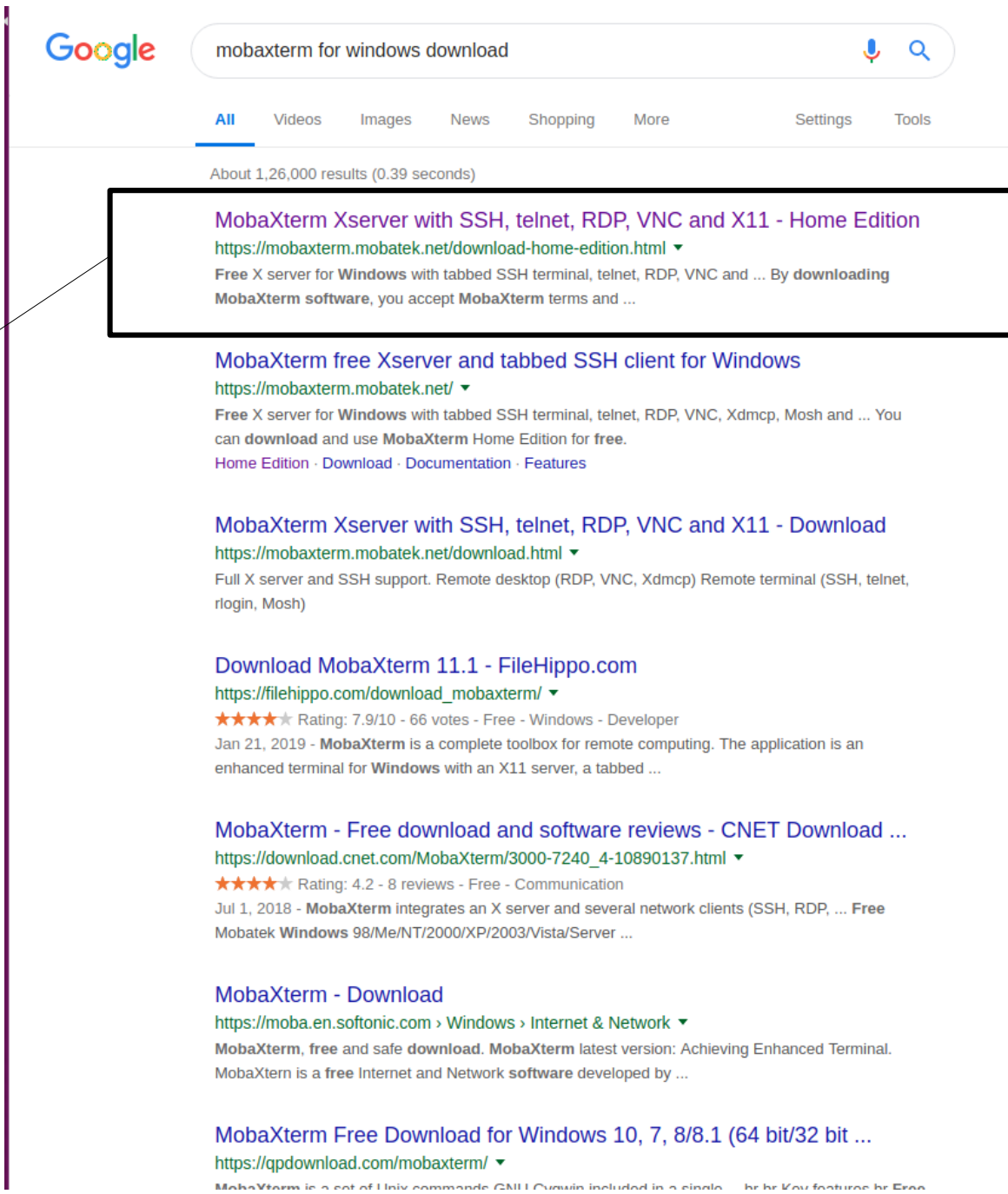


Steps to download softwares for windows for RNAseq workshop

Mohak Sharda
Nitish Malhotra

Installing MobaXterm

Type in google search bar



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mobaXterm for windows download

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About 1,26,000 results (0.39 seconds)

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MobaXterm Home Edition

Download MobaXterm Home Edition (current version):

MobaXterm Home Edition v11.1 (Portable edition)

MobaXterm Home Edition v11.1 (Installer edition)

Download previous stable version: [MobaXterm Portable v11.0](#) [MobaXterm Installer v11.0](#)

By downloading MobaXterm software, you accept [MobaXterm terms and conditions](#)

You can download MobaXterm and plugins sources [here](#)

If you use MobaXterm inside your company, you should consider subscribing to [MobaXterm Professional Edition](#): your subscription will give you access to professional support and to the "Customizer" software. This customizer will allow you to generate personalized versions of MobaXterm including your own logo, your default settings and your welcome message. Please [contact us](#) for more information.

