# Package 'installr'

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Type Package

```
'RStudio', 'Git', and More!)
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Description R is great for installing software. Through the 'installr'
     package you can automate the updating of R (on Windows, using updateR())
     and install new software. Software installation is initiated through a
     GUI (just run installr()), or through functions such as: install.Rtools(),
     install.pandoc(), install.git(), and many more. The updateR() command
     performs the following: finding the latest R version, downloading it,
     running the installer, deleting the installation file, copy and updating
     old packages to the new R installation.
URL https://talgalili.github.io/installr/,
     https://github.com/talgalili/installr/,
     https://www.r-statistics.com/tag/installr/
BugReports https://github.com/talgalili/installr/issues
Depends R (>= 2.14.0)
Imports stringr, utils
Suggests curl, XML, devtools, rjson, data.table, plyr, ggplot2, sp,
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     R.utils
License GPL-2
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```

Title Using R to Install Stuff on Windows OS (Such As: R, 'Rtools',

2 R topics documented:

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installr-package

Using R to Install Stuff (Such As: R, Rtools, RStudio, Git, and More!)

# Description

R is great for installing software. Through the 'installr' package you can automate the updating of R (on Windows, using updateR()) and install new software. Software installation is initiated through a GUI (just run installr()), or through functions such as: install.Rtools(), install.pandoc(), install.git(), and many more. The updateR() command performs the following: finding the latest R version, downloading it, running the installer, deleting the installation file, copy and updating old packages to the new R installation.

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add.installr.GUI

Adds a menu based GUI for updating R within Rgui

# Description

Adds a menu based GUI for updating R within Rgui.

# Usage

```
add.installr.GUI()
```

# **Details**

This function is used during .onLoad to load the menus for the installr package in Rgui.

### Value

Returns invisible TRUE/FALSE if menus were added or not.

# Author(s)

Tal Galili, Dason

### References

My thanks goes to Yihui and Dason, for the idea and help with implementation. See also: https://stackoverflow.com/questions/15250487/how-to-add-a-menu-item-to-rgui/

### **Examples**

```
## Not run:
add.installr.GUI()
## End(Not run)
```

```
add_load_installr_on_startup_menu
```

Add menu item for having installr load on startup

# **Description**

Add menu item for having installr load on startup

### Usage

```
add_load_installr_on_startup_menu(...)
```

### **Arguments**

... not used. (but good for future backward compatibility)

```
add_remove_installr_from_startup_menu
```

Add menu item for having installr NOT load on startup

# **Description**

Add menu item for having installr NOT load on startup

# Usage

```
add_remove_installr_from_startup_menu(...)
```

### **Arguments**

... not used. (but good for future backward compatibility)

```
add_to_.First_in_Rprofile.site

Add a code line to Rprofile.site .First
```

# **Description**

Goes through Rprofile.site text, finds the .First function - and add a line of code to the beginning of it.

# Usage

```
add_to_.First_in_Rprofile.site(code, indent = "\t", ...)
```

# **Arguments**

code A character scalar with code to add at the beginning of the .First function in

Rprofile.site

indent a character scalar indicating the text to be added before code. Default is a tab.

... not used.

### References

```
https://stackoverflow.com/questions/1395301/how-to-get-r-to-recognize-your-working-directory-as-it https://stackoverflow.com/questions/1189759/expert-r-users-whats-in-your-rprofile http://www.noamross.net/archives/2012-11-02-rprofile/https://www.statmethods.net/interface/customizing.html
```

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### **Examples**

```
## Not run:
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
add_to_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # TRUE
remove_from_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
# this would still leave .First
## End(Not run)
```

ask.user.for.a.row

Asks the user for a row number from a data.frame table

### **Description**

The function gets a data.frame and asks the user to choose a row number. Once choosen, that row number is returned from the function.

# Usage

```
ask.user.for.a.row(
   TABLE,
   header_text = "Possible versions to download (choose one)",
   questions_text
)
```

# **Arguments**

TABLE a data.frame table with rows from which we wish the user to choose a row. If

TABLE is not a data.frame, it will be coerced into one.

header\_text the text the users sees (often a question) as a title for the printed table - explaining

which row he should choose from

questions\_text the question the users see after the printing of the table - explaining which row

he should choose from. (the default is: "Please review the table of versions from above, and enter the row number of the file-version you'd like to install: ")

### Details

This function is used in installr when we are not sure what version of the software to download, or when various actions are available for the user to choose from. If the user doesn't give a valid row number, the function repeats its questions until a valid row number is chosen (or the user escapes)

### Value

The row number the user has choosen from the data.frame table.

8 ask.user.yn.question

### **Source**

On how to ask the user for input:

https://stackoverflow.com/questions/5974967/what-is-the-correct-way-to-ask-for-user-input-in-an-r-

### **Examples**

