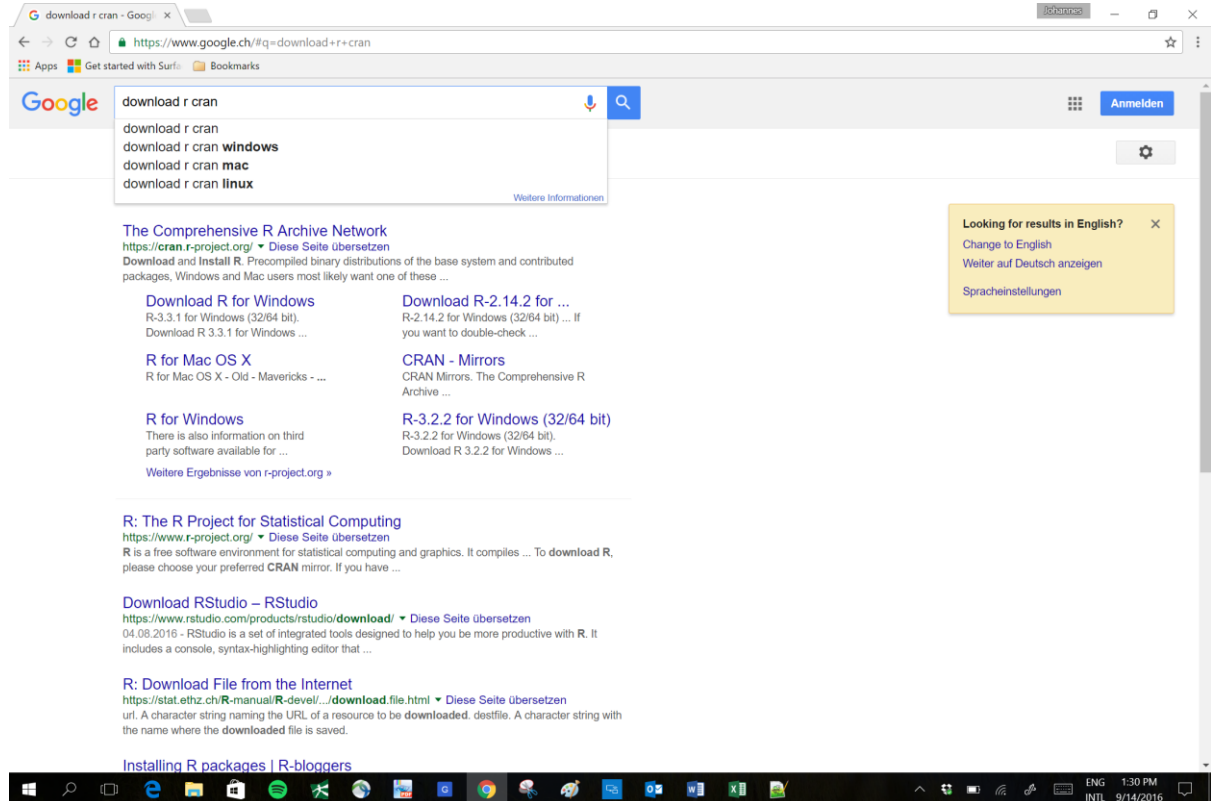


How to install R on Windows 10 (Version 3.3.1, September 2016)

Open Google in a browser (e.g. Chrome) and type the search words as shown below. Then click on “Download R for Windows”.



The following screen appears. Click on “Download R 3.3.1 for Windows”.

The screenshot shows a web browser window with the address bar displaying <https://cran.r-project.org/bin/windows/base/>. The page title is "R-3.3.1 for Windows (32/64 bit)". The main content area features a prominent link: [Download R 3.3.1 for Windows](#) (70 megabytes, 32/64 bit). Below this link are two smaller links: [Installation and other instructions](#) and [New features in this version](#). A paragraph of text follows: "If you want to double-check that the package you have downloaded exactly matches the package distributed by R, you can compare the [md5sum](#) of the .exe to the [true fingerprint](#). You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available." Below this is a section titled "Frequently asked questions" with three bullet points: [Does R run under my version of Windows?](#), [How do I update packages in my previous version of R?](#), and [Should I run 32-bit or 64-bit R?](#). A note states: "Please see the [R FAQ](#) for general information about R and the [R Windows FAQ](#) for Windows-specific information." Another section titled "Other builds" contains two bullet points: "Patches to this release are incorporated in the [r-patched snapshot build](#)." and "A build of the development version (which will eventually become the next major release of R) is available in the [r-devel snapshot build](#)." A final note mentions: "Note to webmasters: A stable link which will redirect to the current Windows binary release is [<CRAN_MIRROR>:bin/windows/base-release.htm](#)." At the bottom, it says "Last change: 2016-06-21, by Duncan Murdoch".

https://cran.r-project.org/bin/windows/base/rw-faq.html#What_0027s_the_best_way_to_upgrade_003f

This downloads an R-3.3.1-win.exe installation file, as you see in the lower left corner of the Chrome browser.

This screenshot is identical to the one above, showing the R Project website for Windows downloads. It includes the same browser window, page title, download link, instructions, frequently asked questions, other builds section, and footer information.

The screenshot shows a Windows taskbar at the bottom of the screen. In the taskbar, there is a file named "R-3.3.1-win.exe" with a size of 20,279.2 KB and a status of "12 secs left". The taskbar also shows various application icons on the left and system tray icons on the right, including the clock showing 1:32 PM on 9/14/2016.

Click on the .exe installation file and choose “Open”.

The screenshot shows a web browser window with the URL <https://cran.r-project.org/bin/windows/base/>. The page title is "R-3.3.1 for Windows (32/64 bit)". It features a download button for "Download R 3.3.1 for Windows (70 megabytes, 32/64 bit)" with links for "Installation and other instructions" and "New features in this version". Below this, a paragraph explains how to verify the download using md5sum and true fingerprint. A "Frequently asked questions" section lists three questions about Windows compatibility, updates, and bit versions. A note directs users to the R FAQ and Windows FAQ. An "Other builds" section mentions patches and development versions. A footer note provides a stable link to the current Windows binary release and the last change date: 2016-06-21, by Duncan Murdoch.



Allow the app to make changes to your computer, in case you are asked. As an installation language, I strongly suggest English. If you need to google what do do with error messages, you will get lots more results in English than in German.

This screenshot is similar to the first one, showing the R project website. However, a "Select Setup Language" dialog box is overlaid on the page. The dialog box has a title bar, a close button, and a message: "Select the language to use during the installation:". It features a dropdown menu with "English" selected, and "OK" and "Cancel" buttons. The background content of the website is partially visible behind the dialog box.



Choose “Next”.

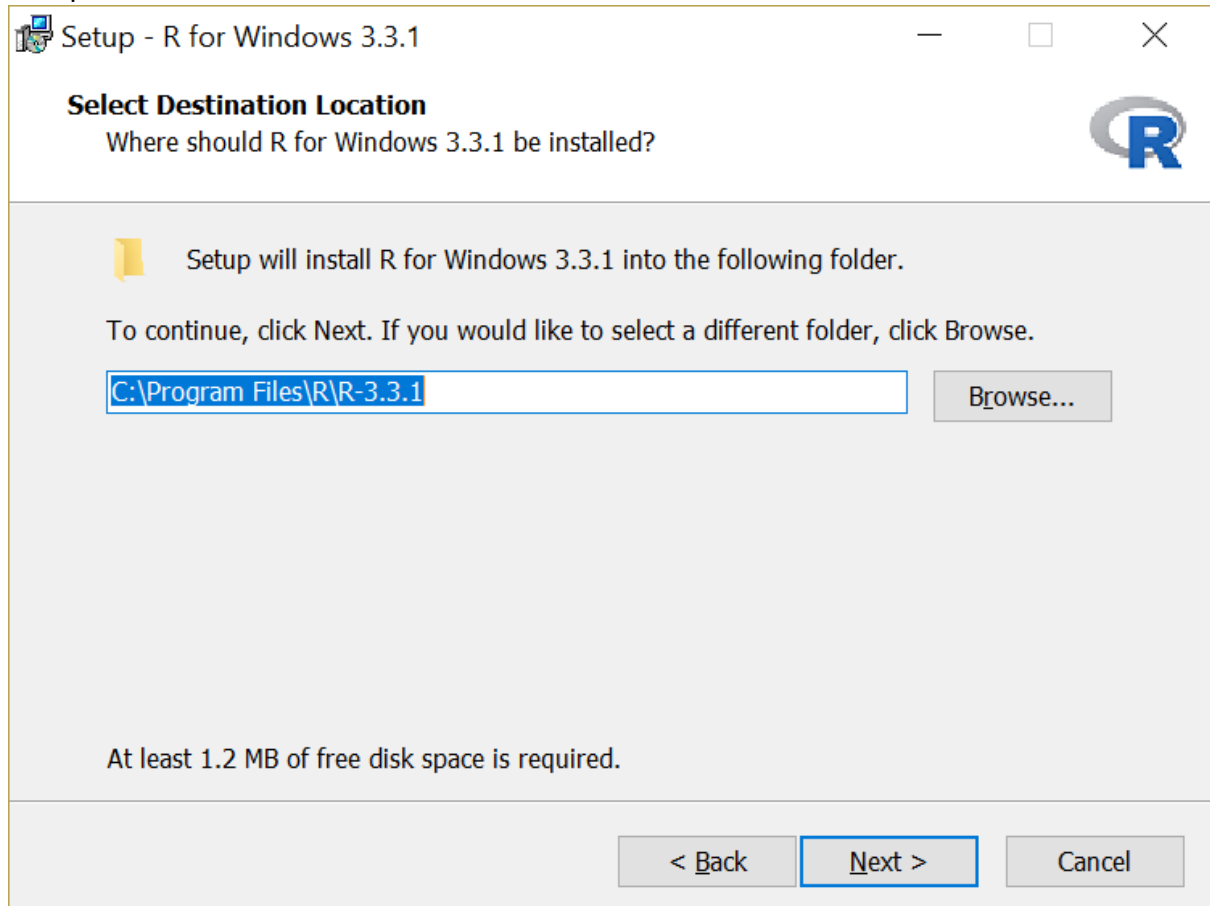
The screenshot shows a web browser window at <https://cran.r-project.org/bin/windows/base/>. The page title is "R-3.3.1 for Windows (32/64 bit)". It contains links for "Download R 3.3.1 for Windows (70 megabytes, 32/64 bit)", "Installation and other instructions", and "New features in this version". Below these links, there is a paragraph about double-checking the package and a list of FAQs. A "Setup - R for Windows 3.3.1" window is overlaid on the page. The window has a blue background with a white R logo and the text "Welcome to the R for Windows 3.3.1 Setup Wizard". It says "This will install R for Windows 3.3.1 on your computer. It is recommended that you close all other applications before continuing. Click Next to continue, or Cancel to exit Setup." At the bottom of the window are "Next >" and "Cancel" buttons.