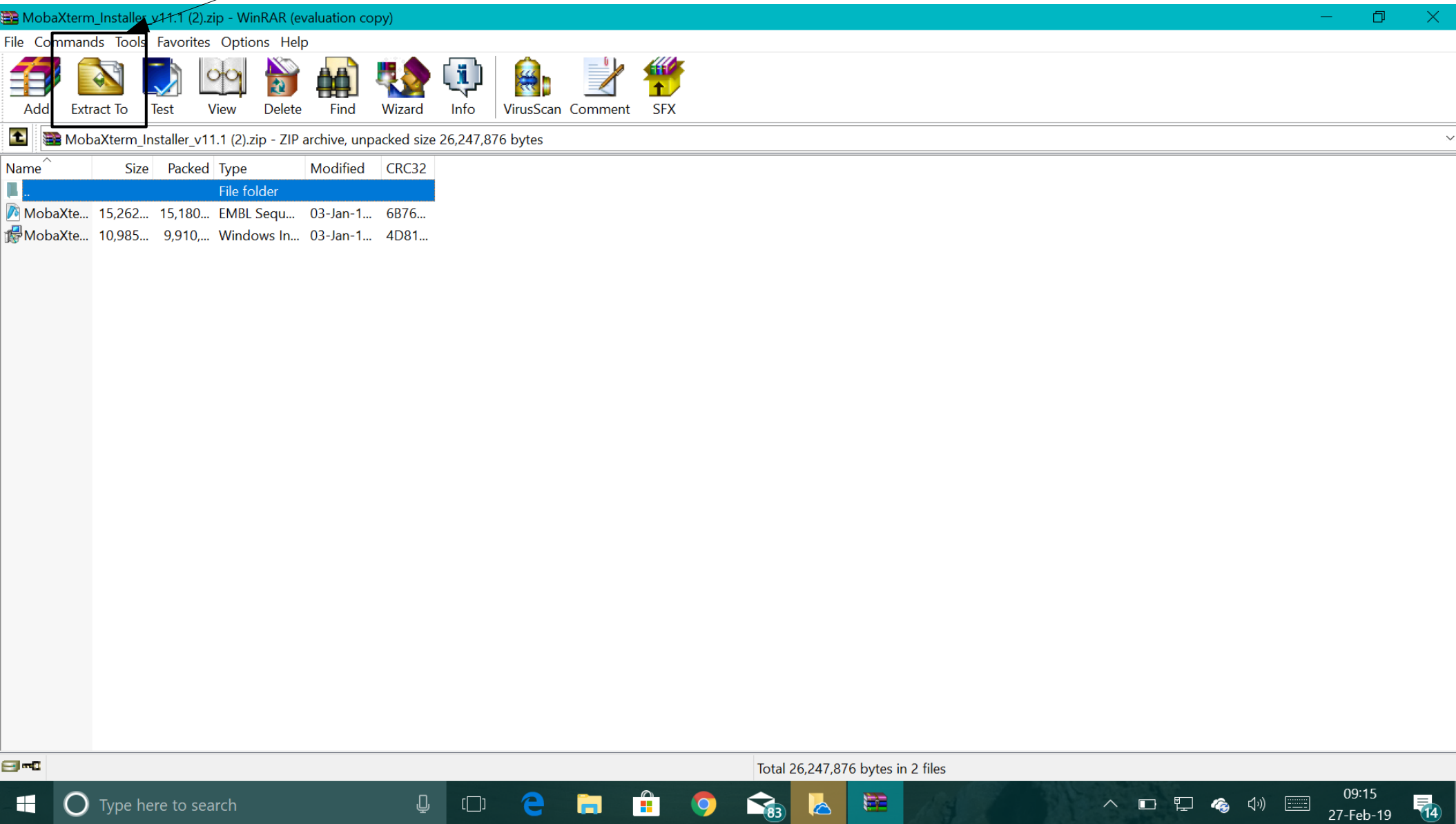
Changelog

Version 11.1 (2019-01-20)

- **Improvement:** eliminated flickering effects in remote monitoring bar
- **Improvement:** improved MobaXterm startup speed by decreasing resources size
- **Improvement:** improved size of main executable by increasing compression of embedded resources
- **Improvement:** Windows PATH is now appended to the terminal PATH in the dropdown terminal (Ctrl+Alt+M)
- **Improvement:** you can now manually select COM interface speed for Serial sessions
- **Improvement:** you can now manually type a path in folder selection dialogs
- **Improvement:** improved "Shift+Enter" terminal type with proper key sequences for Shift+F9 and Shift+F11

Click on the link on the right only.

