

Brief introduction to R

Martín Brun

Public Sector Economics
Faculty of Economics and Business Studies
April 2021

Introduction

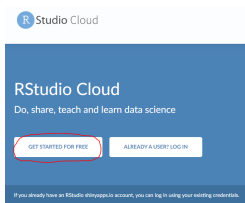
First steps

Two options

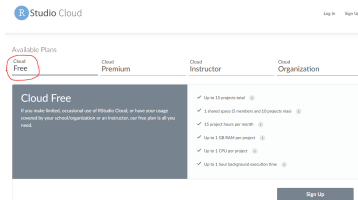
- Use R online: [RStudio cloud \(link\)](#)
 - Good for **learning**
 - Not recommended for **working**
- Install R into your computer: [RStudio \(link\)](#)
 - **Highly recommended**
 - Allows to gradually adjust to your preferences

Introduction

First steps - Online



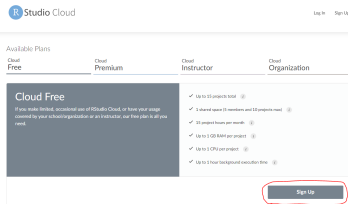
Step 1



Step 2

Introduction

First steps - Online



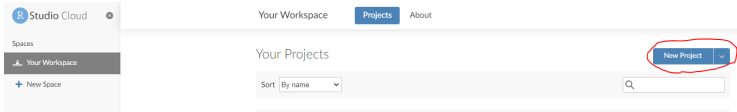
Step 3

You can register as a new user, use your Google user, or use your Github user

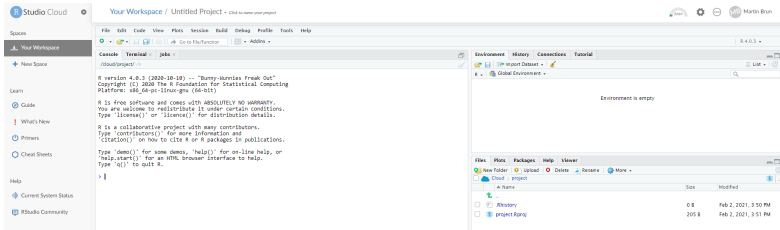
Introduction

First steps - Online

After registration, you enter the platform:



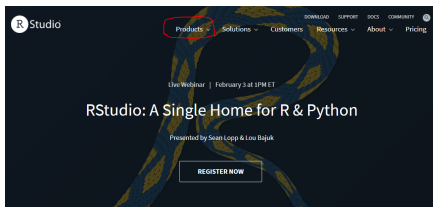
Step 4



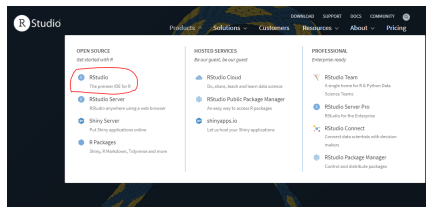
Ready to Start!

Introduction

First steps - Desktop



Step 1



Step 2

Introduction

First steps - Desktop



Products ▾ Solutions ▾ Customers Resources ▾ About ▾ Pricing

DOWNLOAD SUPPORT DOCS COMMUNITY

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, Red Hat/CentOS, and SUSE Linux).


Step 3

There are two versions of RStudio:



RStudio Desktop

Run RStudio on your desktop



RStudio Server

Centralize access and computation

Step 4

Introduction

First steps - Desktop

RStudio Desktop	
Open Source Edition	RStudio Desktop Pro
<ul style="list-style-type: none">Access RStudio locallyScript highlighting, code completion, and smart indentationExecute R code directly from the source editorCapable jump to function definitionsView content changes in real time with the Visual Map EditorEfficiently manage multiple working directories using projectsIntegrated R shiny web developmentInteractive debugging to diagnose and fix errorsExtensive package development tools	<ul style="list-style-type: none">All of the features of open source plus:A commercial license for organizations not able to use AGPL softwareAccess to priority supportRStudio Professional ServicesConnect directly to your RStudio Server Pro instance remotely
Support	Community forums only
License	AGPL v3
Pricing	Free
Download RStudio Desktop	
Download RStudio Desktop Pro Trial	
Purchase Contact Sales	