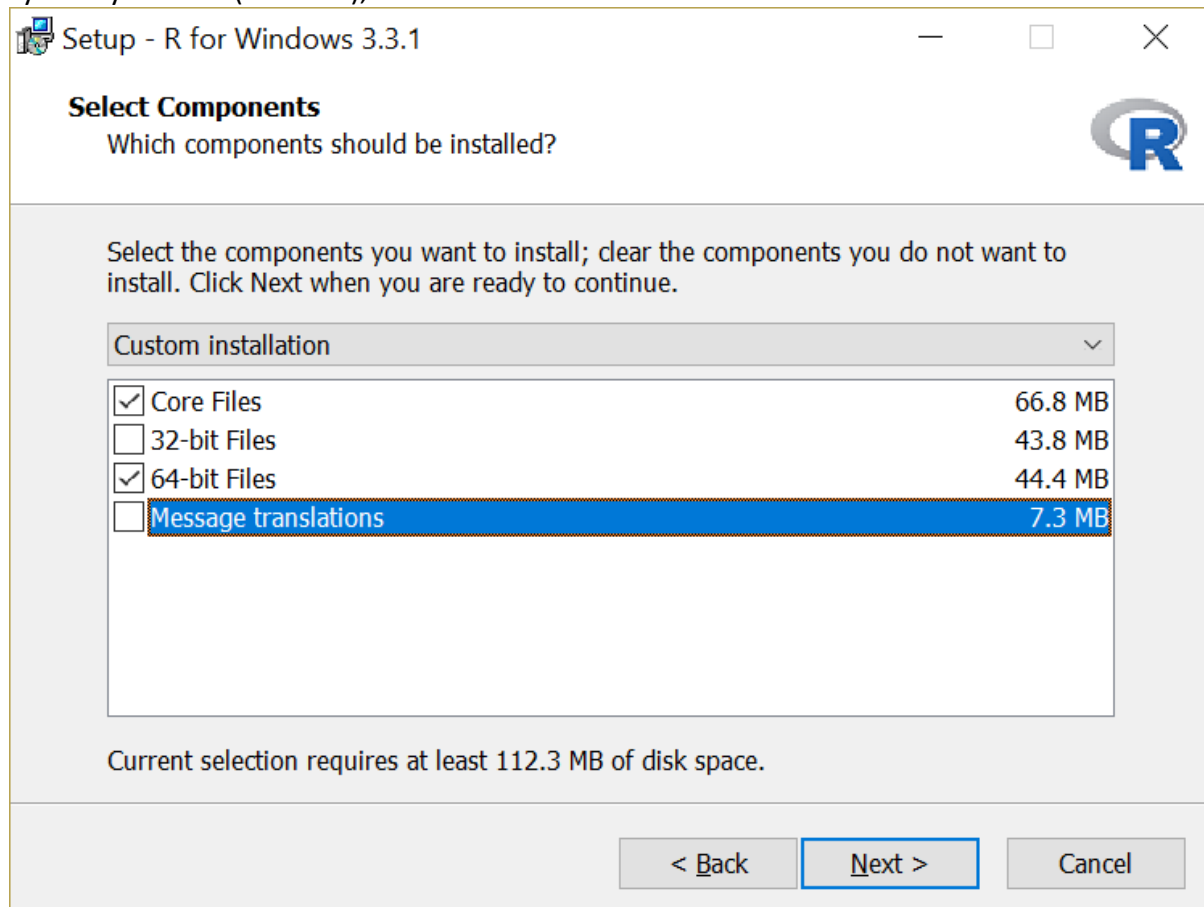
“Next”...

The screenshot shows the "Setup - R for Windows 3.3.1" window. The window has a title bar with the R logo and the text "Setup - R for Windows 3.3.1". Below the title bar is a section titled "Information" with the text "Please read the following important information before continuing." and the R logo. The main area of the window contains the text "When you are ready to continue with Setup, click Next." followed by a scrollable text box containing the "GNU GENERAL PUBLIC LICENSE Version 2, June 1991". The license text includes the copyright information for the Free Software Foundation, Inc. and states that everyone is permitted to copy and distribute verbatim copies of the license document, but changing it is not allowed. Below the license text is the "Preamble" section, which starts with "The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to". At the bottom of the window are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a blue border.

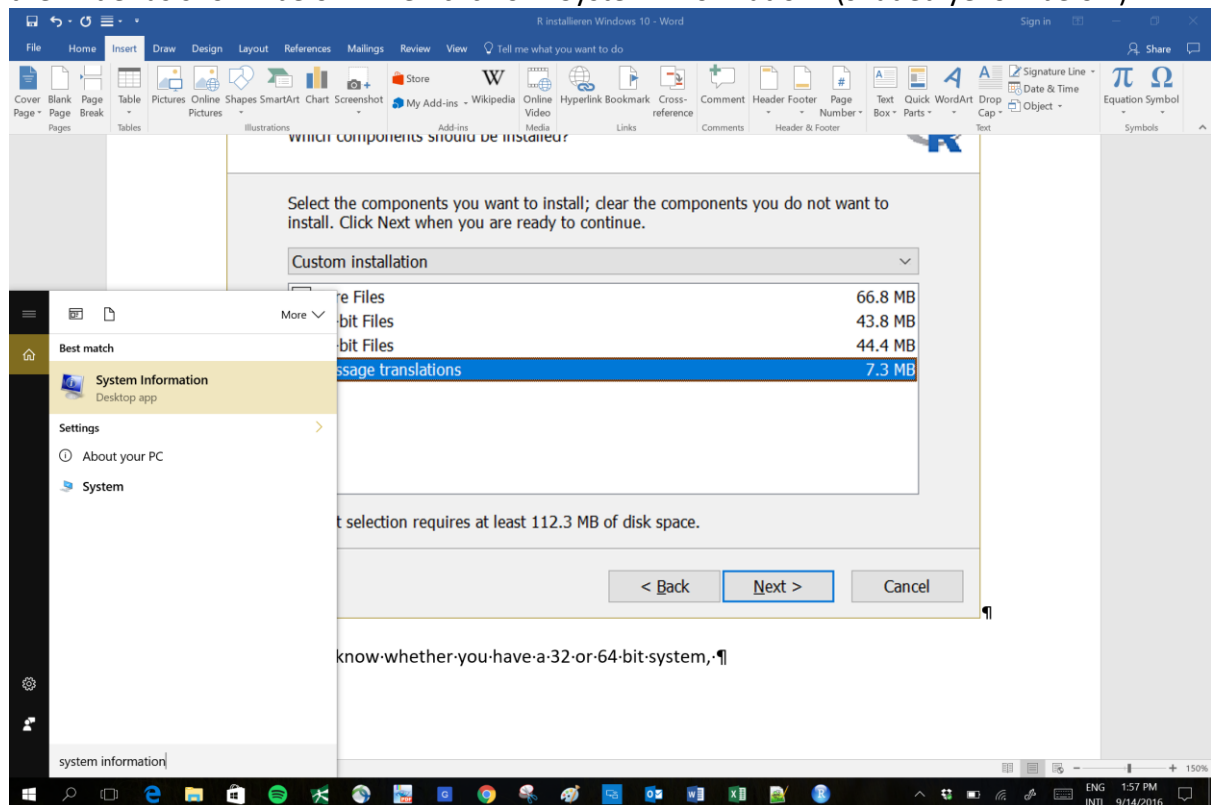
Accept the default installation location.



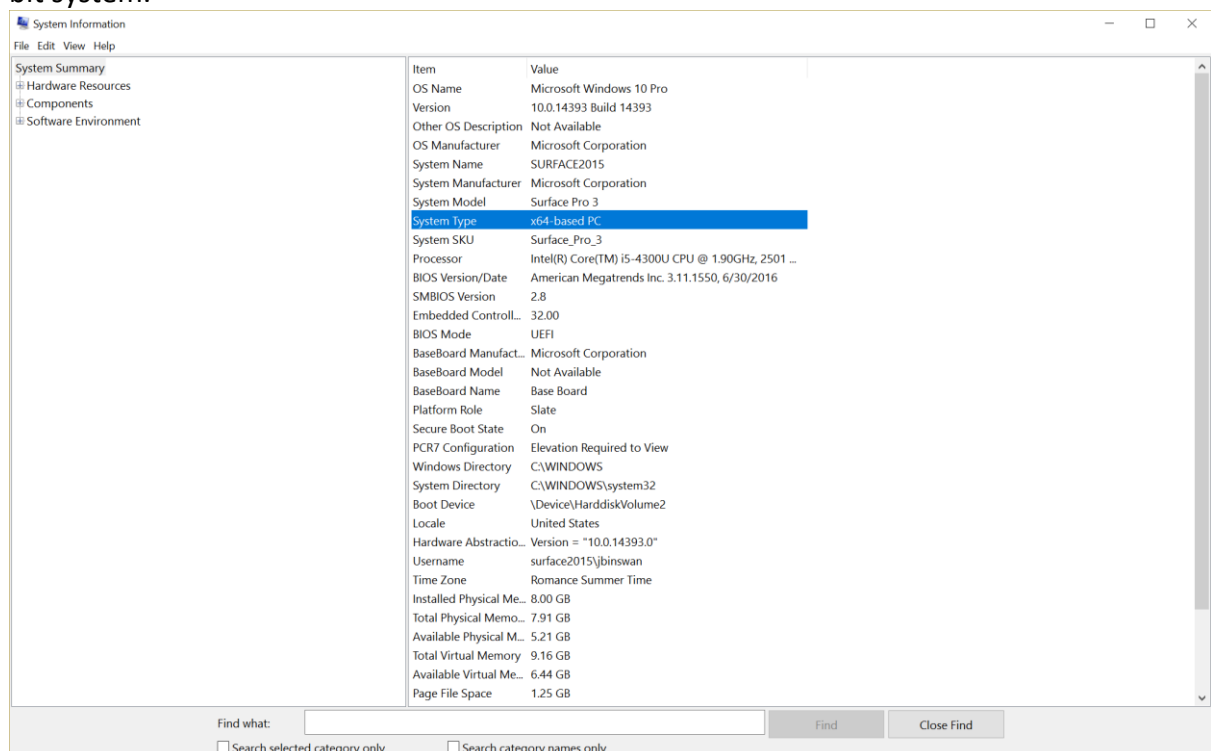
I have a 64-bit system, so I do not install the 32-bit Files. Also, I do not want message translations (into German), they make googling errors harder. If you do not know what system you have (64 or 32), read on below...



If you do not know whether you have a 32- or 64-bit system, type “system information” into the finder as shown below. Then click on “System information” (shaded yellow below).

