

Bite Size R

Installation

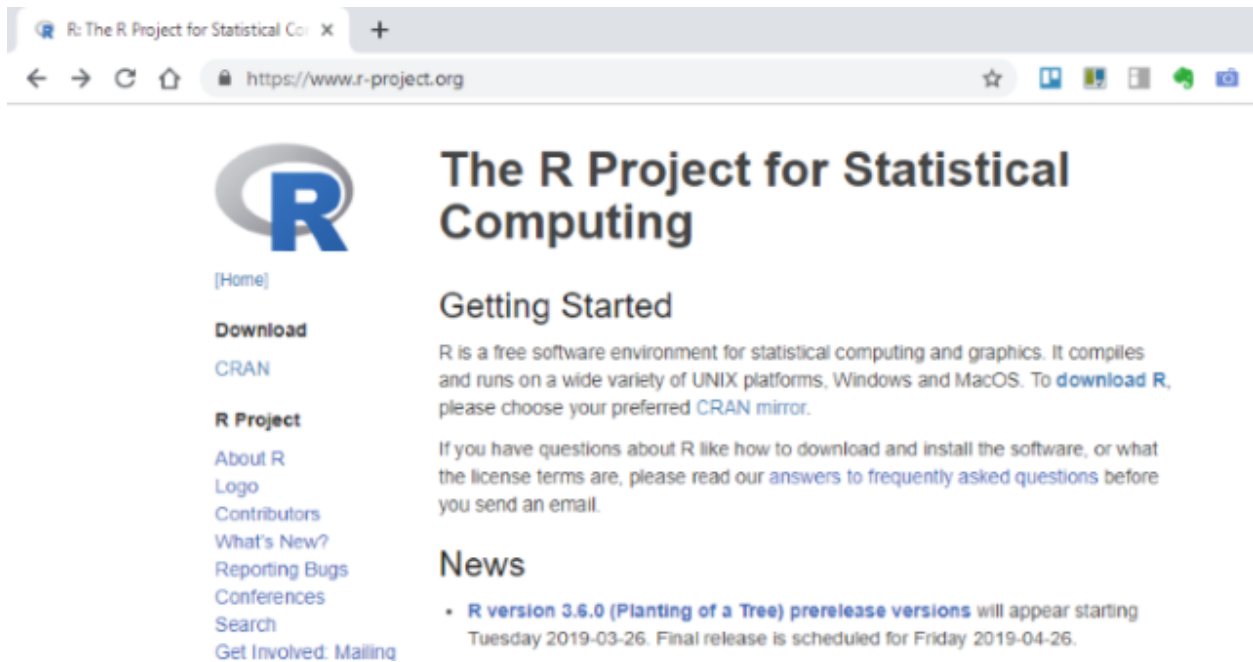
Keith Hurley

April 12, 2019

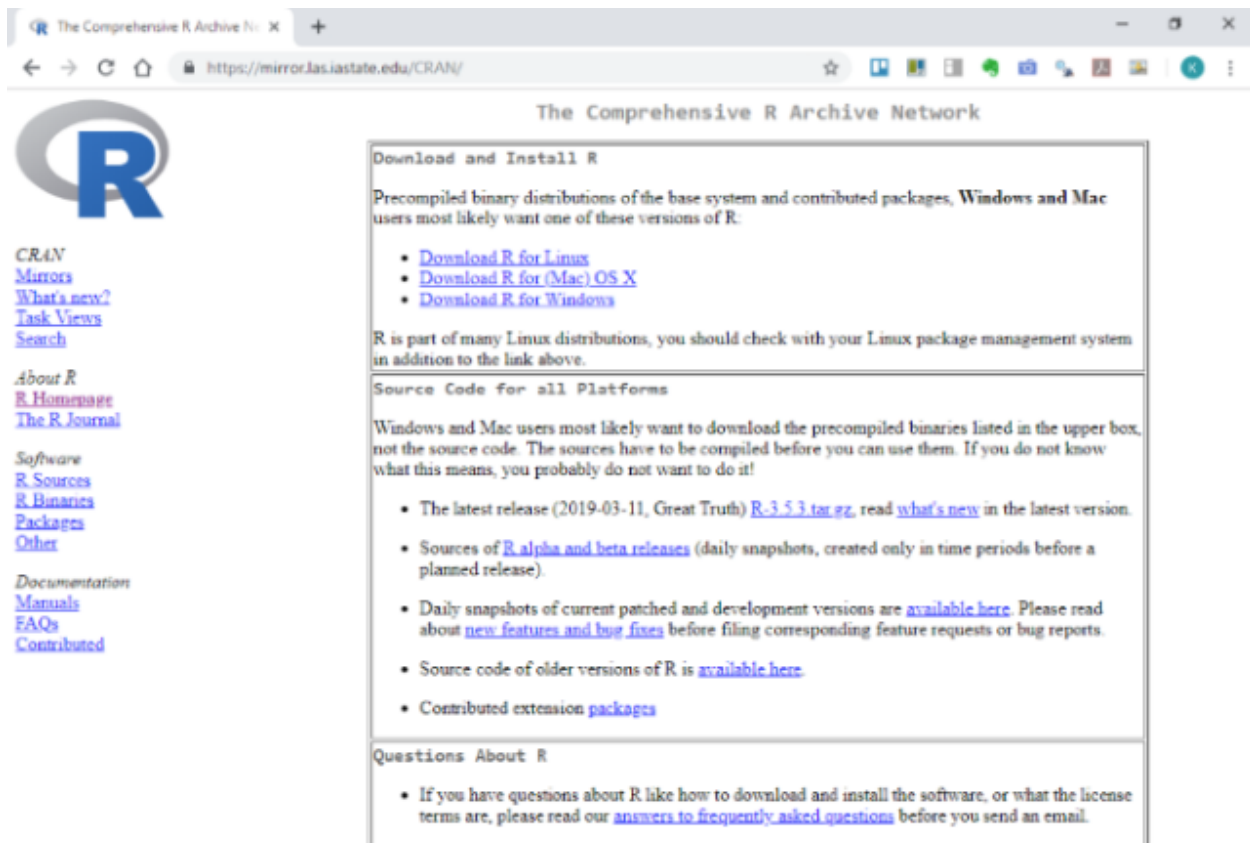
Welcome to Bite Size R. This snack will show you the software and resources you will need to install to follow along with this series. There are two programs that you will need: R, and R studio. Depending on your security settings, you may or may not need to be an administrator to install these programs. First, let's get R installed.

