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R-Powered Excel

Month/Year



R and Excel for Business Analytics

What is R and when would you use it?

R is...

- A programming language



What is R and when would you use it?

R is...

- A programming language
- A statistical package



What is R and when would you use it?

R is...

- A programming language
- A statistical package
- Open-source



What is R and when would you use it?

R is...

- A programming language
- A statistical package
- Open-source

R is not...

- A spreadsheet



What is R and when would you use it?

R is...

- A programming language
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R is not...

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- A database



What is R and when would you use it?

R is...

- A programming language
- A statistical package
- Open-source

R is not...

- A spreadsheet
- A database
- Commercially supported



CRAN: Maintains the “source code..



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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](#)
- [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 (2019-07-05, 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](#)

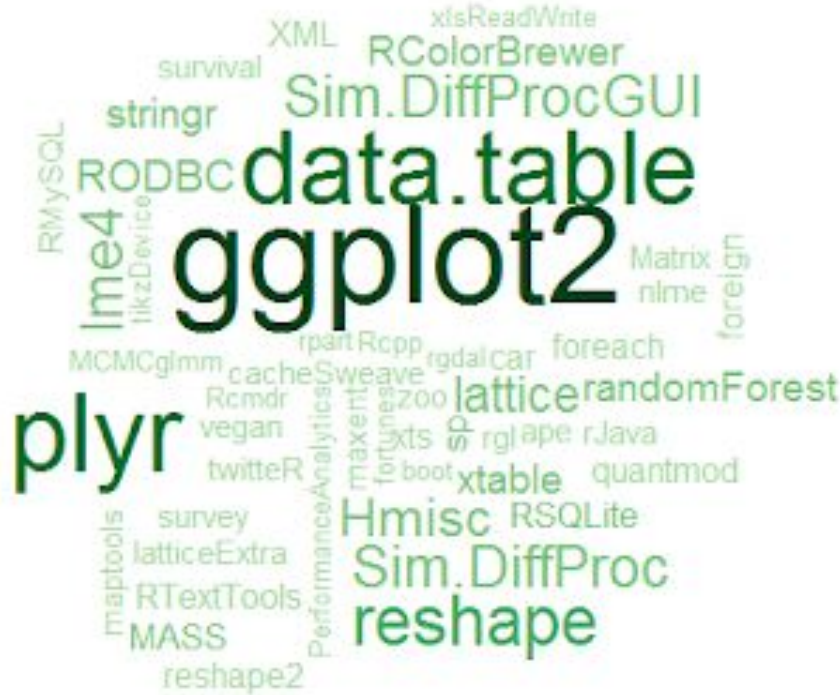
Questions About R

- 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.



Which anyone can build on...





<https://www.r-bloggers.com/the-50-most-used-r-packages/>

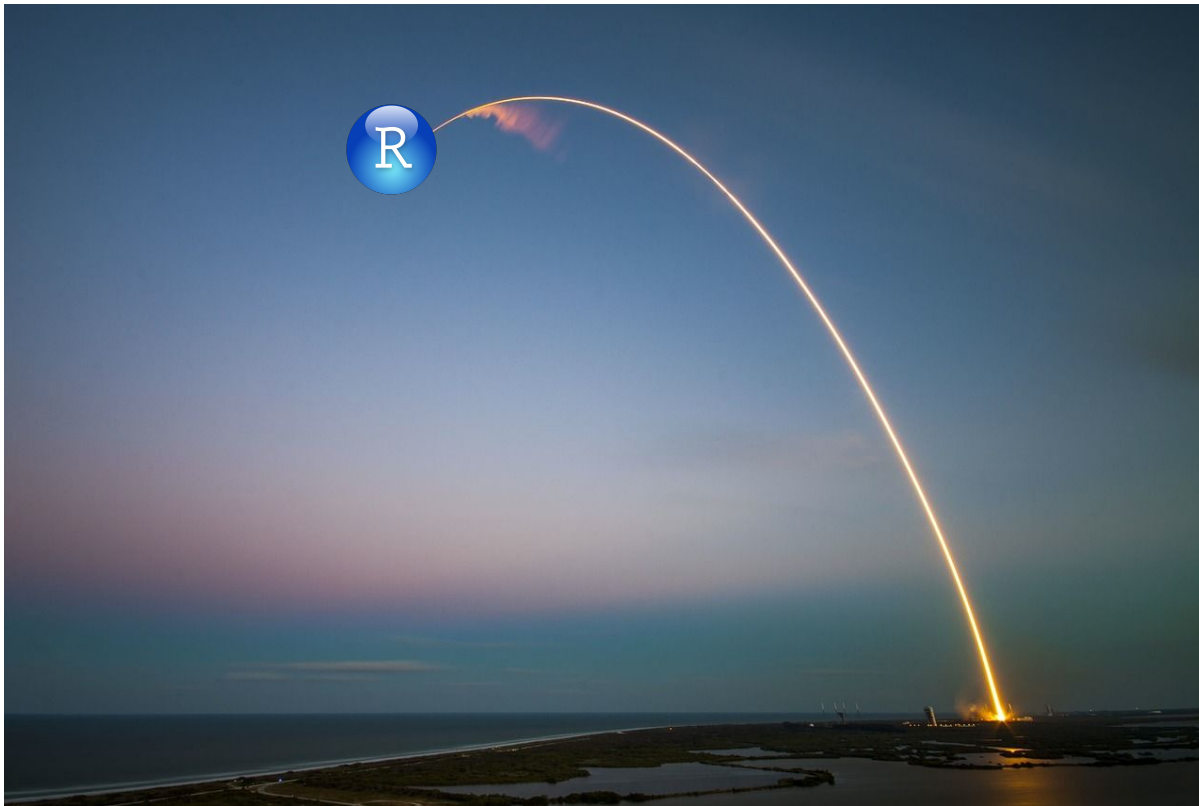


The package two-step

- Install the package
 - `install.packages("tidyverse")`
- Load it before use
 - `library(tidyverse)`



Time to launch RStudio...



install.packages("tidyverse", dependencies = TRUE)

The screenshot shows the RStudio IDE interface. The top bar displays "Your Workspace / Untitled Project" and the user "George Mount". The menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. The toolbar contains icons for creating a new file, opening a file, saving, and navigating to a file/function. The console on the left shows the R version 3.6.0 (2019-04-26) and the "Planting of a Tree" project. The file explorer on the right shows the "Global Environment" and a list of files in the "project" directory.

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins R 3.6.0

Console Terminal x Jobs x

/cloud/project/

R version 3.6.0 (2019-04-26) -- "Planting of a Tree"
Copyright (C) 2019 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

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

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.

> |

Environment History Connections

Import Dataset

Global Environment

Environment is empty

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

Cloud > project

	Name	Size	Modified
	..		
<input type="checkbox"/>	.Rhistory	0 B	Aug 13, 2019, 8:41 AM
<input type="checkbox"/>	project.Rproj	205 B	Aug 13, 2019, 8:41 AM

DJ CRAN spins R playlists:

<https://cran.r-project.org/web/views/>



1. Initialize the taskview package:
 - a. `install.packages("ctv")`
 - b. `library(ctv)`
2. Explore and install the Extreme Value taskview:
 - a. `install.packages("ExtremeValue")`

Drill: Install a taskview



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Questions?