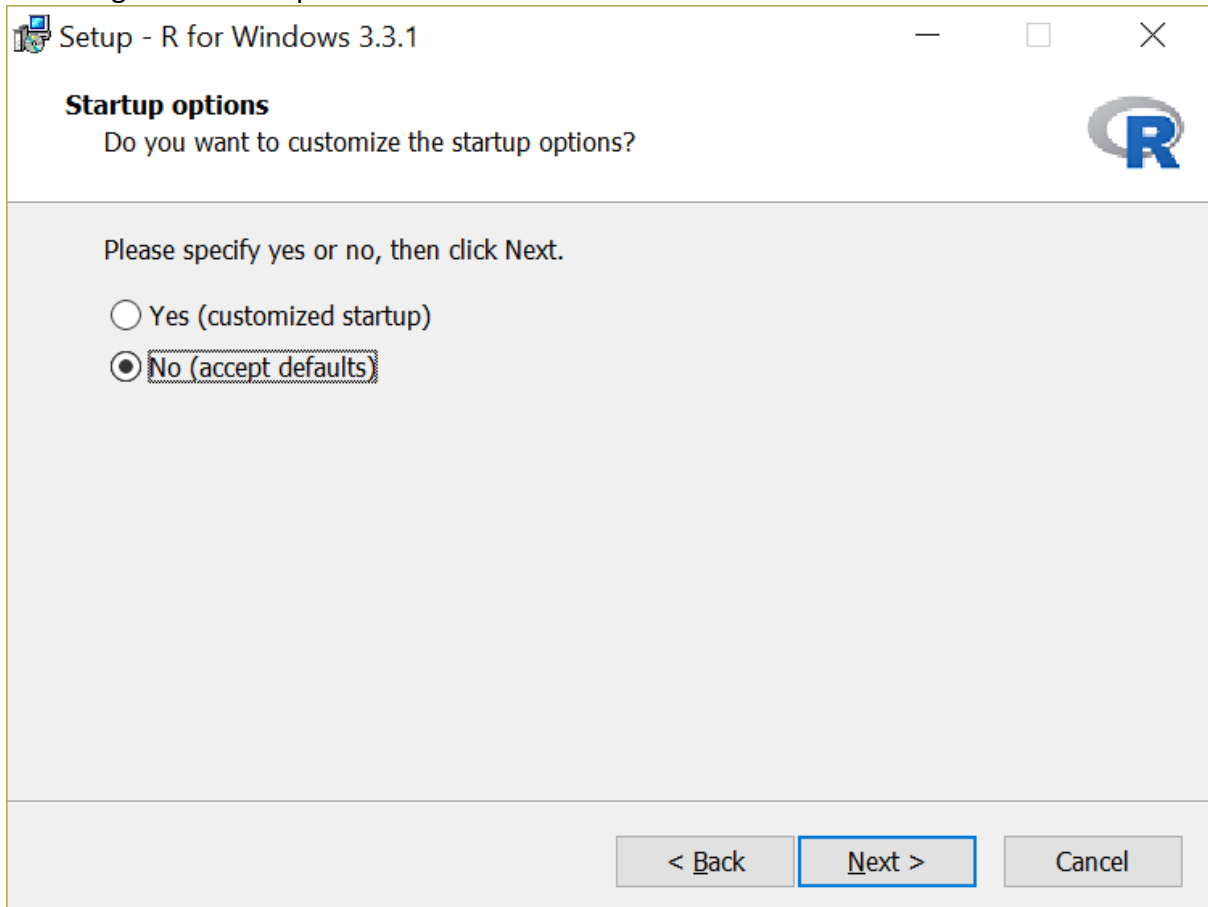


Under “System Type”, I get x64, which means 64 bit. If you see x84 instead, you have a 32-bit system.



If you have a 32-bit version, then check the 32-bit Files on the screen shown above, and uncheck 64.

Now we go back to the installation. After choosing the files you want to install, you get the following screen. Accept the defaults.



Setup - R for Windows 3.3.1

Startup options

Do you want to customize the startup options?

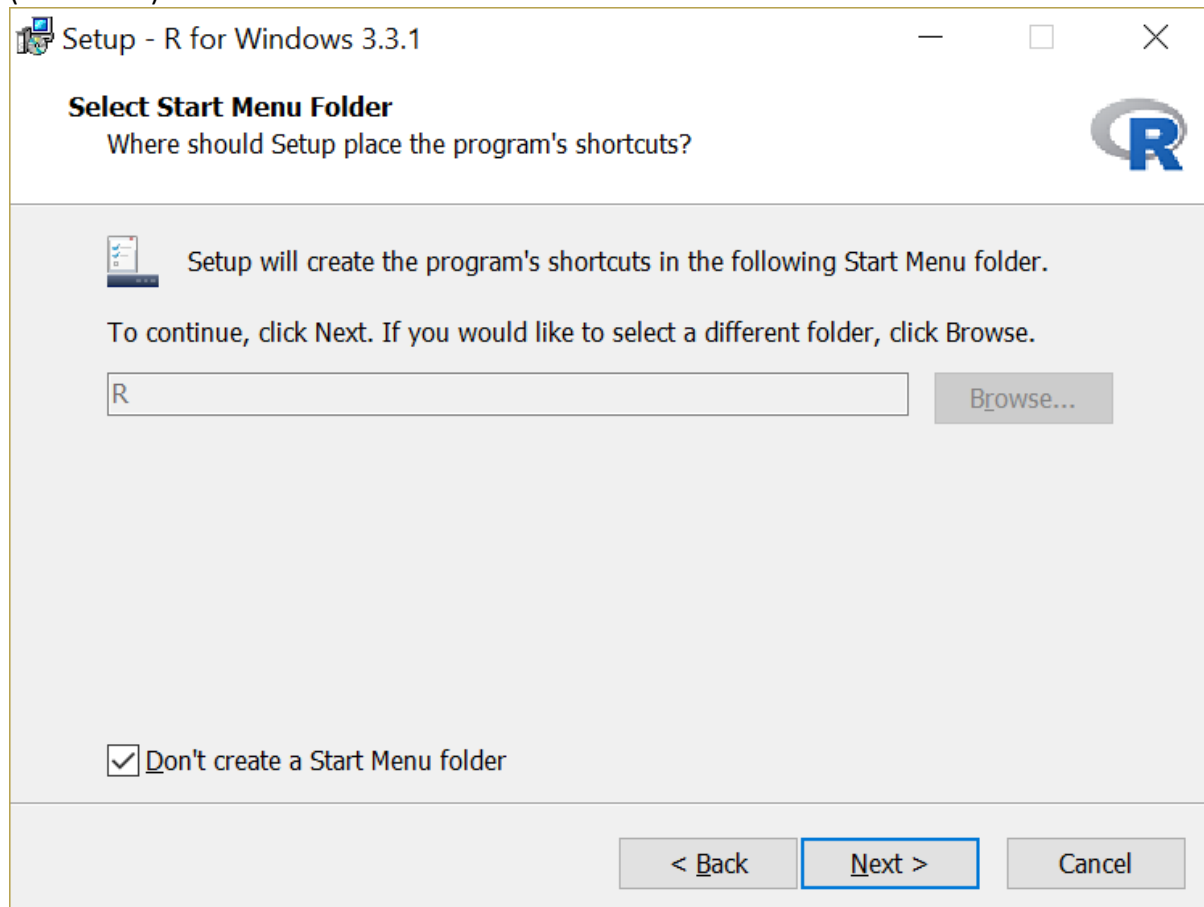
Please specify yes or no, then click Next.

☐ Yes (customized startup)

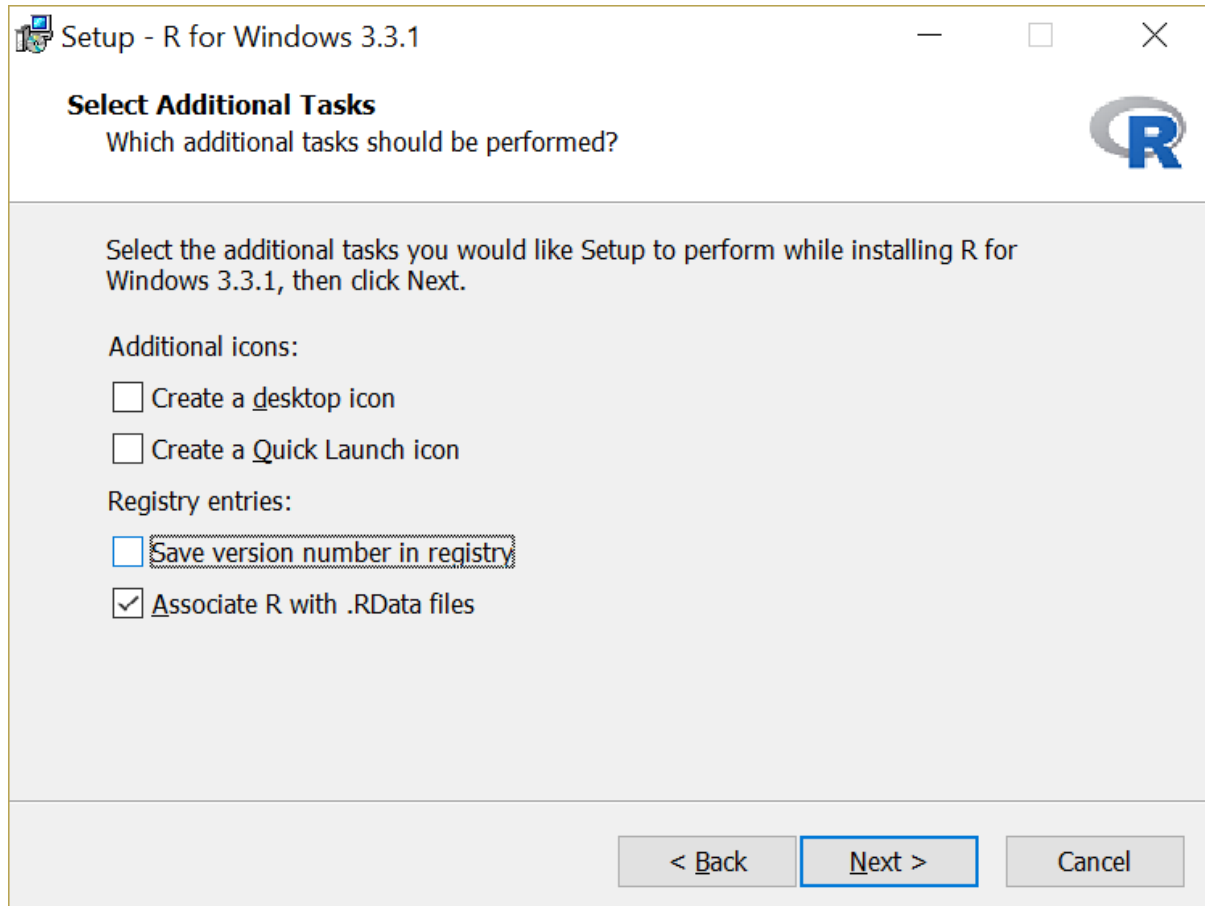
☒ No (accept defaults)

< Back Next > Cancel

If you want to create a shortcut in the start menu, you can choose to do so. I don't want it. The reason is that we will almost never use R directly. Instead, we will work with RStudio (see below).



Check the boxes as shown below.



Setup - R for Windows 3.3.1

Select Additional Tasks

Which additional tasks should be performed?

Select the additional tasks you would like Setup to perform while installing R for Windows 3.3.1, then click Next.