Open the .zip file and extract to a desired folder



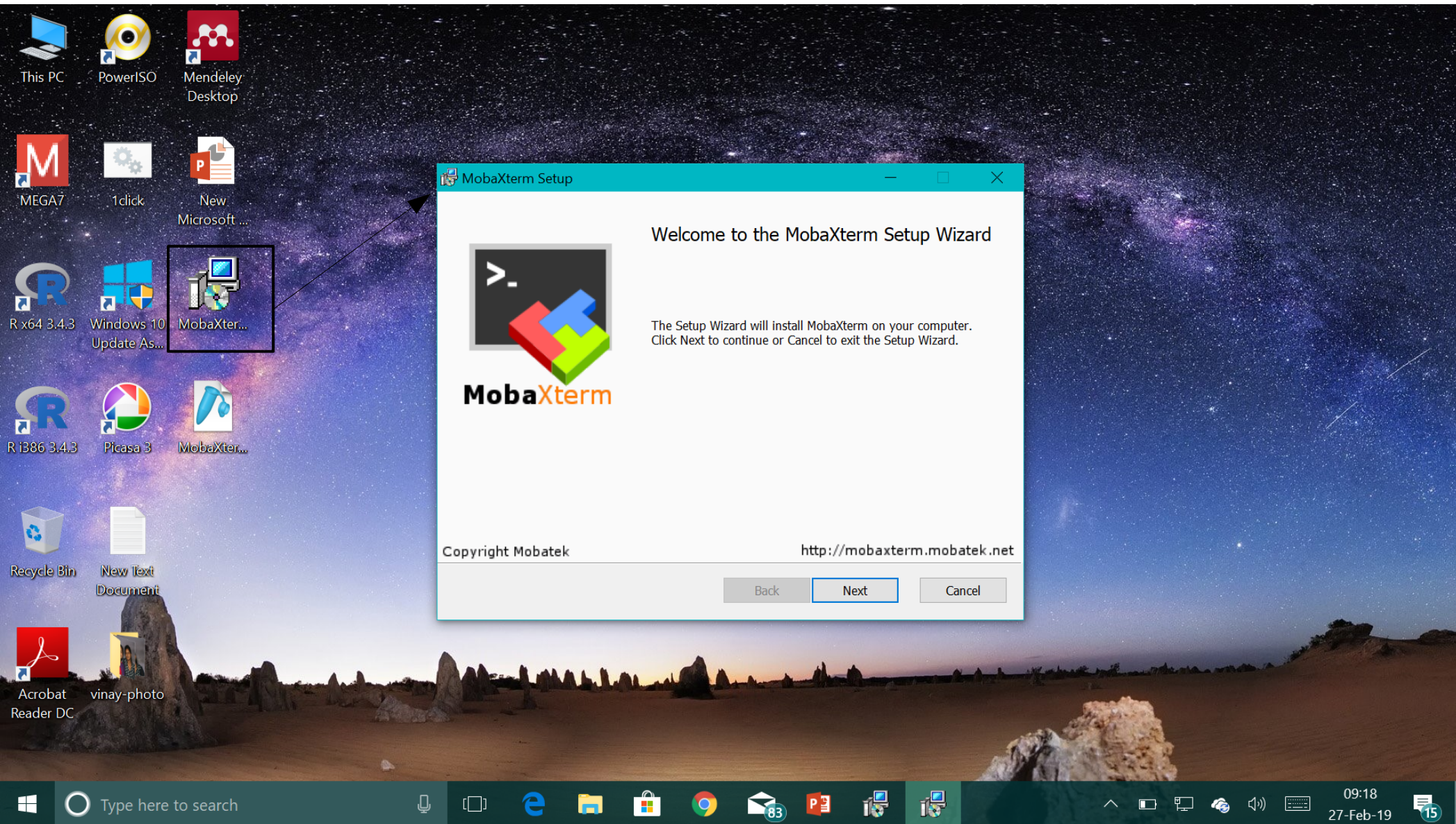
The screenshot shows the WinRAR application window titled "MobaXterm_Installer_v11.1 (2).zip - WinRAR (evaluation copy)". The interface includes a menu bar (File, Commands, Tools, Favorites, Options, Help) and a toolbar with icons for Add, Extract To, Test, View, Delete, Find, Wizard, Info, VirusScan, Comment, and SFX. The main area displays a file list for the ZIP archive, which is "MobaXterm_Installer_v11.1 (2).zip - ZIP archive, unpacked size 26,247,876 bytes".

Name	Size	Packed	Type	Modified	CRC32
..			File folder		
MobaXte...	15,262...	15,180...	EMBL Sequ...	03-Jan-1...	6B76...
MobaXte...	10,985...	9,910...	Windows In...	03-Jan-1...	4D81...