```
## Not run:
version_table <- data.frame(versions = c("devel", "V 1.0.0", "V 2.0.0"))
installr:::ask.user.for.a.row(version_table)

## End(Not run)</pre>
```

Description

Asks the user for one yes/no question. If the users replies with a "yes" (or Y, or y) the function returns TRUE. Otherwise, FALSE. (also exists as the function devtools::yesno)

### Usage

```
ask.user.yn.question(question, GUI = TRUE, add_lines_before = TRUE)
```

ask.user.yn.question Asks the user for one yes/no question.

### **Arguments**

```
question a character string with a question to the user.

GUI a logical indicating whether a graphics menu should be used if available. If TRUE, and on Windows, it will use winDialog, otherwise it will use menu.

add_lines_before

if to add a line before asking the question. Default is TRUE.
```

#### Value

TRUE/FALSE - if the user answers yes or no.

### References

```
https://stackoverflow.com/questions/15250487/how-to-add-a-menu-item-to-rgui (my thanks goes to Dason for his answer and help)
```

### See Also

menu in the utils package, yesno in the devtools package.

### **Examples**

```
## Not run:
ask.user.yn.question("Do you love R?")
ask.user.yn.question(question = "Do you love R?", GUI = TRUE) # the same one as before
ask.user.yn.question(question = "Do you love R?", GUI = FALSE)
# reverts to command line questions

ask.user.yn.question("Lorem ipsum dolor sit amet, consectetur adipisicing elit,
sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
Ut enim ad minim veniam, quis nostrud exercitation

ullamco laboris nisi ut aliquip
ex ea commodo consequat. Do \n you \n love R?")
# checking how it deals with multi lines, and a lot of text (very good actually)

## End(Not run)
```

barplot\_package\_users\_per\_day

barplot for the number of users installation of a package

# Description

This function is a first template for creating a barplot of the number of downloads a package had in a time period. This function is based on some other functions, have a look at the example for more details.

### Usage

```
barplot_package_users_per_day(pkg_name, dataset, remove_dups = TRUE, ...)
```

### **Arguments**

pkg\_name a string of the package we are interested in checking.

dataset a dataset output from running read\_RStudio\_CRAN\_data.

remove\_dups default is TRUE. Should the duplicate user ids (based on their ips) be removed.

If TRUE, then the plot is the number of unique users who have downloaded our

package everyday.

... not in use.

#### **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

### Value

Returns the total number of downloads of the package for that time period.

10 browse.latest.R.NEWS

### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data,barplot\_package\_users\_per\_day

### **Examples**

```
## Not run:
# The first two functions might take a good deal of time to run (depending on the date range)
RStudio_CRAN_data_folder <-
      download_RStudio_CRAN_data(START = '2013-04-02',
                                  END = '2013-04-05')
                                  # around the time R 3.0.0 was released
my_RStudio_CRAN_data <- read_RStudio_CRAN_data(RStudio_CRAN_data_folder)</pre>
my_RStudio_CRAN_data <- format_RStudio_CRAN_data(my_RStudio_CRAN_data)</pre>
head(my_RStudio_CRAN_data)
lineplot_package_downloads(pkg_names = c("ggplot2", "reshape", "plyr", "installr"),
                            dataset = my_RStudio_CRAN_data)
# older plots:
# barplots: (more functions can easily be added in the future)
barplot_package_users_per_day("installr", my_RStudio_CRAN_data)
barplot_package_users_per_day("plyr", my_RStudio_CRAN_data)
## End(Not run)
```

browse.latest.R.NEWS See the NEWS file for the latest R release

# **Description**

Sends the user the NEWS html file on "https://cran.rstudio.com/bin/windows/base/NEWS.R-3.0.0.html" (URL changes with each version)

### Usage

```
browse.latest.R.NEWS(URL = "https://cran.rstudio.com/bin/windows/base/", ...)
```

### **Arguments**