Additional icons:

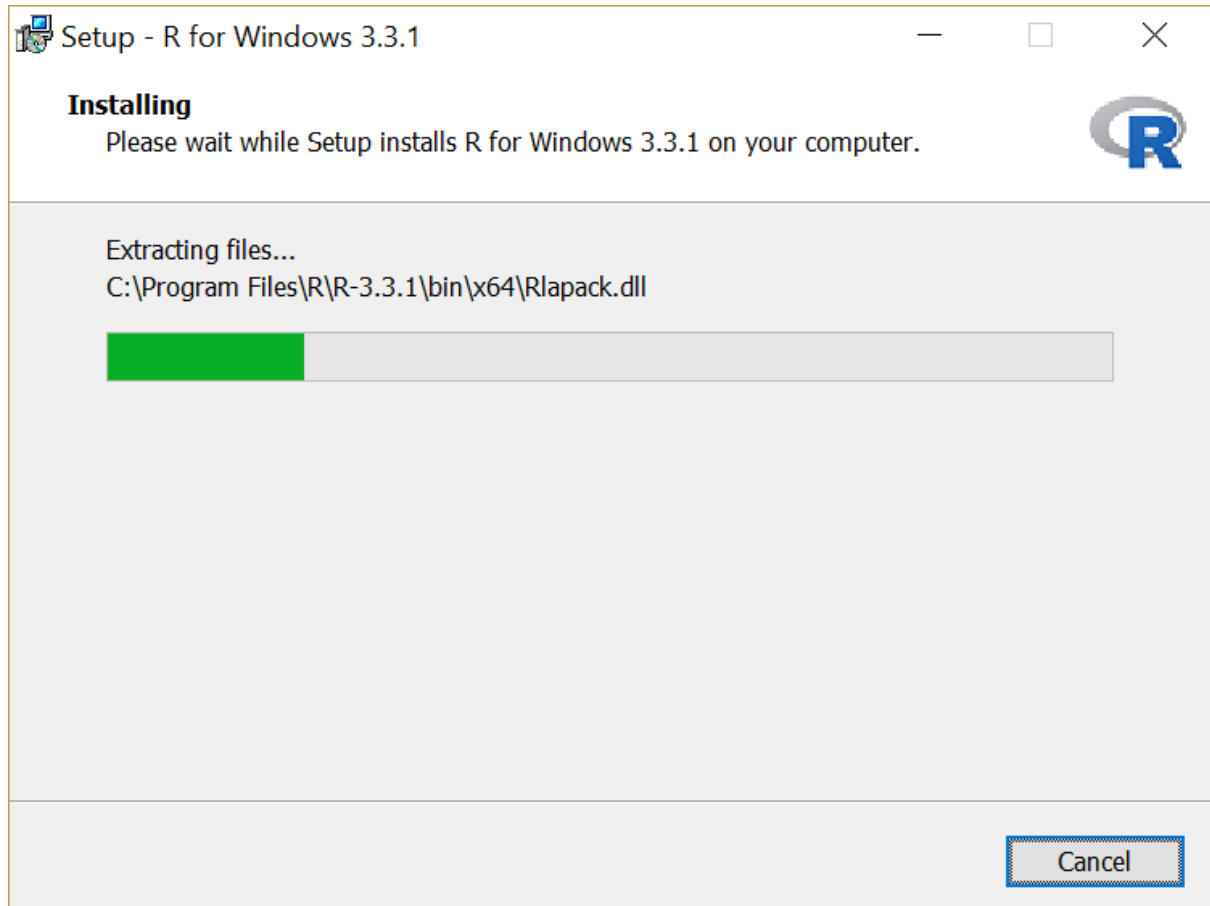
- ☐ Create a desktop icon
- ☐ Create a Quick Launch icon

Registry entries:

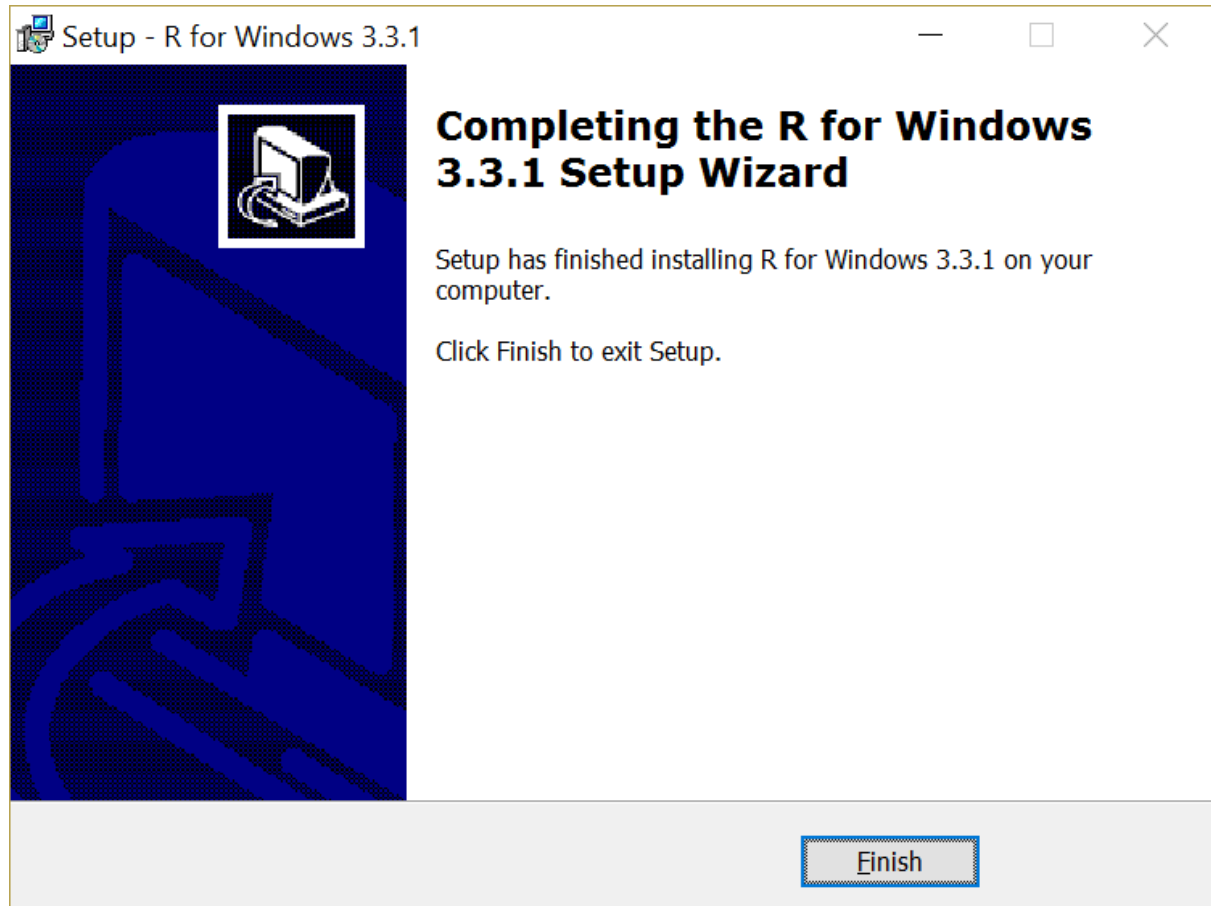
- ☐ Save version number in registry
- ☒ Associate R with .RData files

< Back Next > Cancel

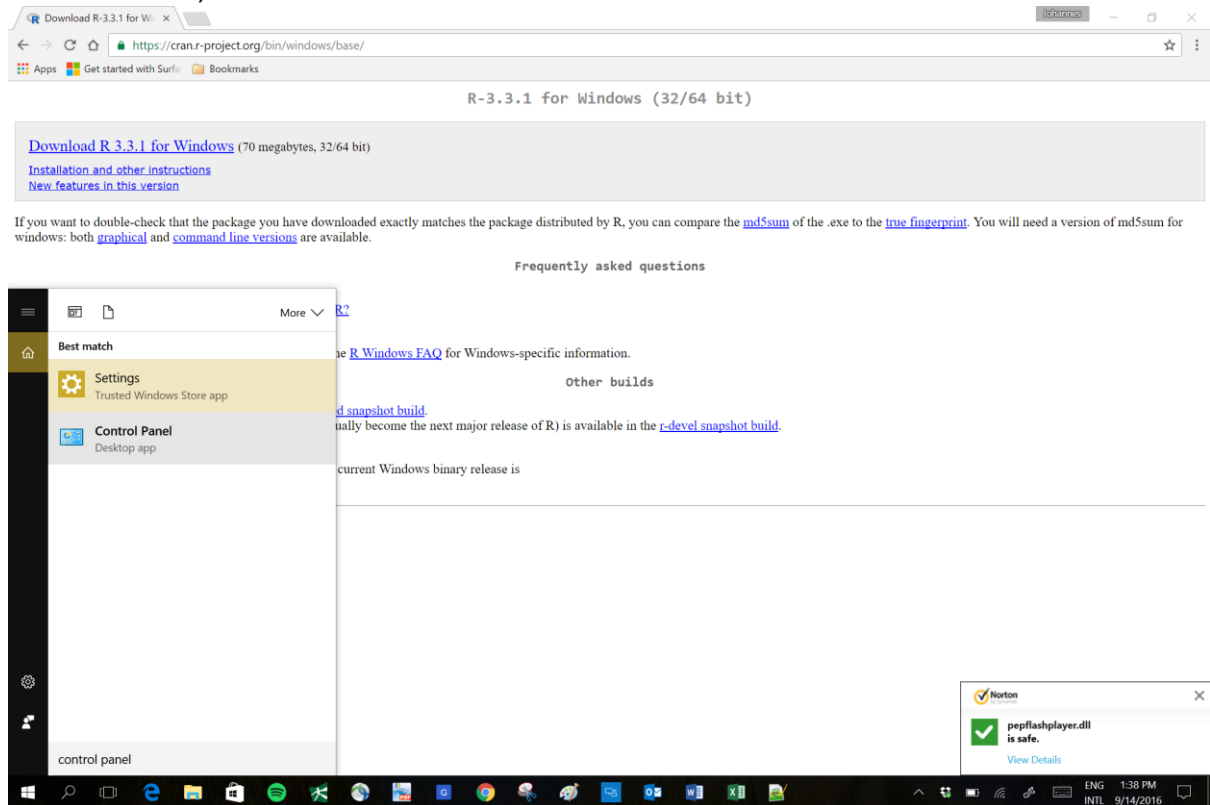
Now the installation starts.



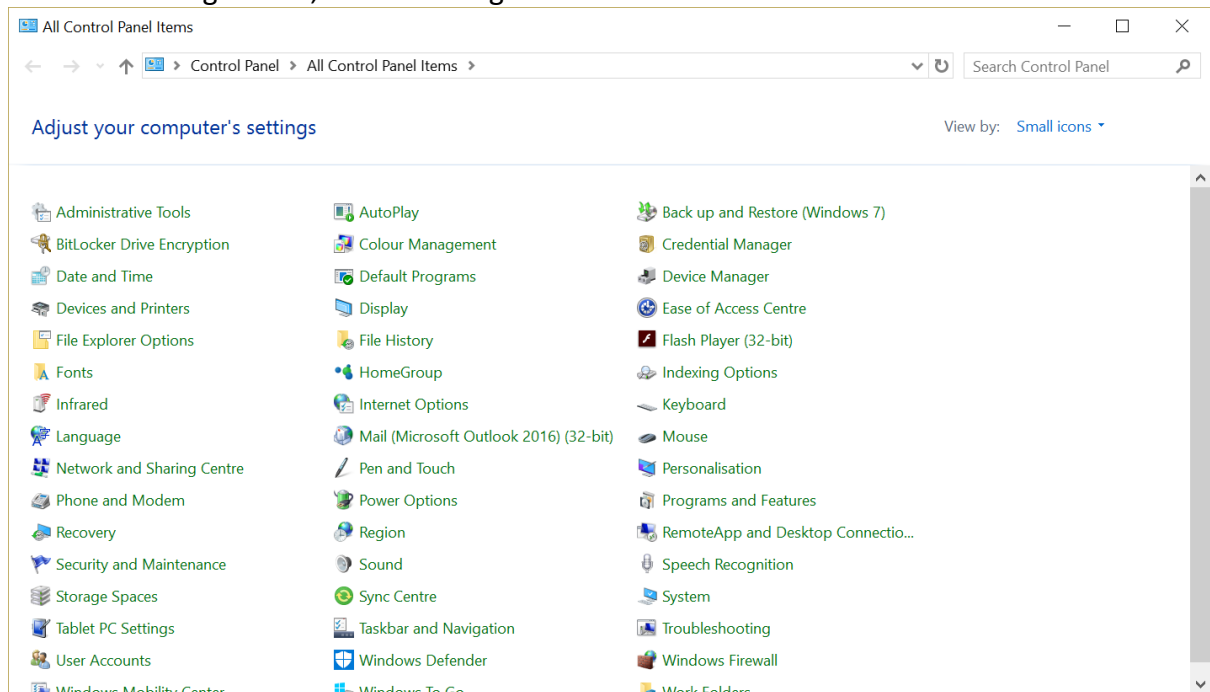
And we are done...