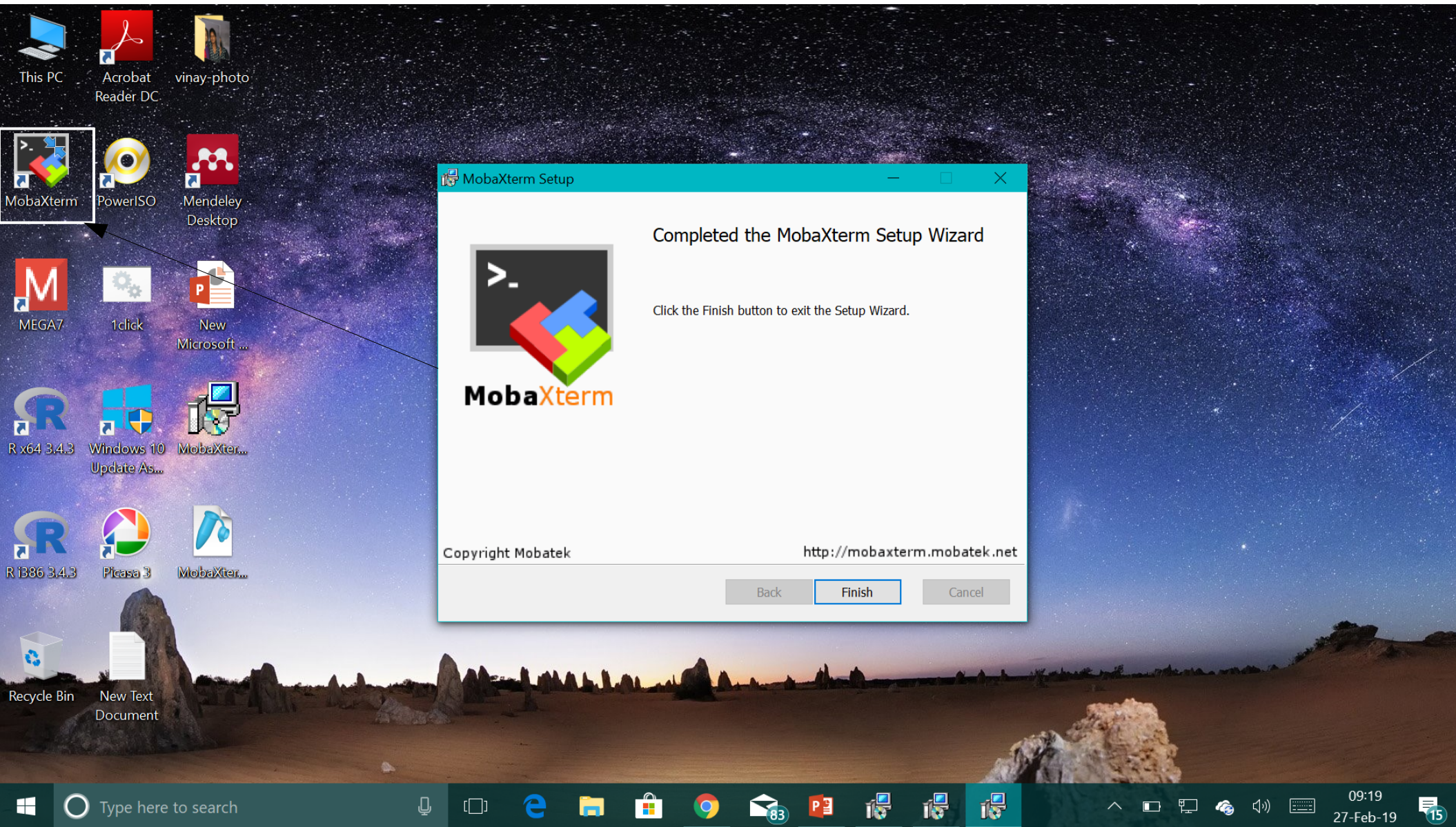
Total 26,247,876 bytes in 2 files

The Windows taskbar at the bottom shows the search bar, taskbar icons for Edge, File Explorer, Store, Chrome, Mail (83), and OneDrive, along with system tray icons for volume, network, and date/time (09:15, 27-Feb-19).

Open the MobaXterm setup from the folder where you extracted your .zip file



A shortcut of MobaXterm will be created after finishing the setup (all default settings)



Installing R

If you do not have R installed on your windows, please follow the instructions ahead

Type in google search bar



install r in windows



All Videos Images News Shopping More Settings Tools

About 54,70,00,000 results (0.35 seconds)

[Download R-3.5.2 for Windows. The R-project for statistical computing.](#)

<https://cran.r-project.org/bin/windows/base/>

R-3.5.2 for Windows (32/64 bit). Download R 3.5.2 for Windows (79 megabytes, 32/64 bit).

[Installation](#) and other instructions · [New features in this version.](#)

Click on the link



R for Windows

<https://cran.r-project.org/bin/windows/>

This is what you want to **install R** for the first time. ... party software available for CRAN Windows services and corresponding environment and make variables.

[Install R for the first time](#) · [Of /bin/windows/contrib](#) · [Rtools](#)

People also search for

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<https://courses.edx.org/courses/UTAustinX/.../56c5437b88fa43cf828bff5371c6a924/>

To **Install R**: Open an internet browser and go to www.r-project.org. Click the "download R" link in the middle of the page under "Getting Started." Select a CRAN location (a mirror site) and click the corresponding link. Click on the "Download R for Windows" link at the top of the page.

