web App..., Plumber API..., Text File, C++ File, Python Script, SQL Script, Stan File, D3 Script, R Sweave, R HTML, R Presentation, R Documentation. An arrow points to the "R Script" icon.
- Middle Left:** Jobs pane showing the R startup message and license information.
- Middle Right:** Environment pane showing the Global Environment. It displays the message "Environment is empty".
- Bottom Right:** Files pane showing the contents of the Home directory. The table below lists the files and their details.

Name	Type	Length	Size	Modified
%le.screencaptre		0 B		Mar 23, 2019, 7:53 PM
.anaconda				
.anaconda_backup				
.android				
.atom				
.bash_history		7.6 KB		Jul 17, 2019, 1:04 AM
.bash_profile		675 B		Jul 4, 2019, 1:22 AM
.bash_profile-anaconda3.bak		149 B		Nov 23, 2017, 2:26 AM
.bash_sessions				
.cache				
.CFUserTextEncoding		7 B		Jun 21, 2019, 9:45 AM
.coffee_history		0 B		Oct 26, 2018, 5:45 PM
.conda				
.condarc		40 B		Jul 4, 2019, 2:14 AM
.config				

RStudio File Edit Code View Plots Session Build Debug Profile Tools Window Help RStudio Addins Project: (None)

Untitled1 x Source on Save Import Dataset Global Environment

Run Source Environment History Connections

Grid

Environment is empty

1

1:1 (Top Level) R Script

Console Terminal Jobs

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

>

New Folder Delete Rename More

Home

Name	Size	Modified
%le.screencaptre	0 B	Mar 23, 2019, 7:53 PM
.anaconda		
.anaconda_backup		
.android		
.atom		
.bash_history	7.6 KB	Jul 17, 2019, 1:04 AM
.bash_profile	675 B	Jul 4, 2019, 1:22 AM
.bash_profile-anaconda3.bak	149 B	Nov 23, 2017, 2:26 AM
.bash_sessions		
.cache		
.CFUserTextEncoding	7 B	Jun 21, 2019, 9:45 AM
.coffee_history	0 B	Oct 26, 2018, 5:45 PM
.conda		
.condarc	40 B	Jul 4, 2019, 2:14 AM
.config		

Type the above line exactly as written

The screenshot shows the RStudio interface. In the top-left, the code editor window titled 'Untitled1*' contains the R command: `install.packages(c("tidyverse", "rmarkdown", "tinytex", "rio"))`. The top bar includes the RStudio menu and various status indicators like battery level and signal strength. The bottom-left pane is the 'Console' tab, displaying the standard R startup message about being free software with no warranty, followed by prompts and help information. The right side of the interface features the 'Environment' pane, which is currently empty, and the 'Files' pane, which shows the contents of the 'Home' directory.

RStudio

Untitled1*

```
install.packages(c("tidyverse", "rmarkdown", "tinytex", "rio"))
```

Run Source

Environment History Connections

Global Environment

Name Type Length Size Value

Environment is empty

Files Plots Packages Help Viewer

New Folder Delete Rename More

Home

Name	Size	Modified
%le.screencaptre	0 B	Mar 23, 2019, 7:53 PM
.anaconda		
.anaconda_backup		
.android		
.atom		
.bash_history	7.6 KB	Jul 17, 2019, 1:04 AM
.bash_profile	675 B	Jul 4, 2019, 1:22 AM
.bash_profile-anaconda3.bak	149 B	Nov 23, 2017, 2:26 AM
.bash_sessions		
.cache		
.CFUserTextEncoding	7 B	Jun 21, 2019, 9:45 AM
.coffee_history	0 B	Oct 26, 2018, 5:45 PM
.conda		
.condarc	40 B	Jul 4, 2019, 2:14 AM
.config		

RStudio File Edit Code View Plots Session Build Debug Profile Tools Window Help RStudio Addins Project: (None)

Untitled1* Go to file/function Addins Run Source

```
1 install.packages(c("tidyverse", "rmarkdown", "tinytex", "rio"))
```

Environment History Connections Import Dataset Global Environment Name Type Length Size Value

Environment is empty

Files Plots Packages Help Viewer New Folder Delete Rename More Home Name Size Modified

Name	Size	Modified
%le.screencaptre	0 B	Mar 23, 2019, 7:53 PM
.anaconda		
.anaconda_backup		
.android		
.atom		
.bash_history	7.6 KB	Jul 17, 2019, 1:04 AM
.bash_profile	675 B	Jul 4, 2019, 1:22 AM
.bash_profile-anaconda3.bak	149 B	Nov 23, 2017, 2:26 AM
.bash_sessions		
.cache		
.CFUserTextEncoding	7 B	Jun 21, 2019, 9:45 AM
.coffee_history	0 B	Oct 26, 2018, 5:45 PM
.conda		
.condarc	40 B	Jul 4, 2019, 2:14 AM
.config		

1:63 (Top Level) R Script

Console Terminal Jobs ~ /

```
R is free software and comes with ABSOLUTELY NO WARRANTY.  
You are welcome to redistribute it under certain conditions.  
Type 'license()' or 'licence()' for distribution details.  
  
Natural language support but running in an English locale  
  
R is a collaborative project with many contributors.  
Type 'contributors()' for more information and  
'citation()' on how to cite R or R packages in publications.  
  
Type 'demo()' for some demos, 'help()' for on-line help, or  
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.
```

> |

**You should be all set
to start class!**