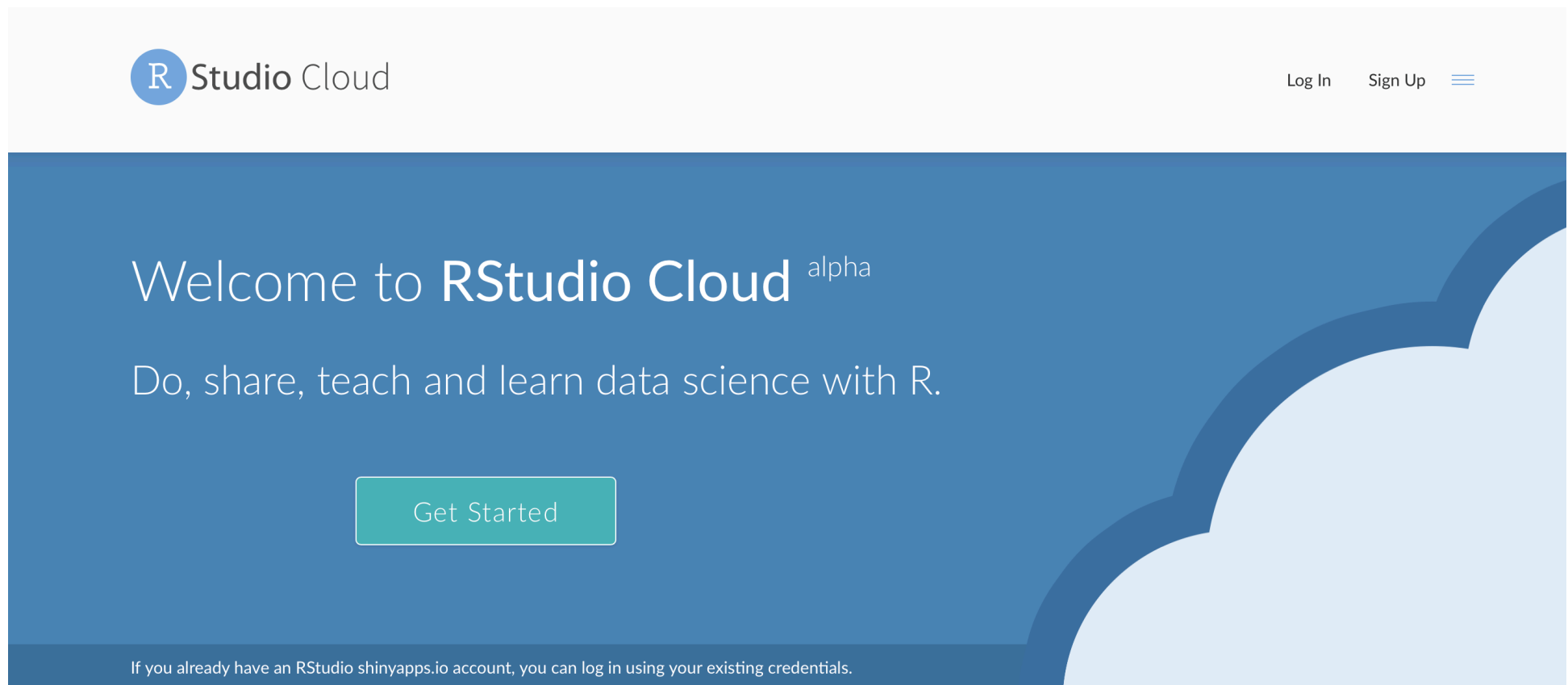


Setting up with RStudio Cloud: 7 Steps

Jim Duggan

(1) Create your account on <https://rstudio.cloud> and login



(2) In your workspace, create a project

☰ Your Workspace

Projects

Info

Your Projects

MyDSORR

Created Sep 11, 2019 9:26 PM



R Course

Created Aug 1, 2019 4:23 PM



New Project



+ New Project



New Project from Git Repo

New Project



Delete



Move

(3) Name the project (e.g. MySmartGrid)

The screenshot displays the RStudio IDE interface. At the top, the title bar reads "Your Workspace / MySmartGrid". The top menu bar includes "File", "Edit", "Code", "View", "Plots", "Session", "Build", "Debug", "Profile", "Tools", and "Help". Below the menu bar, there is a toolbar with icons for creating a new file, opening a file, saving, and a search bar labeled "Go to file/function". The right side of the toolbar shows "Addins" and the R version "R 3.6.0".

The main workspace is divided into two panes. The left pane, titled "Console", shows the R startup message:

```
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 'license()' 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.

> |
```

The right pane is titled "Environment" and shows "Global Environment" with a search bar. Below this, it states "Environment is empty". At the bottom of the right pane, there is a "Files" pane showing the project structure:

	Name	Size	Modified
	..		
<input type="checkbox"/>	.Rhistory	0 B	Mar 17, 2020, 9:09 AM
<input type="checkbox"/>	project.Rproj	205 B	Mar 17, 2020, 9:09 AM