[Install R and RStudio on Windows 7, 8, and 10 – Michael Galarnyk ...](#)

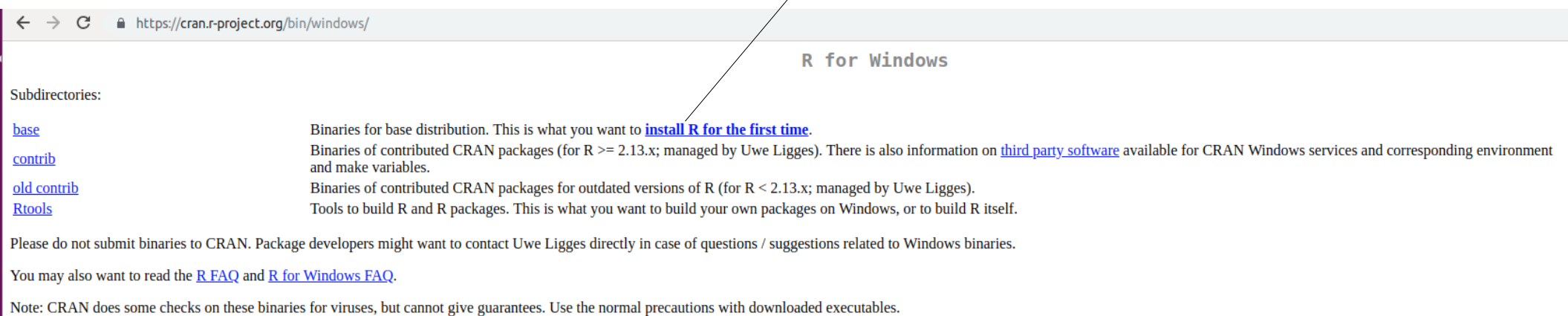
<https://medium.com/.../install-r-and-rstudio-on-windows-5f503f708027>

Jan 25, 2017 - 2. Click on **Download R for Windows**. Click on **base**. Click on **Download R 3.3.2 for Windows** (or a newer version that appears). 4. Download ...

Videos



Open this hyperlink.



The image shows a browser window with the address bar containing the URL <https://cran.r-project.org/bin/windows/>. The page title is "R for Windows". Under the heading "Subdirectories:", there are four links: [base](#), [contrib](#), [old contrib](#), and [Rtools](#). The text below these links describes the contents of each directory. An arrow points from the text "Open this hyperlink." to the [install R for the first time](#) link in the "base" subdirectory description.

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 >= 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.

← → ↻ 🔒 https://cran.r-project.org/bin/windows/base/ ☆ M

R-3.5.2 for Windows (32/64 bit)

[Download R 3.5.2 for Windows](#) (79 megabytes, 32/64 bit)
[Installation and other instructions](#)
[New features in this version](#)

If you want to double-check that the package you have downloaded matches the package distributed by CRAN, you can compare the [md5sum](#) of the .exe to the [fingerprint](#) on the master server. You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available.

Frequently asked questions

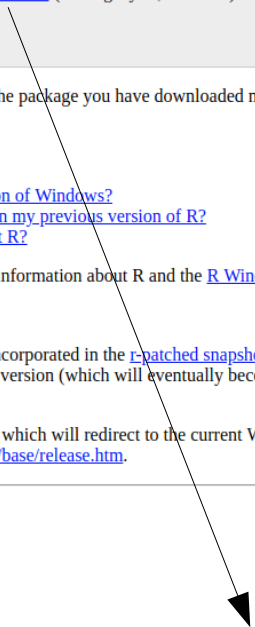
- [Does R run under my version of Windows?](#)
- [How do I update packages in my previous version of R?](#)
- [Should I run 32-bit or 64-bit R?](#)

Please see the [R FAQ](#) for general information about R and the [R Windows FAQ](#) for Windows-specific information.

Other builds

- Patches to this release are incorporated in the [patched snapshot build](#).
- A build of the development version (which will eventually become the next major release of R) is available in the [r-devel snapshot build](#).
- [Previous releases](#)

Note to webmasters: A stable link which will redirect to the current Windows binary release is <CRAN MIRROR>/bin/windows/base/release.htm.



Download the hyperlink. Follow the instructions with default settings to install R as previously done for MobaXterm installation.

Installing Rstudio

In order for Rstudio to work, you need to have R already installed on your system. Please go back to the previous section and install R before proceeding.

Click on the link highlighted

The screenshot shows a Google search for 'rstudio'. The search results include a main entry for 'RStudio: Open source and enterprise-ready professional software for ...' with a link to 'https://www.rstudio.com/'. Below this, there is a section for 'Results from rstudio.com' which contains several links: 'Download RStudio', 'TensorFlow for R', 'RStudio Desktop', 'RStudio Webinars', 'R Packages', and 'Careers'. The 'Download RStudio' link is highlighted with a black box, and an arrow points from this box to the text 'Click on the link highlighted' at the top of the image. To the right of the search results is a knowledge panel for 'RStudio' with a description and license information.

Results from rstudio.com

- Download RStudio**
Download the RStudio IDE or RStudio Server.
- TensorFlow for R**
Documentation for the TensorFlow for R interface.
- RStudio Desktop**
Desktop. Run RStudio on your desktop. RStudio Desktop ...
- RStudio Webinars**
Webinars and videos are presented on a variety of ...
- R Packages**
The RStudio team contributes code to many R packages and ...
- Careers**
RStudio is always on the lookout for talented people to join ...

