

RStudio IDE :: CHEATSHEET



Documents and Apps

Open Shiny, R Markdown, knitr, Sweave, LaTeX, .Rd files and more in Source Pane
 Check spelling, Render output, Choose output format, Configure render options, Insert code chunk, Publish to server
 Jump to previous chunk, Jump to next chunk, Run code, Show file outline, Visual Editor (reverse side)
 Jump to section or chunk, Run all previous code chunks, Run this code chunk, Set knitr chunk options

Access markdown guide at **Help > Markdown Quick Reference**
See reverse side for more on **Visual Editor**

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

Source Editor

Navigate backwards/forwards, Open in new window, Save, Find and replace, Compile as notebook, Run selected code
 Re-run previous code, Source with or w/out Echo or as a Local Job, Show file outline
 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, Run scripts in separate sessions, Maximize, minimize panes
 Ctrl/Cmd + ↑ to see history, R Markdown Build Log, Drag pane boundaries

Tab Panes

Import data with wizard, History of past commands to run/copy, Manage external databases, View memory usage, R tutorials
 Load workspace, Save workspace, Clear R workspace, 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, 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.

Version Control

Turn on at **Tools > Project Options > Git/SVN**
 Added, Deleted, Modified, Renamed, Untracked
 Stage files, Commit staged files, Push/Pull to remote, View History, Current branch
 Show file diff to view file differences
 Open shell to type commands

Debug Mode

Use **debug()**, **browse()**, or a breakpoint and execute your code to open the debugger mode.
 Launch debugger mode from origin of error, Open traceback to examine the functions that R called before the error occurred
 Show Traceback, Rerun with Debug

Package Development

Create a new package with **File > New Project > New Directory > R Package**
 Enable roxygen documentation with **Tools > Project Options > Build Tools**

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

See package information in the **Build Tab**

Install package and restart R, Run devtools::load_all() and reload changes
 Run R CMD check, Customize package build options, Clear output and rebuild, Run package tests

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 Packages, Update Packages, Browse package site, Package version installed, Delete from library
 Click to load package with **library()**. Unclick to detach package with **detach()**.

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, RStudioConnect, ..., Refresh

View(<data>) opens spreadsheet like view of data set
 Filter rows by value or value range, Sort by values, Search for value

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

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





Keyboard Shortcuts

RUN CODE

	Windows/Linux	Mac
Search command history	Ctrl+↑	Cmd+↑
Interrupt current command	Esc	Esc
Clear console	Ctrl+L	Ctrl+L

NAVIGATE CODE

	Windows/Linux	Mac
Go to File/Function	Ctrl+.	Ctrl+.

WRITE CODE

	Windows/Linux	Mac
Attempt completion	Tab or Ctrl+Space	Tab or Ctrl+Space
Insert <- (assignment operator)	Alt+-	Option+-
Insert > or %>% (pipe operator)	Ctrl+Shift+M	Cmd+Shift+M
(Un)Comment selection	Ctrl+Shift+C	Cmd+Shift+C

MAKE PACKAGES

	Windows/Linux	Mac
Load All (devtools)	Ctrl+Shift+L	Cmd+Shift+L
Test Package (Desktop)	Ctrl+Shift+T	Cmd+Shift+T
Document Package	Ctrl+Shift+D	Cmd+Shift+D

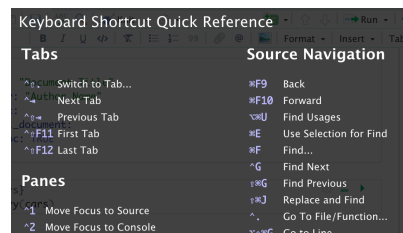
DOCUMENTS AND APPS

	Windows/Linux	Mac
Knit Document (knitr)	Ctrl+Shift+K	Cmd+Shift+K
Insert chunk (Sweave & Knitr)	Ctrl+Alt+I	Cmd+Option+I
Run from start to current line	Ctrl+Alt+B	Cmd+Option+B

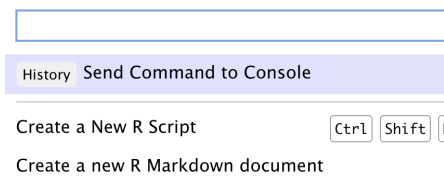
MORE KEYBOARD SHORTCUTS

	Windows/Linux	Mac
Keyboard Shortcuts Help	Alt+Shift+K	Option+Shift+K
Show Command Palette	Ctrl+Shift+P	Cmd+Shift+P

View the Keyboard Shortcut Quick Reference with **Tools > Keyboard Shortcuts** or **Alt/Option + Shift + K**



Search for keyboard shortcuts with **Tools > Show Command Palette** or **Ctrl/Cmd + Shift + P**.



Visual Editor

Annotations in the Visual Editor include:

- Block format
- 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
- Back to Source Editor (front page)
- File outline
- Insert and edit tables
- Insert blocks, citations, equations, and special characters
- More formatting
- Links
- Citations
- Images
- Lists and block quotes
- Clear formatting
- Insert verbatim code
- Insert blocks, citations, equations, and special characters
- Add/Edit attributes
- Run this and all previous code chunks
- Run this code chunk
- Set knitr chunk options
- Jump to chunk or header

RStudio Workbench

WHY RSTUDIO WORKBENCH?

Extend the open source server with a commercial license, support, and more:

- open and run multiple R sessions at once
- tune your resources to improve performance
- administrative tools for managing user sessions
- collaborate real-time with others in shared projects
- switch easily from one version of R to a different version
- integrate with your authentication, authorization, and audit practices
- work in the RStudio IDE, JupyterLab, Jupyter Notebooks, or VS Code

Download a free 45 day evaluation at www.rstudio.com/products/workbench/evaluation/

Share Projects

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.

Annotations in the 'New Project' dialog include:

- Start **new R Session** in current project
- Close R Session in project
- Active shared collaborators
- Name of current project
- Select **R Version**
- Share Project with Collaborators

Run Remote Jobs

Run R on remote clusters (Kubernetes/Slurm) via the Job Launcher

Annotations in the Job Launcher interface include:

- Monitor launcher jobs
- Launch a job
- Run launcher jobs remotely