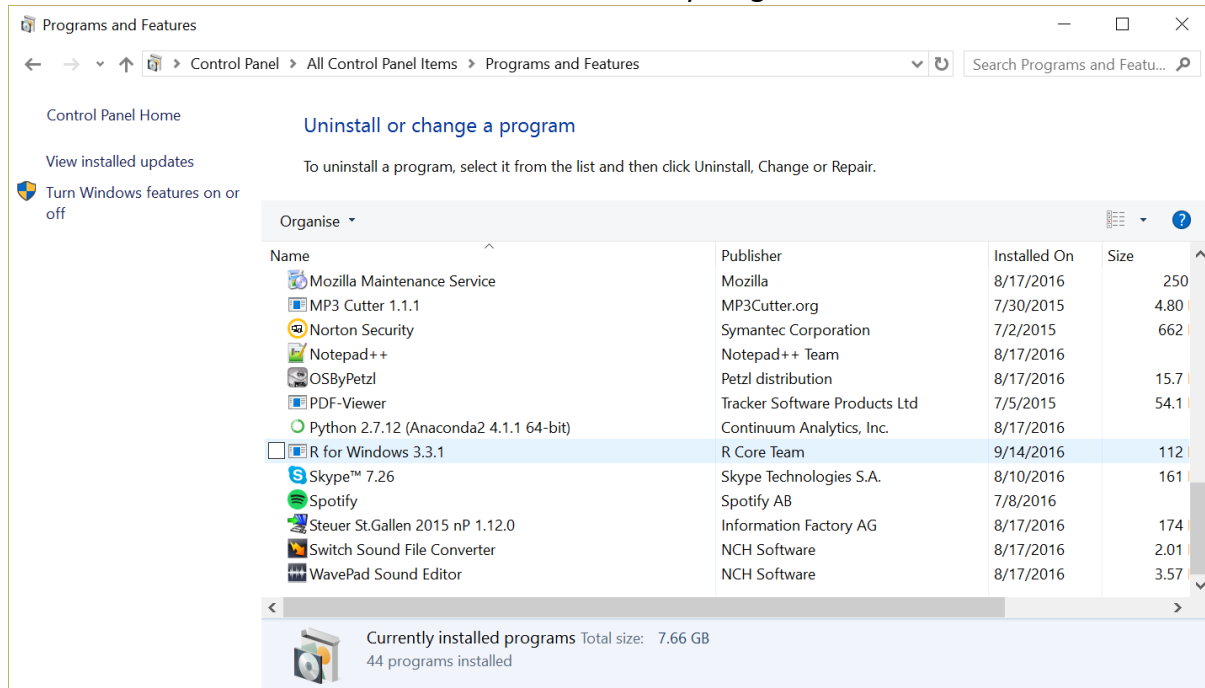
To see whether the program actually got installed, type “control panel” into the finder, and then click on it, as shown below.



On the resulting screen, click on “Programs and Features”.

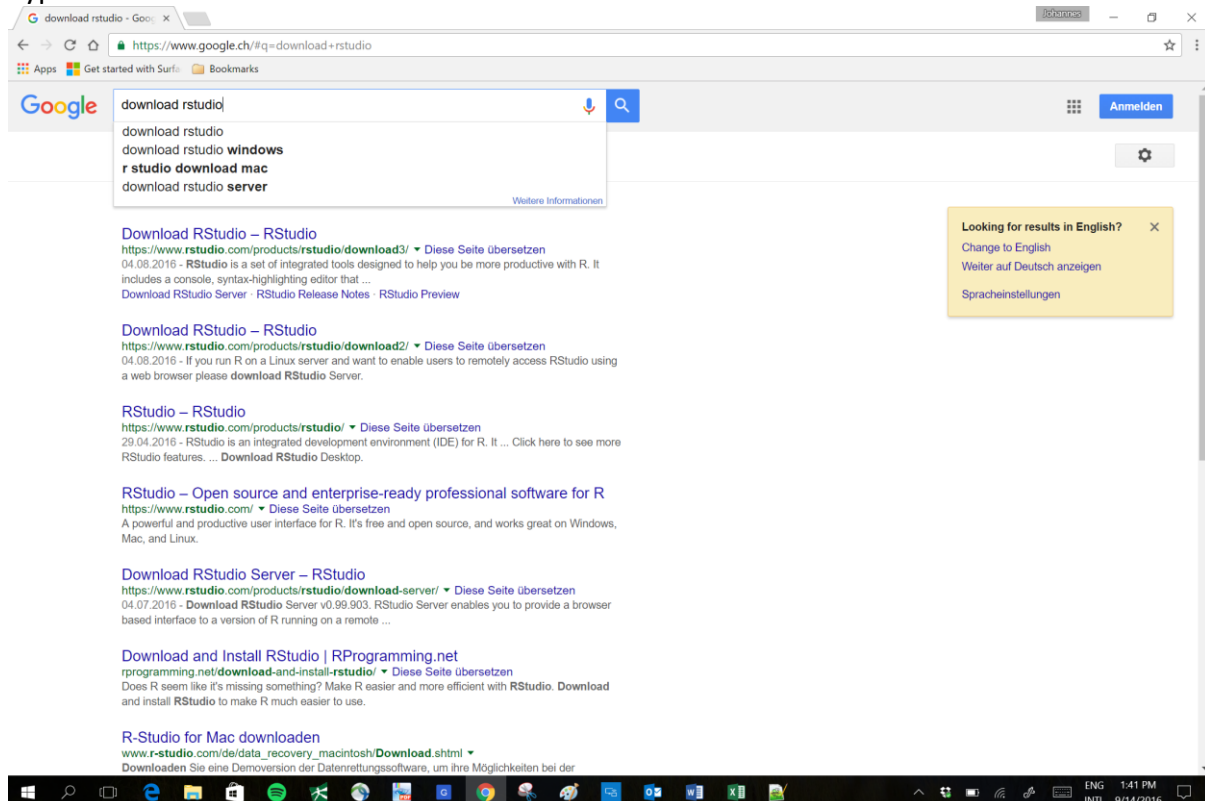


You see that there is “R for Windows 3.3.1”. So everything is fine.



Next we download RStudio. This is the editor, with which we will use for interacting with R and writing programs. In geek language, this is called in Integrated Development Environment or IDE.

Type the search words as shown below. Then click on “Download RStudio – Rstudio”.



On the resulting screen scroll down until...

The screenshot shows the RStudio website's download page. The header includes the RStudio logo and navigation links: Products, Resources, Pricing, About Us, and Blog. The main heading is "Choose Your Version of RStudio". Below this, a paragraph describes RStudio as a set of integrated tools for R. A table compares four versions: RStudio Desktop (Free License), RStudio Desktop (Commercial License), RStudio Server (Free License), and RStudio Server Pro (Commercial License). The table lists features like Integrated Development Environment, Priority support, Access via Web Browser, Enterprise Security, Project Sharing, Access to Multiple Versions of R, Multiple Concurrent Sessions, and Administrative Dashboard, with green checkmarks indicating availability for each version.

	RStudio Desktop (Free License)	RStudio Desktop (Commercial License)	RStudio Server (Free License)	RStudio Server Pro (Commercial License)
Integrated Development Environment for R	✓	✓	✓	✓
Priority support		✓		✓
Access via Web Browser			✓	✓
Enterprise Security and Access Controls				✓
Project Sharing				✓
Access to Multiple Versions of R				✓
Multiple Concurrent Sessions				✓
Administrative Dashboard				✓

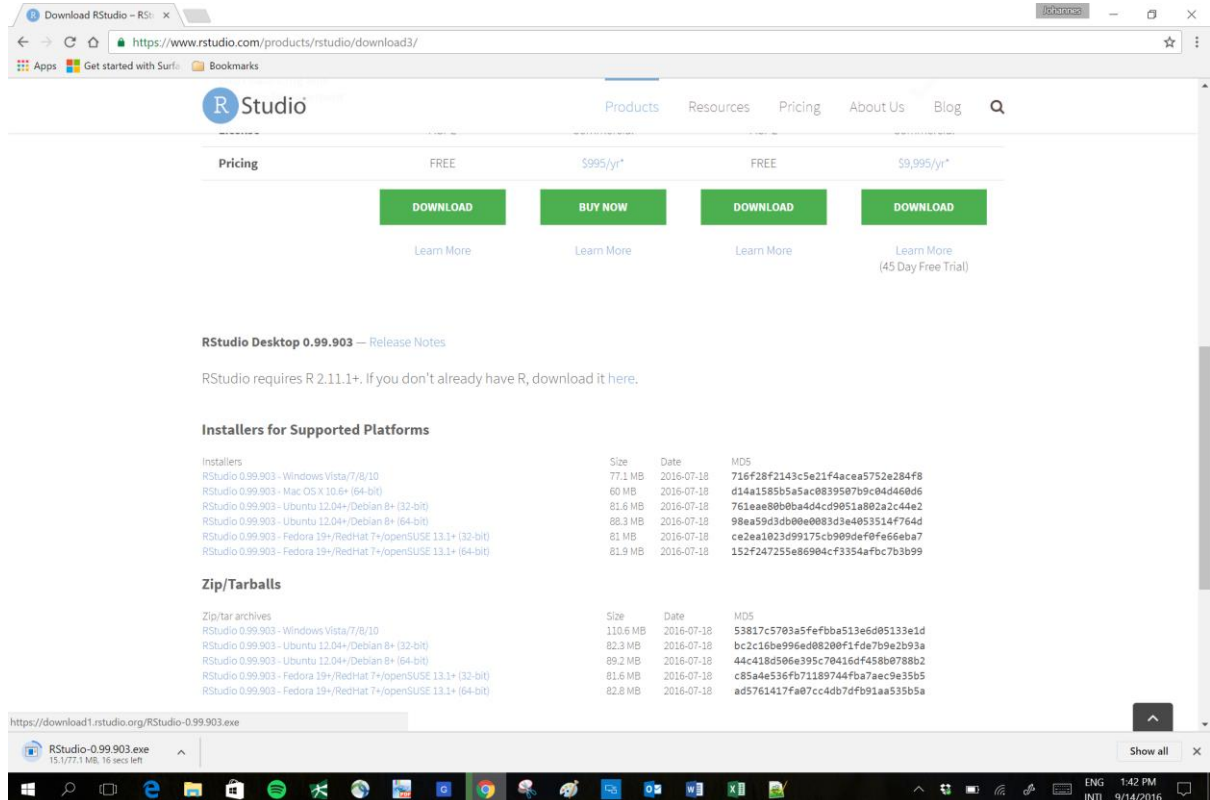
...Until you see the “Installers for Supported Platforms”. Click on the Installer “RStudio ... Windows Vista/7/8/10”.