Step 5

RStudio Desktop

Open Source License

Free[DOWNLOAD](#)[Learn more](#)

RStudio Desktop Pro

Commercial License

\$995

/year

[BUY](#)[Learn more](#)

RStudio Server

Open Source License

Free[DOWNLOAD](#)[Learn more](#)

RStudio Server Pro

Commercial License

\$4,975

/year

(5 Named Users)

[BUY](#)[Evaluation](#) | [Learn more](#)

Step 6

Introduction

First steps - Desktop

First, we will install the R language

RStudio Desktop 1.4.1103 - [Release Notes](#)

1. Install R. RStudio requires R 3.0.1+.
2. Download RStudio Desktop. Recommended for your system:



Requires Windows 10/8/7 (64-bit)

Step 7

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.

Step 8

Introduction

First steps - Desktop

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 \geq 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.

Step 9

R-4.0.3 for Windows (32/64 bit)

[Download R 4.0.3 for Windows](#) (85 megabytes, 32/64 bit)

[Installation and other instructions](#)

[New features in this version](#)

Step 10

Introduction

First steps - Desktop

Second, we will install the R **environment**

RStudio Desktop 1.4.1103 - [Release Notes](#)

1. Install R. RStudio requires R 3.0.1+.
2. Download RStudio Desktop. Recommended for your system:



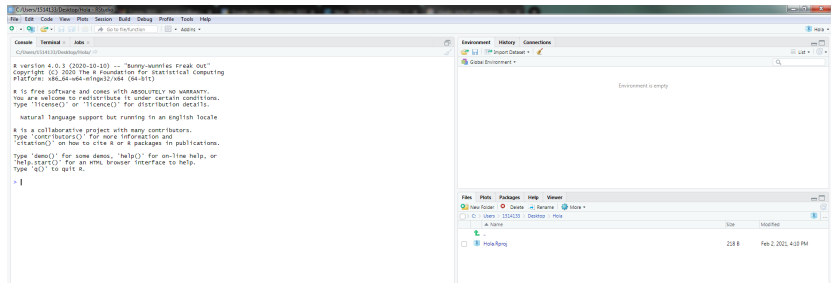
Requires Windows 10/8/7 (64-bit)

Step 11

Introduction

First steps - Desktop

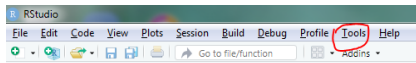
After all installations, open RStudio



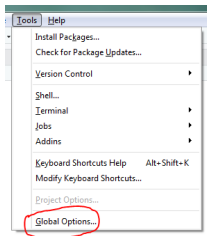
Ready to Start!

Do your eyes a favor!

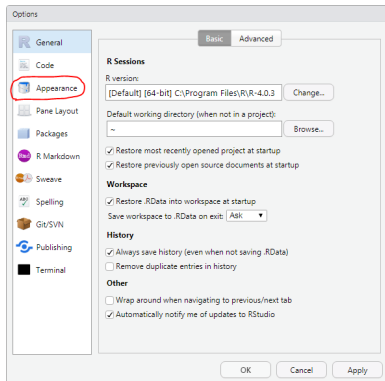
Use a Dark Mode



Step 1



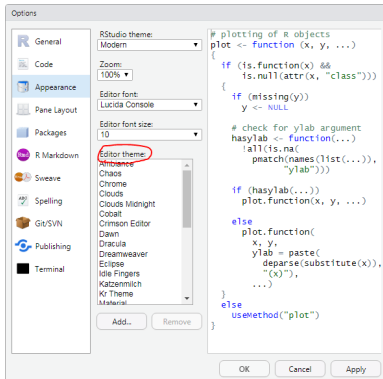
Step 2



Step 3

Introduction

First steps - Online



You can choose among many dark mode themes.

I recommend: "Idle Fingers" "):