

# RStudio IDE Cheat Sheet

learn more at [www.rstudio.com](http://www.rstudio.com)



The RStudio IDE is an Integrated Development Environment in R that comes in three versions



## Desktop IDE

A local version of the IDE for your desktop



## Open Source Server

for larger compute resources and remote access



## Professional Server

for teams that share large compute resources, large data, and uniform environments for collaboration

Download all at [www.rstudio.com](http://www.rstudio.com). Each provides the same useful interface:

### Documents and Apps

Open Shiny, R Markdown, knitr, Sweave, LaTeX, .R files and more in Source Pane

Check spelling, Render output, Choose output format, Choose output location, Insert code chunk

Jump to previous chunk, Jump to next chunk, Run selected lines, Publish to server, Show file outline

Access markdown guide at **Help > Markdown Quick Reference**

Jump to chunk, Set knitr options, Run this and all previous code chunks, Run this code chunk

RStudio recognizes that files named **app.R**, **server.R**, **ui.R**, and **global.R** belong to a shiny app

Run app, Choose location to view app, Publish to shinyapps.io or server, Manage publish accounts

### Write Code

Navigate tabs, Open in new window, Save, Find and replace, Compile as notebook, Run selected code

Multiple cursors/column selection with **Alt + mouse drag**

Code diagnostics that appear in the margin. Hover over diagnostic symbols for details.

Syntax highlighting based on your file's extension

Tab completion to finish function names, file paths, arguments, and more.

Multi-language code snippets to quickly use common blocks of code.

Jump to function in file, Change file type

Working Directory, Press **↑** to see command history, Maximize, minimize panes, Drag pane boundaries

### R Support

Import data file with wizard, History of past commands to run/add to source, Display .Rpres slideshows, **File > New File > R Presentation**

Load workspace, Save workspace, Delete all saved objects, Search inside environment

Choose environment to display from list of parent environments, Display objects as list or grid

Displays saved objects by type with short description, View in data viewer, View function source code

Create folder, Upload file, Delete file, Rename file, Change directory

Path to displayed directory, A File browser keyed to your working directory. Click on file or directory name to open.

### RStudio Pro Features

Share Project with Collaborators, Active shared collaborators, Start new R Session in current project, Close R Session in project, Select R Version

**Project System**

**File > New Project**

RStudio saves the call history, workspace, and working directory associated with a project. It reloads each when you re-open a project.

RStudio opens plots in a dedicated Plots pane

Navigate recent plots, Open in window, Export plot, Delete plot, Delete all plots

GUI Package manager lists every installed package

Install, Update, Create reproducible package library for your project

Click to load package with **library()**. Unclick to detach package with **detach()**

Package version installed, Delete from library

### Debug Mode

Open with **debug()**, **browse()**, or a breakpoint. RStudio will open the debugger mode when it encounters a breakpoint while executing code.

Click next to line number to add/remove a breakpoint.

Highlighted line shows where execution has paused

Run commands in environment where execution has paused, Examine variables in executing environment, Select function in traceback to debug

Launch debugger mode from origin of error, Open traceback to examine the functions that R called before the error occurred

Step through code one line at a time, Step into and out of functions to run, Resume execution mode, Quit debug mode

### Version Control with Git or SVN

Turn on at **Tools > Project Options > Git/SVN**

Stage files, Show file diff, Commit staged files, Push/Pull to remote, View History

Added, Deleted, Modified, Renamed, Untracked

Open shell to type commands, current branch

### Package Writing

**File > New Project > New Directory > R Package**

Turn project into package, Enable roxygen documentation with **Tools > Project Options > Build Tools**

Roxygen guide at **Help > Roxygen Quick Reference**

RStudio opens documentation in a dedicated Help pane

Home page of helpful links, Search within help file, Search for help file

Viewer Pane displays HTML content, such as Shiny apps, RMarkdown reports, and interactive visualizations

Stop Shiny app, Publish to shinyapps.io, rpubs, RSConnect, ..., Refresh

**View(<data>)** opens spreadsheet like view of data set

Filter	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
All	All	All	All	All	All
1	5.1	3.5	1.4	0.2	setosa
2					
3					
4					

Filter rows by value or value range, Sort by values, Search for value