The screenshot shows the RStudio website's download page, specifically the "Installers for Supported Platforms" section. The page includes a pricing table with four columns: FREE, \$995/yr*, FREE, and \$9,995/yr*. Below the pricing table, there are four green buttons labeled "DOWNLOAD" or "BUY NOW". The "Installers for Supported Platforms" section lists various installers for different operating systems and architectures, including Windows Vista/7/8/10, Mac OS X 10.6+ (64-bit), Ubuntu 12.04+/Debian 8+ (32-bit), Ubuntu 12.04+/Debian 8+ (64-bit), Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit), and Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit). Each installer entry includes its size, date, and MD5 hash. The "Zip/Tarballs" section lists zip/tar archives for the same operating systems and architectures, also including size, date, and MD5 hash. The "Source Code" section provides a link to download the source code for RStudio v0.99.903.

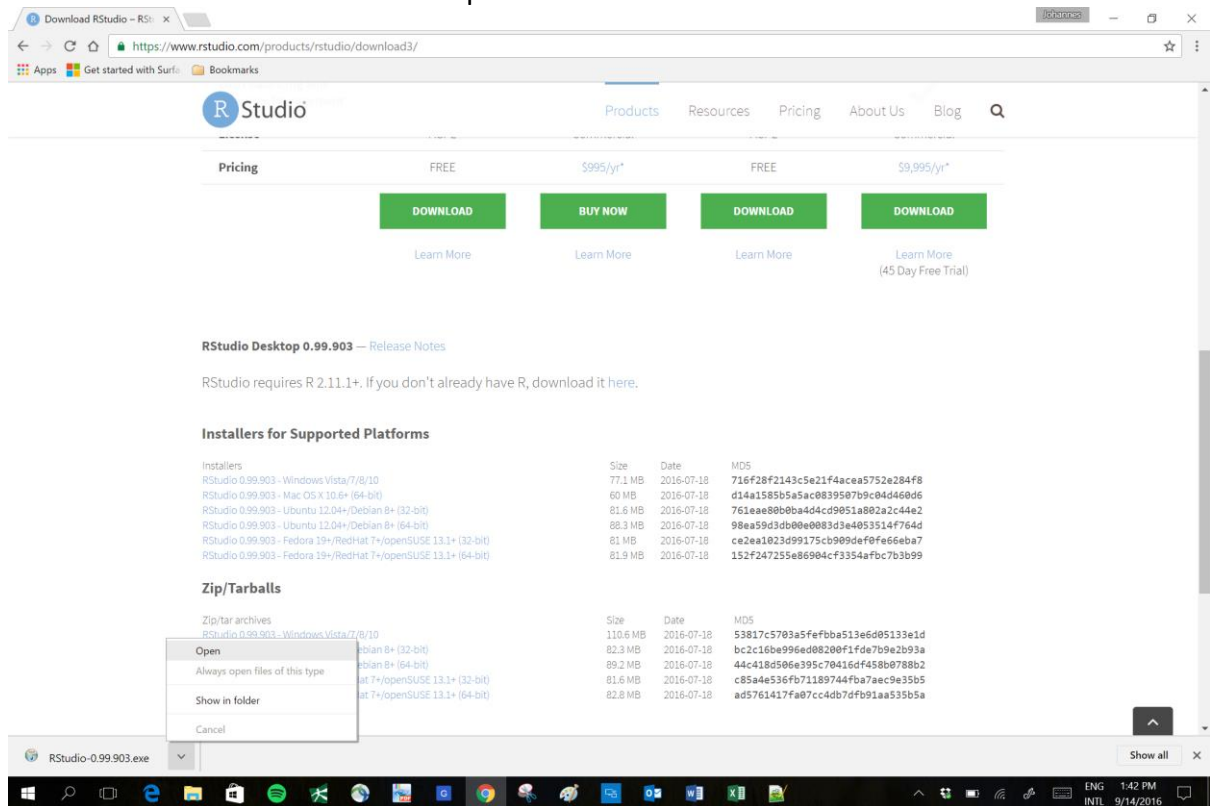
Installers	Size	Date	MD5
RStudio 0.99.903 - Windows Vista/7/8/10	77.1 MB	2016-07-18	716f28f2143c5e21f4acea5752e284f8
RStudio 0.99.903 - Mac OS X 10.6+ (64-bit)	60 MB	2016-07-18	d14a1585b5a5ac0839507b9c040460d6
RStudio 0.99.903 - Ubuntu 12.04+/Debian 8+ (32-bit)	81.8 MB	2016-07-18	761aee0b00a4d4c09951a802a2c44e2
RStudio 0.99.903 - Ubuntu 12.04+/Debian 8+ (64-bit)	88.3 MB	2016-07-18	98ea59d3d00e0083d3e4053514f764d
RStudio 0.99.903 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit)	81 MB	2016-07-18	ce2ea1023d99175cb909de0f0e65eba7
RStudio 0.99.903 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit)	81.9 MB	2016-07-18	152f247255e86904cf3354afbc7b3b99

Zip/Tarballs	Size	Date	MD5
RStudio 0.99.903 - Windows Vista/7/8/10	110.6 MB	2016-07-18	53817c5703a5fe5bba513e6d05133e1d
RStudio 0.99.903 - Ubuntu 12.04+/Debian 8+ (32-bit)	82.3 MB	2016-07-18	bc2c16be996ed08200f1de7b9e2b93a
RStudio 0.99.903 - Ubuntu 12.04+/Debian 8+ (64-bit)	89.2 MB	2016-07-18	44c418d506e395c70416d4f458b0780b2
RStudio 0.99.903 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit)	81.6 MB	2016-07-18	c85a4e536fb71189744fba7aec9e35b5
RStudio 0.99.903 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit)	82.8 MB	2016-07-18	ad5761417fa07cc4db7dfb91aa535b5a

An .exe file gets downloaded (see lower left corner).

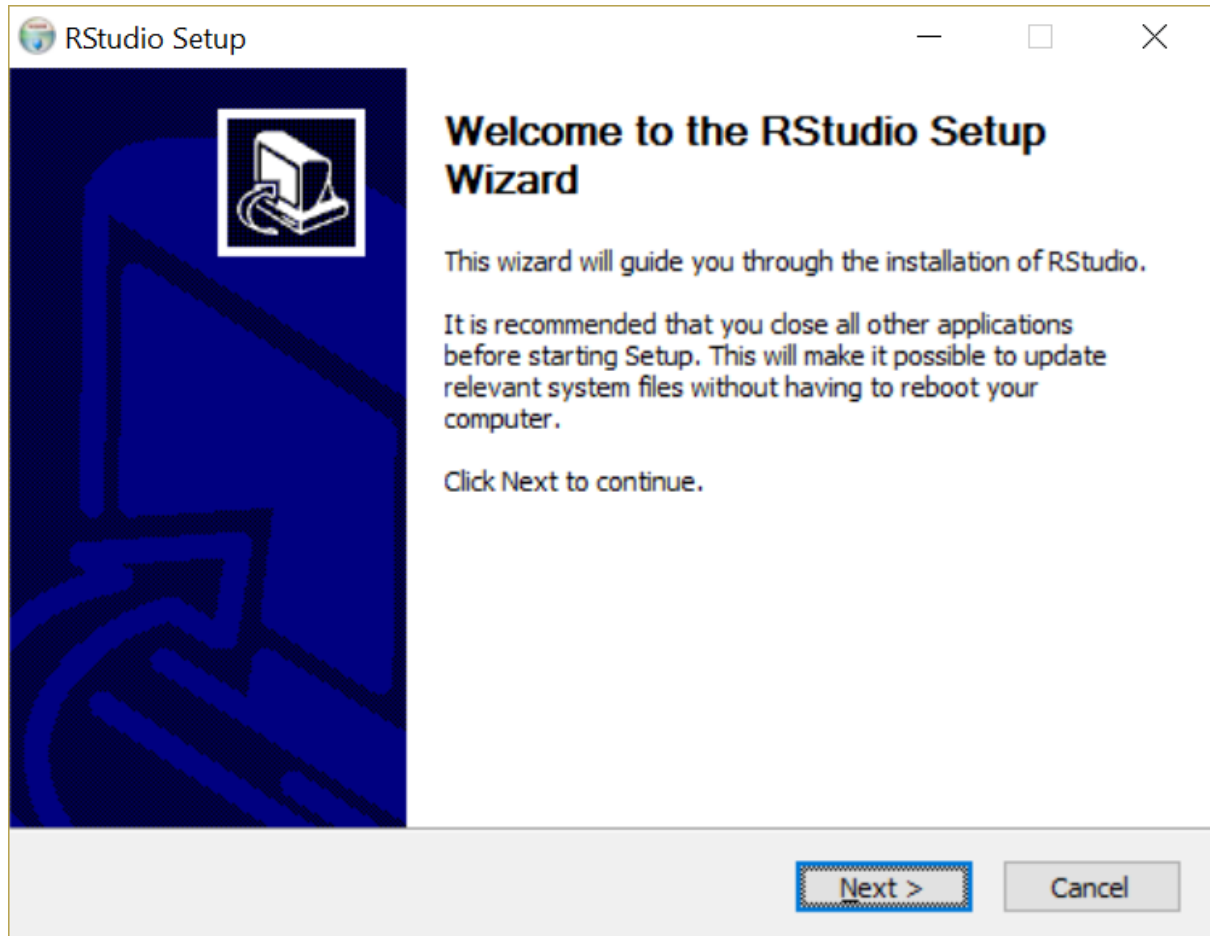


Click on the .exe file and choose “Open”.