RStudio
Computer program

RStudio is a free and open-source integrated development environment for R, a programming language for statistical computing and graphics. RStudio was founded by JJ Allaire, creator of the programming language ColdFusion. Hadley Wickham is the Chief Scientist at RStudio. [Wikipedia](#)

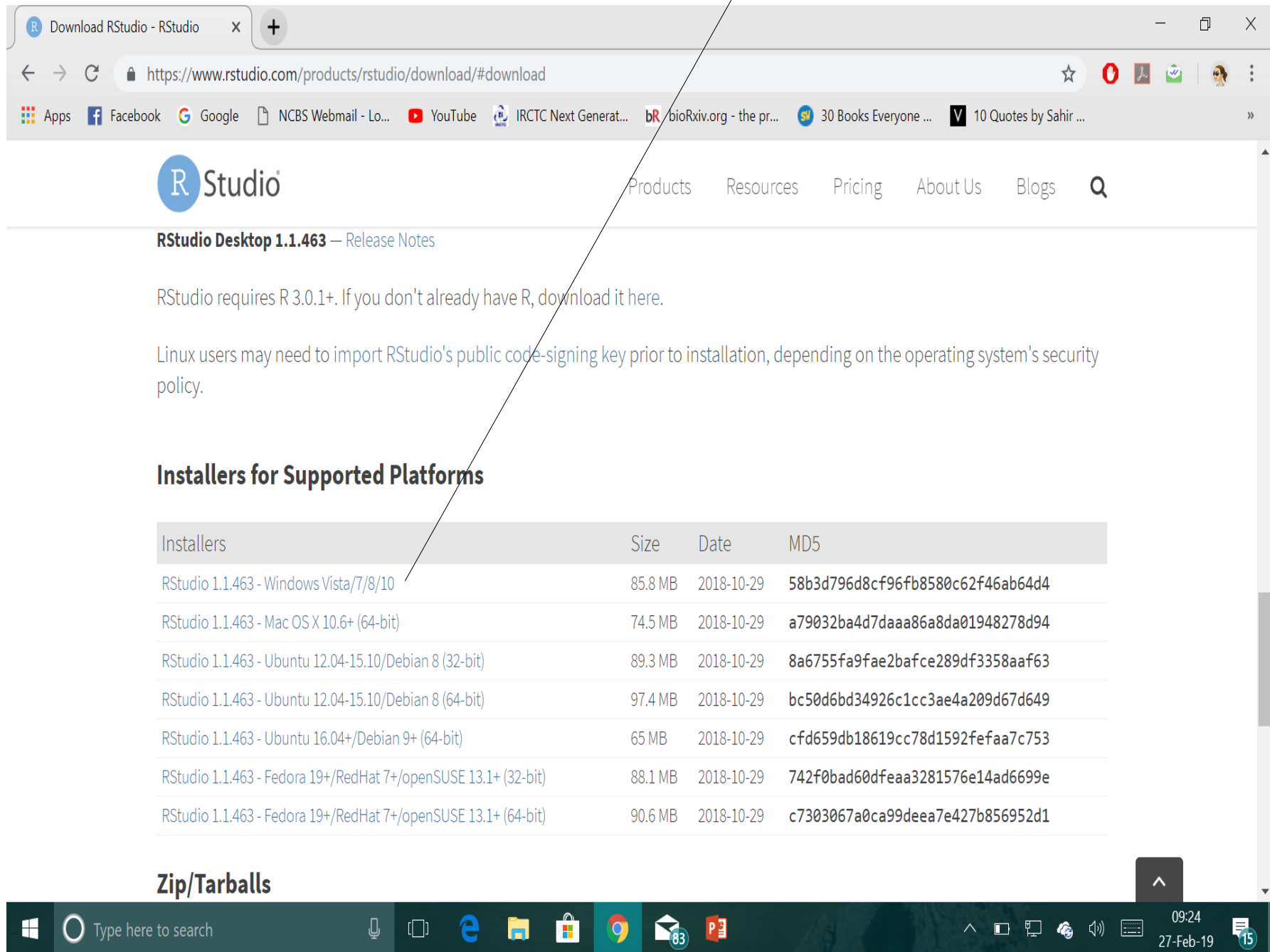
License: Afero General Public License v3
Developer(s): RStudio, Inc

Click on the non-green fill “Download” option

The screenshot shows the RStudio website's download page. At the top, there is a navigation bar with the RStudio logo and links for Products, Resources, Pricing, About Us, and Blogs. Below this, five product options are listed in columns. Each column contains the product name, license type, price, and a primary action button. The first column, 'RStudio Desktop Open Source License', is highlighted with a light blue background and has a 'DOWNLOAD' button with a white fill. An arrow points from the text above to this button. The other columns have 'BUY', 'DOWNLOAD', 'DOWNLOAD', and 'TALK' buttons respectively, all with green fills. Below the product list is a comparison table with rows for 'Integrated Tools for R', 'Priority Support', 'Access via Web Browser', and 'Enterprise Security'. Each cell in the table contains a green dot indicating availability. The Windows taskbar is visible at the bottom.