(4) Run some R code in Console

≡ Your Workspace / MySmartGrid

File Edit Code View Plots Session Build Debug Profile Tools Help

+ Go to file/function Addins R 3.6.0

Console Terminal Jobs

/cloud/project/

```
>
>
> d <- faithful
>
> summary(d)
  eruptions      waiting 
Min.   :1.600   Min.   :43.0 
1st Qu.:2.163   1st Qu.:58.0 
Median :4.000   Median :76.0 
Mean   :3.488   Mean   :70.9 
3rd Qu.:4.454   3rd Qu.:82.0 
Max.   :5.100   Max.   :96.0 
>
> head(d)
  eruptions waiting
1    3.600      79
2    1.800      54
3    3.333      74
4    2.283      62
5    4.533      85
6    2.883      55
> tail(d)
  eruptions waiting
267    4.750      75
268    4.117      81
269    2.150      46
270    4.417      90
271    1.817      46
272    4.467      74
> plot(d$eruptions,d$waiting)
> |
```

Environment History Connections

Import Dataset

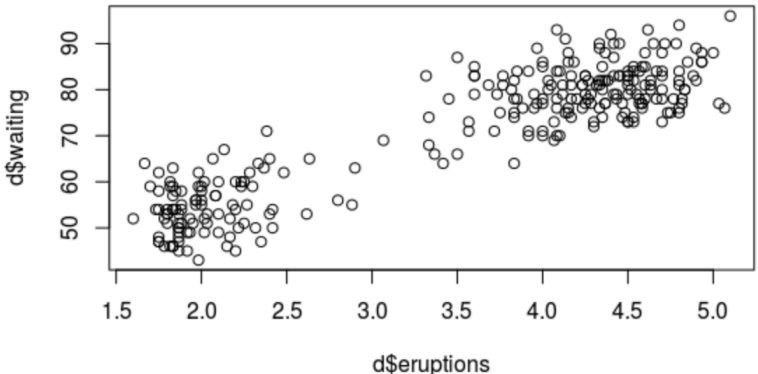
Global Environment

Data

d 272 obs. of 2 variables

Files Plots Packages Help Viewer

Zoom Export Publish



A scatter plot showing the relationship between eruption duration (d\$eruptions) on the x-axis and waiting time (d\$waiting) on the y-axis. The x-axis ranges from 1.5 to 5.0, and the y-axis ranges from 50 to 90. The plot displays a positive correlation, with data points clustered into two main groups: one at lower eruption durations (around 1.5 to 2.5) and lower waiting times (around 40 to 70), and another at higher eruption durations (around 3.5 to 5.0) and higher waiting times (around 70 to 90). The data points are represented by open circles.

(5) Install required packages

The screenshot shows the RStudio Cloud interface. The top bar includes the RStudio Cloud logo, the workspace name 'Your Workspace / R Course', and user information 'JD Jim Duggan'. The left sidebar contains navigation links for Spaces, Your Workspace, New Space, Learn (Guide, What's New, Primers, Cheat Sheets, Feedback and Questions), and Info (Terms and Conditions, System Status).

The main editor area shows the 'Tools' menu with 'Install Packages...' selected. The console displays the following text:

```
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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.

> x <- 1:100
> y <- sin(x)
> plot(x,y,type = "l")
>
```

The right sidebar shows the 'Global Environment' with a table of variables:

Variable	Value
int	[1:100] 1 2 3 4 5 6 7 8 9 10 ...
num	[1:100] 0.841 0.909 0.141 -0.757 -0.959 ...

The bottom right pane shows a plot of the sine wave, with the x-axis labeled 'x' and the y-axis labeled 'y'.

(6) For example, ggplot2

The screenshot displays the R Studio Cloud interface. On the left, a sidebar contains navigation links: Spaces, Your Workspace, New Space, Learn, Guide, What's New, Primers, Cheat Sheets, Feedback and Questions, Info, Terms and Conditions, and System Status. The main workspace area is titled 'Your Workspace / R Course' and shows the R console output. The console displays the R version (3.6.0), copyright information, and a series of commands and their outputs: `> x <- 1:100`, `> y <- sin(x)`, and `> plot(x,y,type = "l")`. A dialog box titled 'Install Packages' is open, showing the 'Install from' dropdown set to 'Repository (CRAN, RSPM)', the 'Packages' field containing 'ggplot2', and the 'Install to Library' dropdown set to '/home/rstudio-user/R/x86_64-pc-linux-gnu-library/3.6 [Default]'. The 'Install dependencies' checkbox is checked. The 'Install' button is highlighted. In the background, a plot of a sine wave is visible, with the x-axis ranging from 0 to 100 and the y-axis ranging from -1.0 to 1.0.

R version 3.6.0 (2019-04-26) -- "Planting of a Tree"
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Platform: x86_64-pc-linux-gnu (64-bit)

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'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

```
> x <- 1:100
> y <- sin(x)
> plot(x,y,type = "l")
>
```

Install Packages

Install from: [? Configuring Repositories](#)
Repository (CRAN, RSPM)

Packages (separate multiple with space or comma):
ggplot2

Install to Library:
/home/rstudio-user/R/x86_64-pc-linux-gnu-library/3.6 [Default]

☒ Install dependencies

Install Cancel

Viewer

Export Publish

Plot of a sine wave (y = sin(x)) for x from 0 to 100.

(7) Sample Packages required

Package	Purpose
ggplot2	Produce graphics for data
dplyr	Analysis of data held in tibbles/data frames
tidyr	Tidy data in order to make it suitable for processing
readxl	Read Excel worksheets into R (as tibbles)