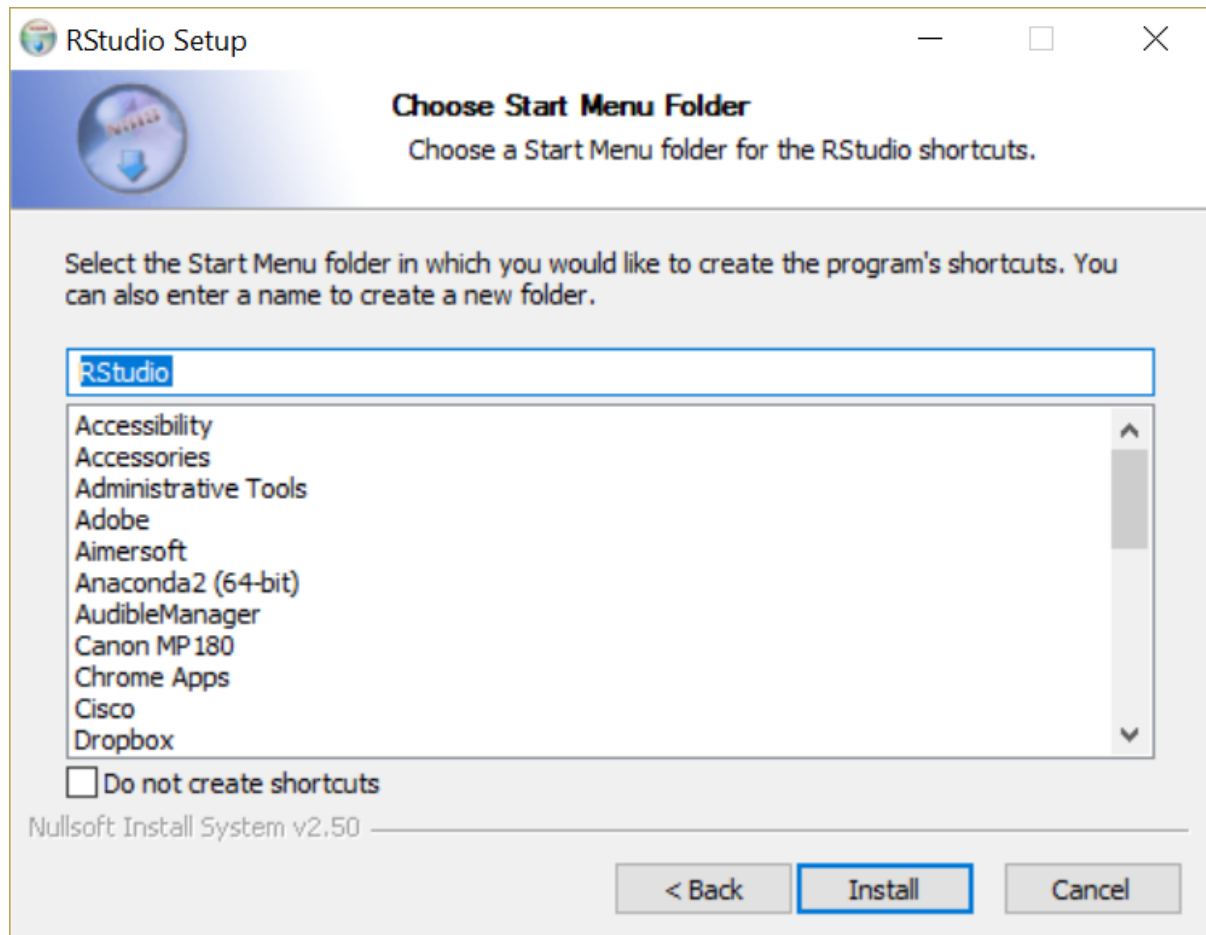


You may have to confirm that you want to allow the app to make changes to your computer.

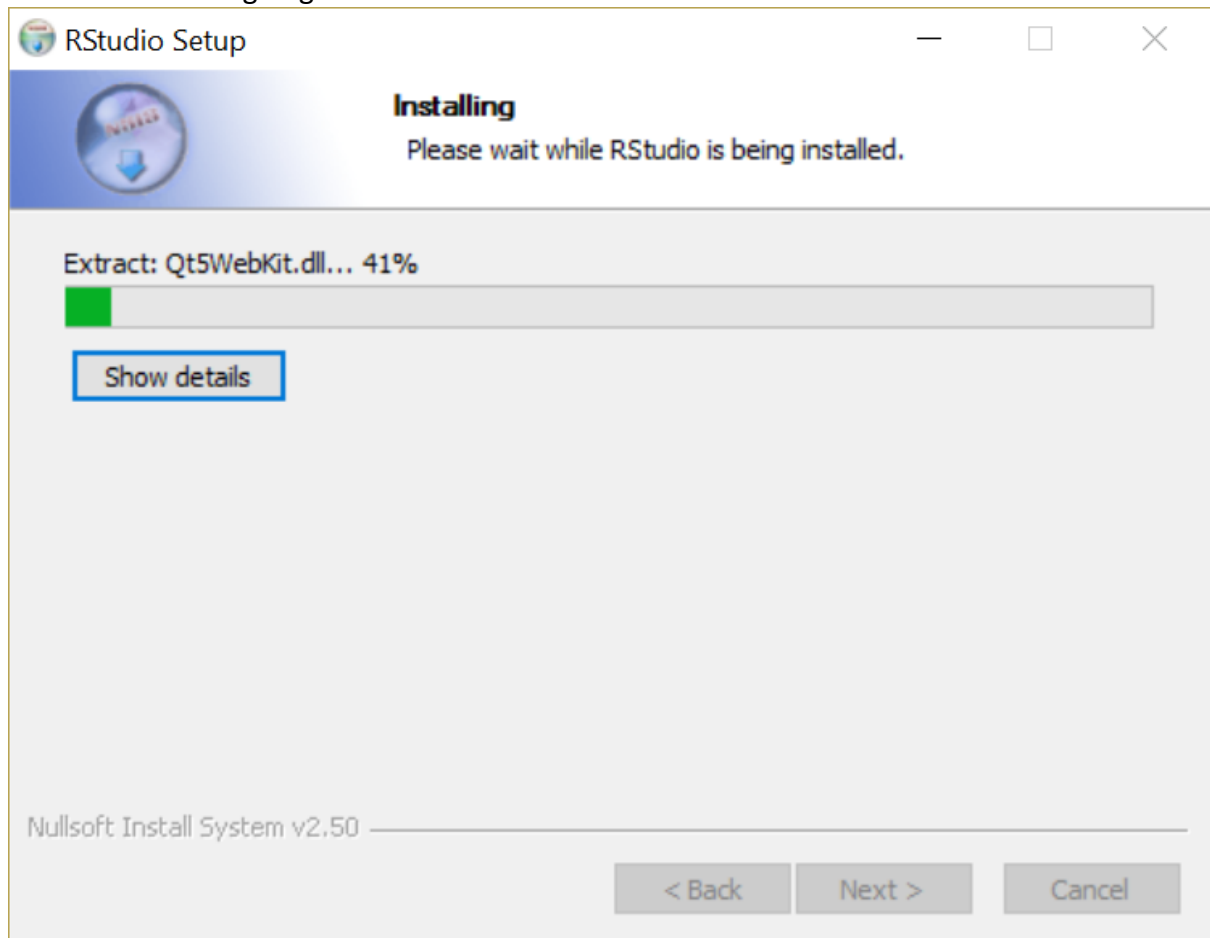
The installation starts. "Next"...



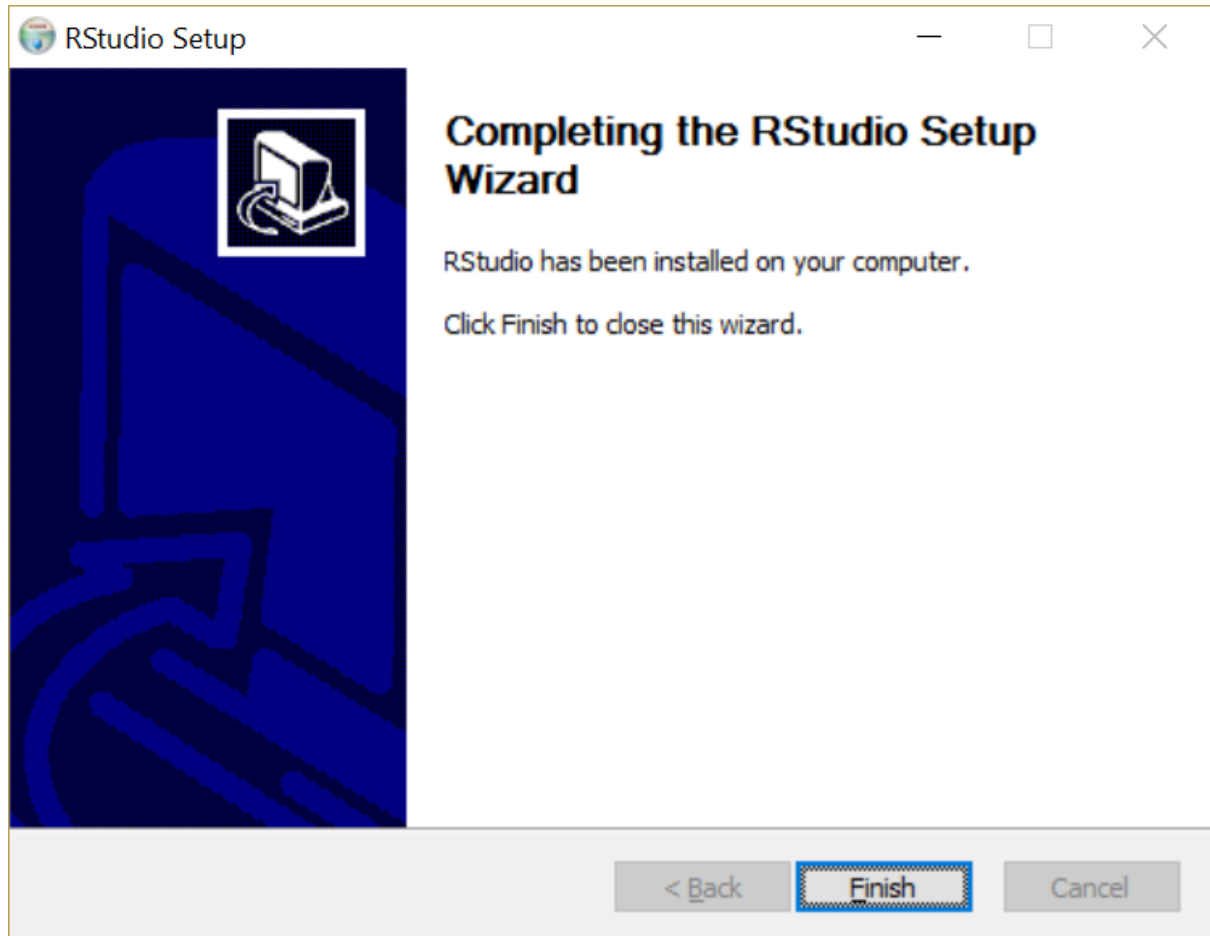
Choose as shown.



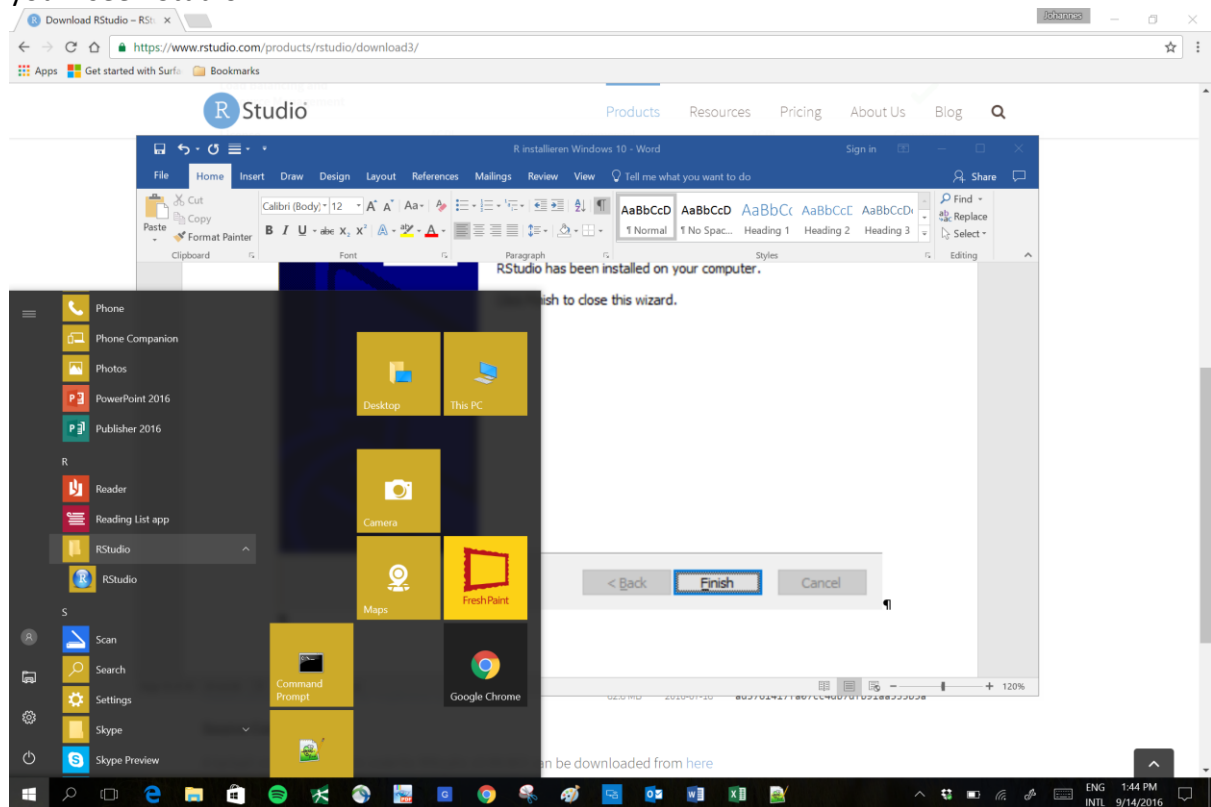
The installation is going on...