	RStudio Desktop Open Source License	RStudio Desktop Commercial License	RStudio Server Open Source License	RStudio Server Pro Commercial License	RStudio Server Pro + RStudio Connect Commercial License
Price	FREE	\$995 per year	FREE	\$9,995 per year	\$29,995 per year
Primary Action	DOWNLOAD	BUY	DOWNLOAD	DOWNLOAD	TALK
Learn More	Learn More	Learn More	Learn More	Learn More	Learn More
Integrated Tools for R	●	●	●	●	●
Priority Support		●		●	●
Access via Web Browser			●	●	●
Enterprise Security				●	●

Click on the first link to download Rstudio package on your system



The screenshot shows the RStudio website's download page. At the top, there is a navigation menu with links for Products, Resources, Pricing, About Us, and Blogs. Below this, the page title is "RStudio Desktop 1.1.463 — Release Notes". A paragraph states that RStudio requires R 3.0.1+ and provides a link to download R. Another paragraph mentions that Linux users may need to import RStudio's public code-signing key. The main content is a table titled "Installers for Supported Platforms". The first row of the table is highlighted, and an arrow points from the text above to the first link in this row. Below the table, there is a section for "Zip/Tarballs". The Windows taskbar is visible at the bottom of the screen.

Download RStudio - RStudio

https://www.rstudio.com/products/rstudio/download/#download

Apps Facebook Google NCBS Webmail - Lo... YouTube IRCTC Next Generat... bioRxiv.org - the pr... 30 Books Everyone ... 10 Quotes by Sahir ...

RStudio

Products Resources Pricing About Us Blogs

RStudio Desktop 1.1.463 — [Release Notes](#)

RStudio requires R 3.0.1+. If you don't already have R, download it [here](#).

Linux users may need to import RStudio's [public code-signing key](#) prior to installation, depending on the operating system's security policy.

Installers for Supported Platforms

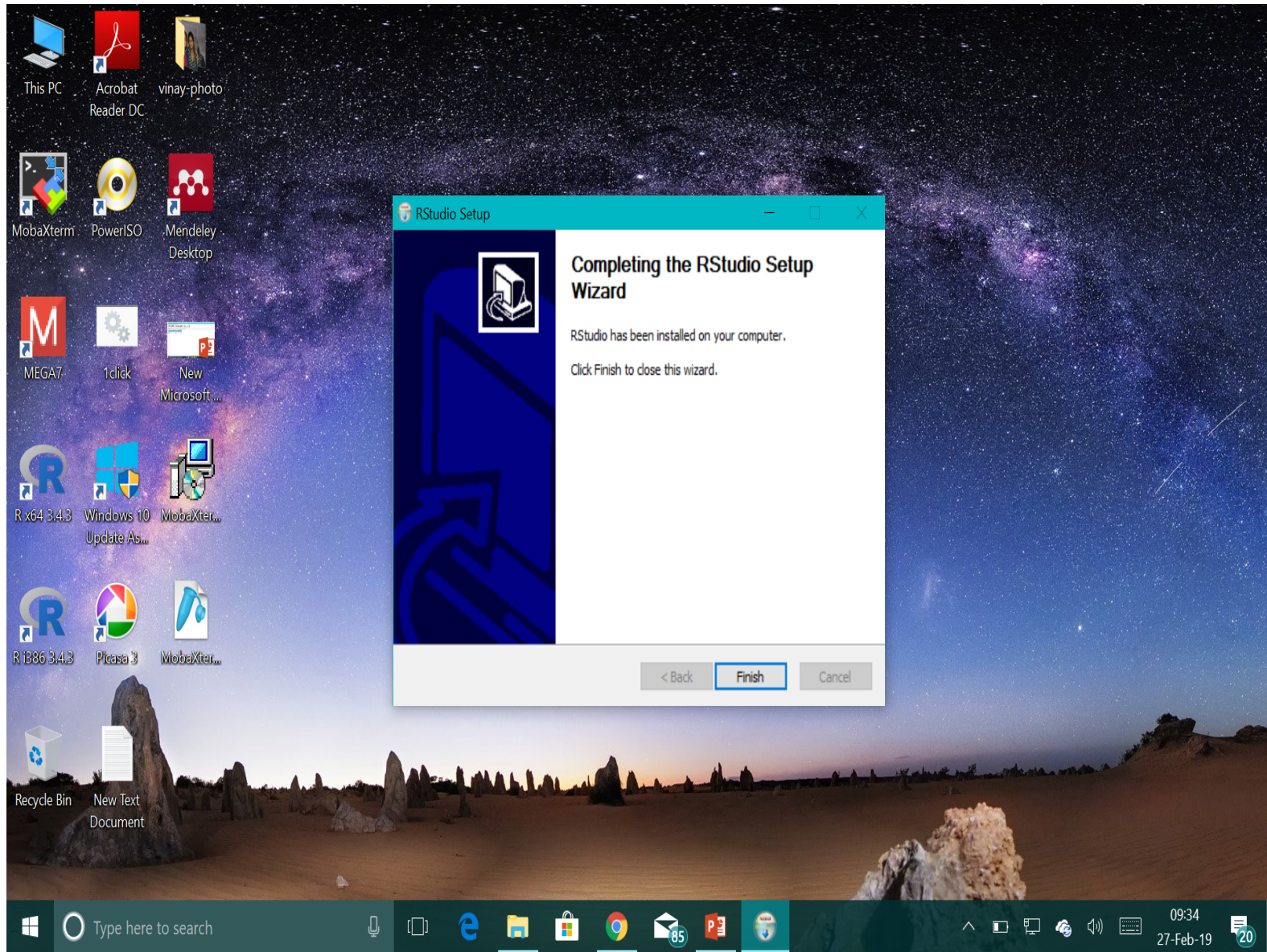
Installers	Size	Date	MD5
RStudio 1.1.463 - Windows Vista/7/8/10	85.8 MB	2018-10-29	58b3d796d8cf96fb8580c62f46ab64d4
RStudio 1.1.463 - Mac OS X 10.6+ (64-bit)	74.5 MB	2018-10-29	a79032ba4d7daaa86a8da01948278d94
RStudio 1.1.463 - Ubuntu 12.04-15.10/Debian 8 (32-bit)	89.3 MB	2018-10-29	8a6755fa9fae2bafce289df3358aaf63
RStudio 1.1.463 - Ubuntu 12.04-15.10/Debian 8 (64-bit)	97.4 MB	2018-10-29	bc50d6bd34926c1cc3ae4a209d67d649
RStudio 1.1.463 - Ubuntu 16.04+/Debian 9+ (64-bit)	65 MB	2018-10-29	cf659db18619cc78d1592fefaa7c753
RStudio 1.1.463 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit)	88.1 MB	2018-10-29	742f0bad60dfcaa3281576e14ad6699e
RStudio 1.1.463 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit)	90.6 MB	2018-10-29	c7303067a0ca99deea7e427b856952d1