Install R

R can be downloaded from The R Project at <https://www.r-project.org>.



Click on “Download R” and choose an appropriate mirror site.



The screenshot shows the CRAN website with the URL <https://mirror.las.iastate.edu/CRAN/>. The page features the CRAN logo and a sidebar with links to CRAN, Mirrors, What's new?, Task Views, Search, About R, R Homepage, The R Journal, Software, R Sources, R Binaries, Packages, Other, Documentation, Manuals, FAQs, and Contributed.

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.

Source Code for all Platforms

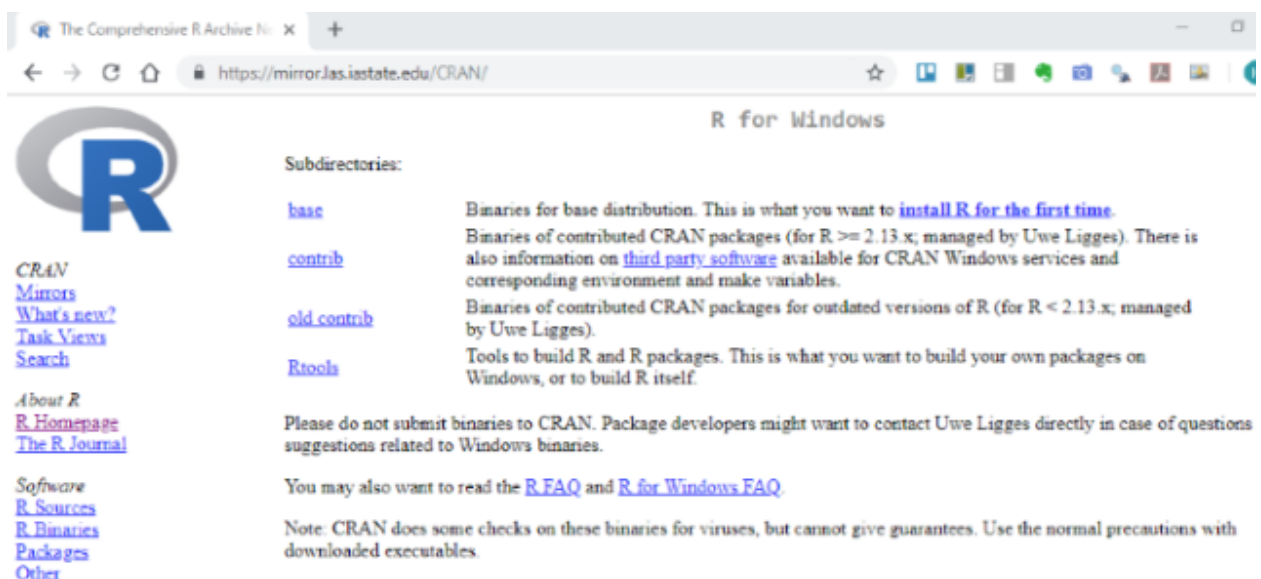
Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2019-03-11, Great Truth) [R-3.5.3.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.

There are installations for Linux, Apple, and Windows. As I'm a Windows user, the videos in this series will be shot on a Window's system. However, there is, for all intents and purposes, no difference between operating systems. Please use whichever is appropriate for you. Click on either "Base" or "Install for the first time".