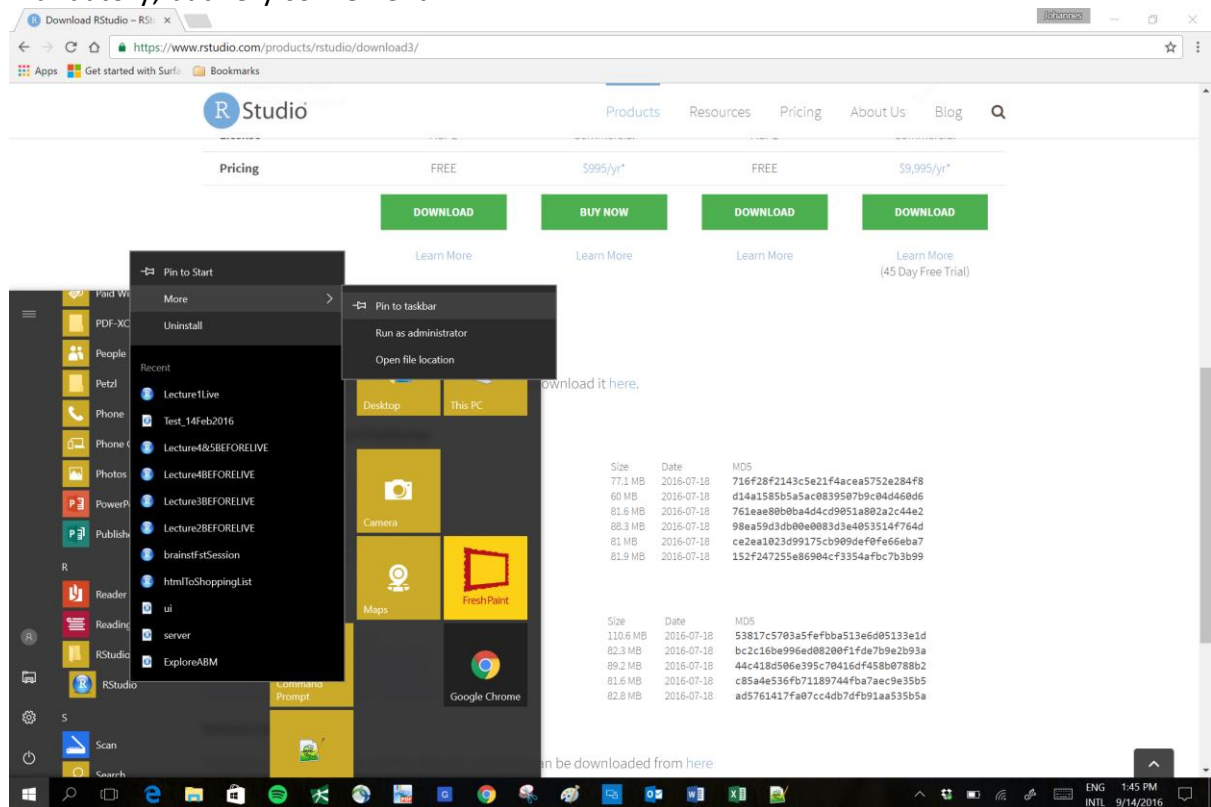
We are done...



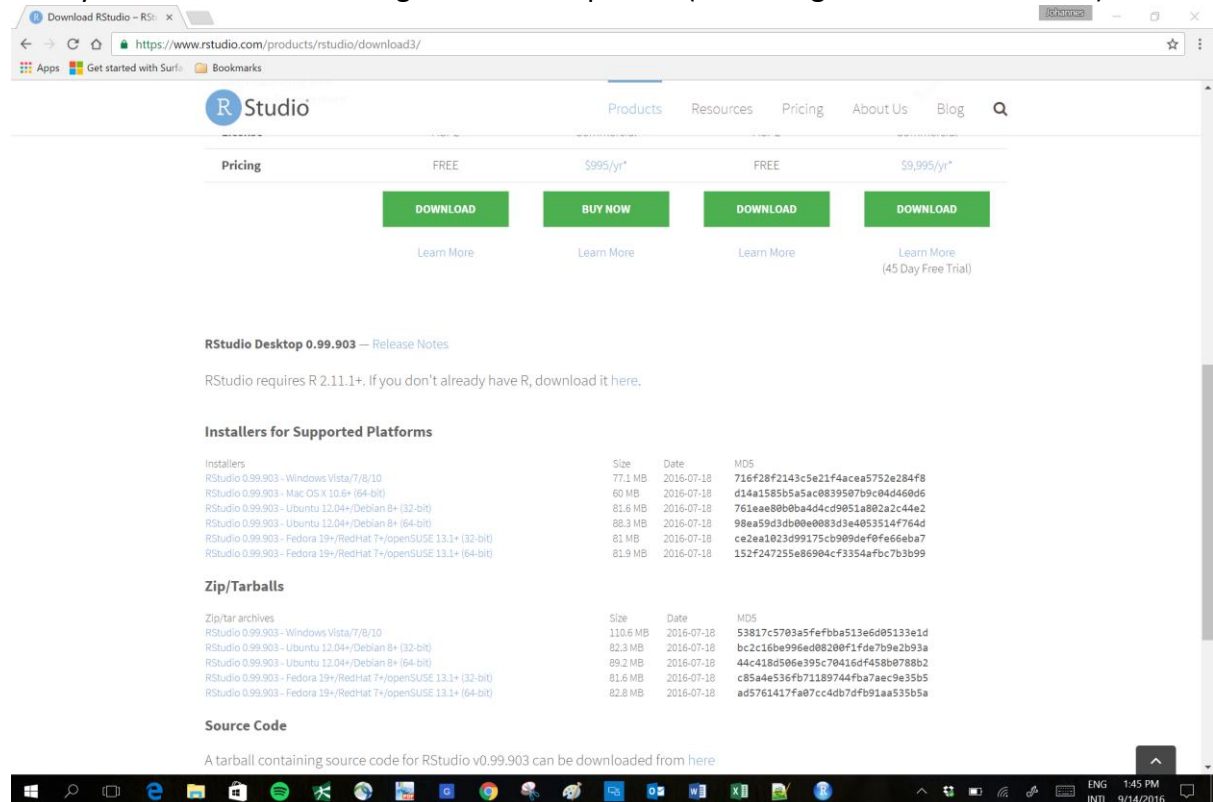
When you go to the Windows/start function and you scroll down the apps to the letter “R”, you’ll see RStudio.



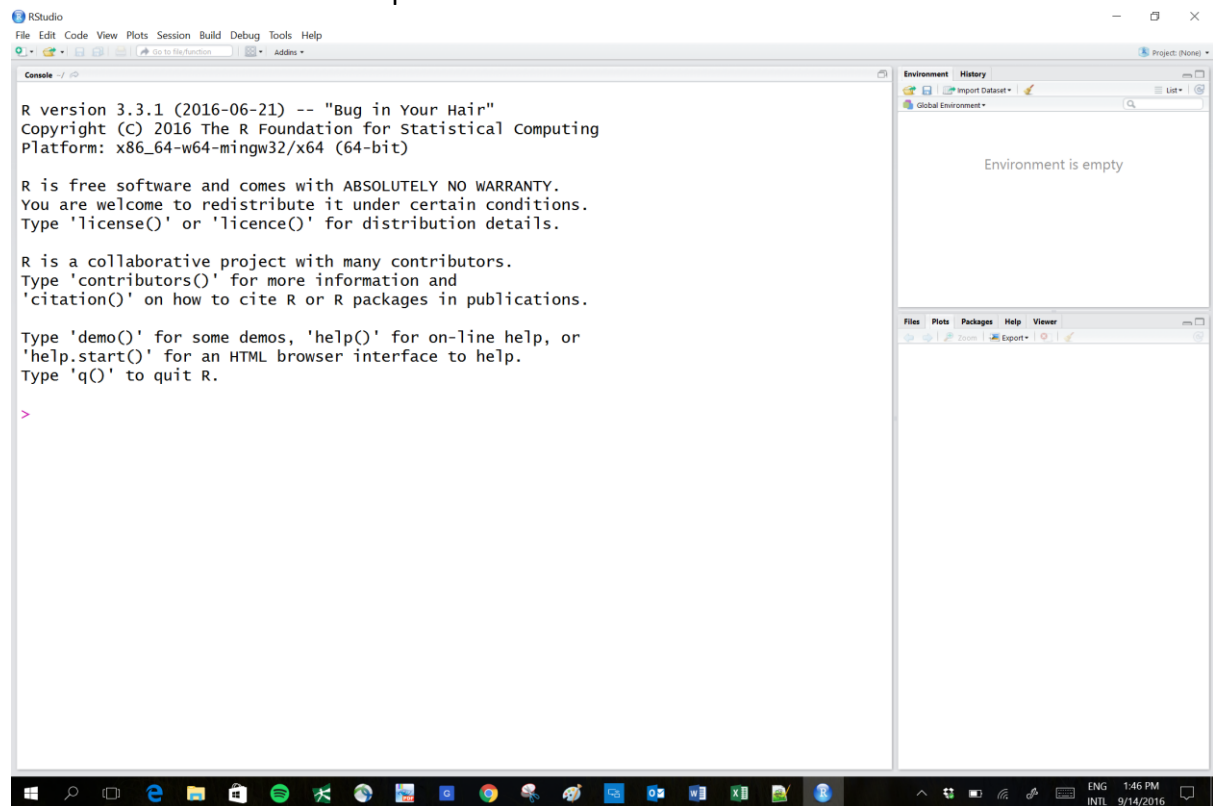
Right-click on RStudio, choose “More” and “Pin to taskbar” as shown below. This step is not mandatory, but very convenient.



Now you see RStudio at the right end of the pin bar (the blue globe with an R inside).



Click on the RStudio icon to open it. It looks like shown below.



That's it. More on this during the lecture.