Zip/Tarballs

Type here to search

09:24
27-Feb-19

Follow the instructions with default settings to complete the installation.



Installation of certain packages in R using Rstudio

The screenshot shows the RStudio interface with the following components:

- Console:** Contains the following commands and output:

```
> a <- c(1,2)
> a
[1] 1 2
> source("https://bioconductor.org/biocLite.R")
Bioconductor version 3.6 (BiocInstaller 1.28.0), ?biocLite for help
A new version of Bioconductor is available after installing the most recent version of R; see
http://bioconductor.org/install
> biocLite("edgeR")
BioC_mirror: https://bioconductor.org
Using Bioconductor 3.6 (BiocInstaller 1.28.0), R 3.4.3 (2017-11-30).
Installing package(s) 'edgeR'
trying URL 'https://bioconductor.org/packages/3.6/bioc/bin/windows/contrib/3.4/edgeR_3.20.9.zip'
Content type 'application/zip' length 5531758 bytes (5.3 MB)
downloaded 5.3 MB

package 'edgeR' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
C:\Users\Lenovo\AppData\Local\Temp\RtmpSW0jxS\downloaded_packages
installation path not writeable, unable to update packages: class, cluster, codetools,
foreign, lattice, MASS, Matrix, mgcv, nlme, rpart, survival
> install.packages("gplots")
Installing package into 'C:/Users/Lenovo/Documents/R/win-library/3.4'
(as 'lib' is unspecified)
trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/gplots_3.0.1.1.zip'
Content type 'application/zip' length 512296 bytes (500 KB)
downloaded 500 KB

package 'gplots' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
C:\Users\Lenovo\AppData\Local\Temp\RtmpSW0jxS\downloaded_packages
> install.packages("ape")
Installing package into 'C:/Users/Lenovo/Documents/R/win-library/3.4'
(as 'lib' is unspecified)
trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/ape_5.2.zip'
Content type 'application/zip' length 2092401 bytes (2.0 MB)
downloaded 2.0 MB

package 'ape' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
C:\Users\Lenovo\AppData\Local\Temp\RtmpSW0jxS\downloaded_packages
> |
```
- Environment/History/Connections:** Shows the current environment and history of commands.
- Values:** Shows the current values of variables, e.g., 'a' is a numeric vector [1:2] with values 1 and 2.
- Packages:** Shows a list of installed and available packages, including 'ape', 'BiocInstaller', 'bitops', 'caTools', 'edgeR', 'gdata', 'gplots', 'gttools', 'limma', 'locfit', 'Rcpp', 'statmod', 'boot', 'class', 'cluster', 'codetools', 'compiler', and 'datasets'.

Arrows in the image point to the following commands in the console:

- 1: `source("https://bioconductor.org/biocLite.R")`
- 2: `biocLite("edgeR")`
- 3: `install.packages("gplots")`
- 4: `install.packages("ape")`

Type the commands in blue and then press **Ctrl+Enter** in the **Console**. Wait for the commands to complete, before the next “>” appears on console.

Note: Just pressing Enter alone will not execute the command. Press “**Ctrl**” and “**Enter**” at the same time to execute the command.

Similarly, install statmod using console.

```
> install.packages("statmod")
```

The following packages will be installed in R for carrying out the differential gene expression analysis:

- 1) edgeR
- 2) gplots
- 3) ape
- 4) statmod

See you all at the workshop!