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R for Windows

Subdirectories:

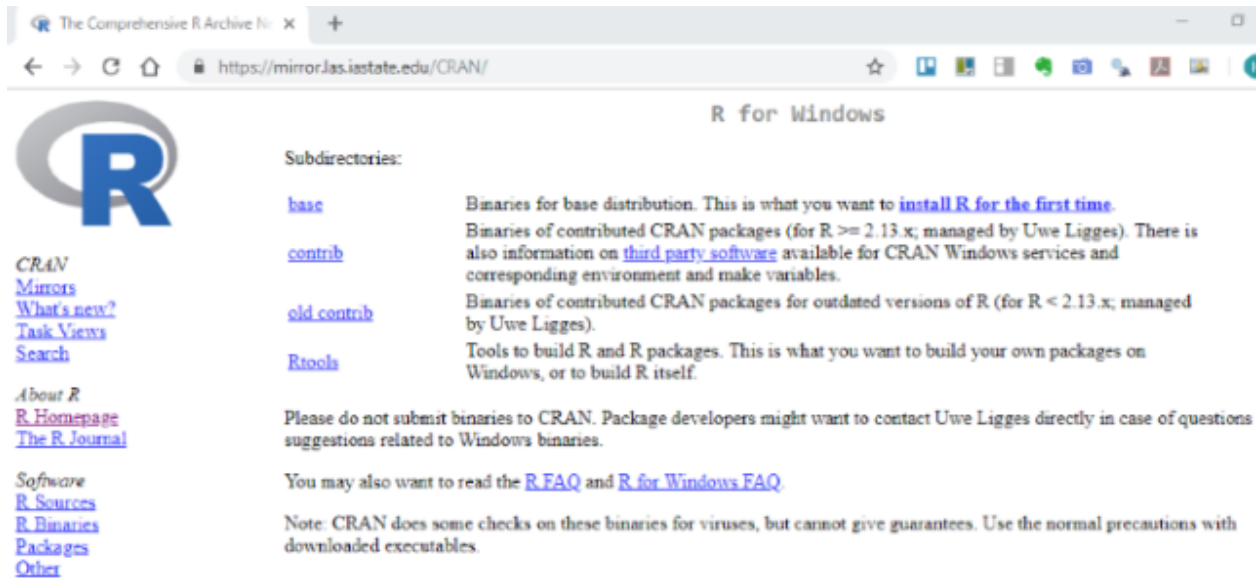
- [base](#): Binaries for base distribution. This is what you want to [install R for the first time](#).
- [contrib](#): Binaries of contributed CRAN packages (for R >= 2.13.x; managed by Uwe Ligges). There is also information on [third party software](#) available for CRAN Windows services and corresponding 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.

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.

Download and install the latest version of R - at the time of production it was version 3.5.3.



Install RStudio

While it's possible to write and run R code in notepad or even R itself, it is a much more enjoyable experience to use an integrated development environment (IDE). Using an IDE provides all kinds of benefits and will increase your productivity greatly. Far and away the most popular R IDE at this time is RStudio and that is what we will work in throughout this series.

RStudio can be downloaded from the RStudio website at <https://www.rstudio.com>.

Open source and enterprise-ready professional software for R

[Download RStudio](#)

[Discover Shiny](#)

[Discover RStudio Package Manager](#)

[Discover RStudio Connect](#)

RStudio

RStudio makes R easier to use. It includes a code editor, debugging & visualization tools.

[Download](#) [Learn More](#)

Shiny

Shiny helps you make interactive web applications for visualizing data. Bring R data analysis to life.

[Learn More](#)

R Packages

Our developers create popular packages to expand the features of R. Includes ggplot2, dplyr, R Markdown & more.

[Learn More](#)

Click on the “Download R Studio” button and then download and install the Community Version of RStudio Desktop.

The screenshot shows the RStudio website with the URL <https://www.rstudio.com/products/RStudio/>. The page is titled "RStudio Desktop" and compares two editions: "Open Source Edition" and "Commercial License".

	Open Source Edition	Commercial License
Overview	<ul style="list-style-type: none"> • 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 	<p>All of the features of open source; plus:</p> <ul style="list-style-type: none"> • A commercial license for organizations not able to use AGPL software • Access to priority support
Support	Community forums only	<ul style="list-style-type: none"> • 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

RStudio desktop is provided free for use under the AGPL V3 license. This should be sufficient for most folks and the Commercial version is not needed for the materials we will work with, but if this license is not applicable for you, please investigate RStudio Pro Desktop from RStudio.

There is also a server version of RStudio that can be installed and run on a server allowing users to log in using a web browser and work in an IDE environment almost identical to the desktop version. In some situations, this can be advantageous as it does not require each user to install software on their local machines.

RStudio has also recently launched Rstudio.cloud at <http://www.rstudio.cloud> which allows a person to use RStudio hosted on RStudio's cloud servers. Currently it is possible to use this service (after registering) for free - however that may be subject to change as that version evolves.

Wrap Up

That's it for this time. Go ahead and install R and RStudio and you'll be ready to continue on in this series. We will load additional components (called packages) for R, but that will occur from within RStudio and should require no elevated permissions on your computer to accomplish. Happy snacking!