

# R Installation

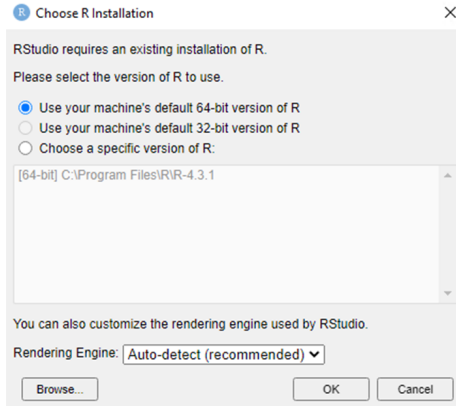
The following instructions demonstrate how to install R, RStudio and R packages for Windows.

## Installing R

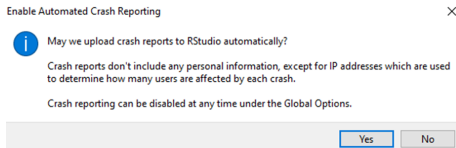
- ❶ To download R, visit <https://www.r-project.org/>
  - ❶ Click on the [CRAN](#) hyperlink below the **Download** heading.
  - ❷ Select an appropriate mirror based on where you live.
  - ❸ Click on [Download R for Windows](#).
  - ❹ Click on [base](#).
  - ❺ Click on [Download R-<version> for Windows](#).
    - ★ <version> simply denotes since the current version of R available for download. For example, this might be R-4.3.1 for Windows.
  - ❻ Run the executable to install R.
    - ★ It is recommended to use the default settings provided by the installer

## Installing RStudio

- ② To download RStudio, visit <https://posit.co/downloads/>
  - ① Scroll down on this page until you see the heading **Download RStudio**.
  - ② Click the download button for **RStudio Desktop Open Source Edition (AGPL v3)**.
  - ③ This opens a new tab. Click the download button under the heading **2: Install RStudio**.
  - ④ Run the downloaded executable to install RStudio. Once again, use the default settings.
  - ⑤ Run RStudio once it has been installed.
  - ⑥ It should ask which R Installation you wish to use. Choose the option **Use your machines default 64-bit version of R** and click **OK**.



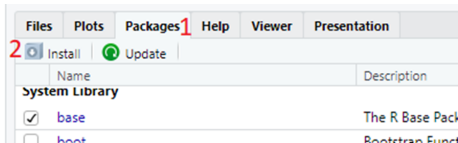
- For the automated crash reporting, choose **Yes** or **No** depending on which you prefer.



## Installing R packages in RStudio

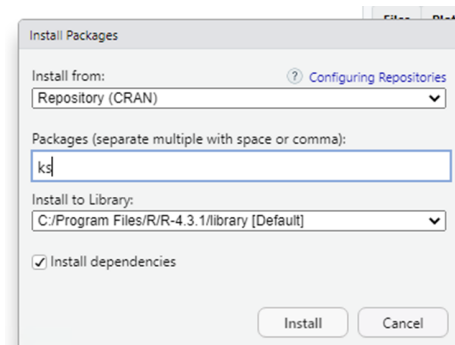
There are many ways to instal packages in R. One can do so via the R console, the Windows R GUI, or within RStudio. We recommend to use RStudio to install packages due the simplicity of it.

- 1 Open a new RStudio session.
- 2 In the bottom right panel of the RStudio GUI, click on the **Packages** tab (1), and click **Install** (2).



- Alternatively, in the menu bar of RStudio, click **Tools** and click **Install Packages. . .**

- 3 Within the Install Packages window, type `ks`, and click the Install button.



- Always check **Install dependencies**, otherwise packages may fail to install.

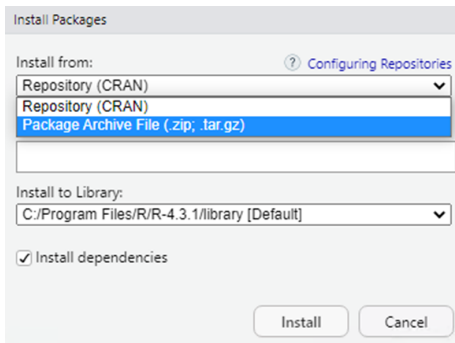
## Installing R packages from files

Alternatively, if you do not wish to install a package through RStudio or a package is not on CRAN, was archived or not available for your version of R, you can install packages locally.

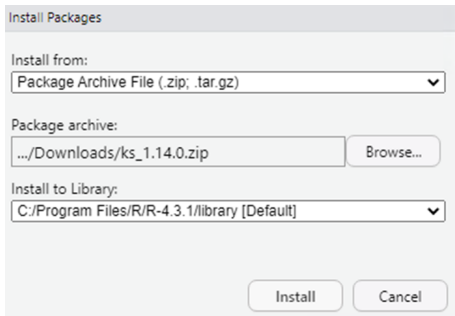
We will demonstrate how it can be done in RStudio, although using the above RStudio method if a package is available on CRAN is recommended.

Using the CRAN page for the **ks** package, download **r-release** Windows binaries (or macOS if you are on Mac). Do not download the Package source file as it will attempt to build the package from scratch, and will most likely fail.

- 1 Open the install packages window once again.
- 2 Change the option for Install from: from CRAN to Package Archive File.



- 8 Click on the Browse button to select an archive file to install from.



4 Click on **Install**.

Once a package is installed, it can be loaded into the R environment by using the command **library(package\_name)**. For example, **library(ks)**. This needs to be done every time a new R session is opened.