```
URL the URL of the page from which R can be downloaded.
... for future use
```

#### Value

```
invisible(NULL)
```

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### **Examples**

```
## Not run:
browse.latest.R.NEWS()
## End(Not run)
```

check.for.updates.R

Checks if there is a newer version of R

### **Description**

Fetches the latest (not development!) R version and compares it with your currently installed R version (the version of the R session from which you are running this function).

# Usage

```
check.for.updates.R(
  notify_user = TRUE,
  GUI = TRUE,
  page_with_download_url = "https://cran.rstudio.com/bin/windows/base/",
  pat = "R-[0-9.]+.+-win\\.exe"
)
```

### **Arguments**

notify\_user if to print to you (the user) what is the latest version and what version you are currently using.

GUI a logical indicating whether a graphics menu should be used if available. If TRUE, and on Windows, it will use winDialog, otherwise it will use cat.

page\_with\_download\_url
the URL of the page from which R can be downloaded.

pattern to search for when looking for a newer R version

### Value

TRUE/FALSE - if there is a newer version of R to install or not.

```
## Not run:
check.for.updates.R()
# Possible output:
# There is a newer version of R for you to download!
# You are using R version: 2.15.0
# And the latest R version is: 2.15.3
# [1] TRUE
## End(Not run)
```

12 check.integer

check.integer

Check if a number is integer

# Description

Returns TRUE/FALSE on whether a number is integer or not.

### Usage

```
check.integer(N)
```

# **Arguments**

Ν

A number (if a vector is supplied only the first element is checked - without warning)

### **Details**

Surprising as it may be, R doesn't come with a handy function to check if the number is integer. This function does just this.

### Value

TRUE/FALSE on whether a number is integer or not.

# Author(s)

VitoshKa

### **Source**

https://stackoverflow.com/questions/3476782/how-to-check-if-the-number-is-integer

```
check.integer <- installr:::check.integer
check.integer(4) # TRUE
check.integer(3243) #TRUE
check.integer(3243.34) #FALSE
check.integer("sdfds") #FALSE
check.integer("sdfds") #FALSE
check.integer(1e4) #TRUE
check.integer(1e6) #TRUE
check.integer(1e600) #FALSE - the function is having a hardtime with Inf...
rm(check.integer)</pre>
```

checkMD5sums2

checkMD5sums2	Check and Create MD5 Checksum Files	

# **Description**

checkMD5sums checks the files against a file 'MD5'. This extends the default checkMD5sums from package tools by adding a new parameter "md5file"

# Usage

```
checkMD5sums2(package, dir, md5file, omit_files, ...)
```

# **Arguments**

package	the name of an installed package
dir	the path to the top-level directory of an installed package.
md5file	the exact path of the md5file to compare the dir with
omit_files	a character vector with the files or file directories to not include in the checksums
	not used. (but good for future backward compatibility)

### Value

checkMD5sums returns a logical, NA if there is no 'MD5' file to be checked.

### See Also

```
checkMD5sums
```

```
## Not run:
checkMD5sums2(dir=R.home()) # doesn't work for R 3.0.0 or R 3.0.1
checkMD5sums2(dir=R.home(), omit_files = c("etc/Rconsole", "etc/Rprofile.site")) # will work!
# tools::md5sum(file.path(R.home(), "MD5"))
## End(Not run)
```

```
copy.packages.between.libraries
```

Copies all packages from one library folder to another

# **Description**

Copies all packages from one folder to another. This function is used if we wish to either:

- Upgrade R to a new version and copy all of the packages from the old R installation to the new one.
- Move to a global library system and wanting to copy all of packages from the local library folder to the global one

It takes into account that we don't want to copy packages which have "high" importance (such as MASS, boot, graphics, utils, rpart, Matrix and more GREAT packages...) to the new library folder. Also, it assumes that within an R installation, the packages are located inside the "library" folder.

# Usage

```
copy.packages.between.libraries(
  from,
  to,
  ask = FALSE,
  keep_old = TRUE,
  do_NOT_override_packages_in_new_R = TRUE
)
```

# Arguments

from	a character vector for the location of the old library folder FROM which to copy files from.	
to	a character vector for the location of the old library folder TO which to copy files to.	
ask	should the user be given the option to choose between which two libraries to copy the packages? If FALSE (default), the folders are copied from the beforenewest R installation to the newest R installation. This the overrides "from" and "to" parameters.	
keep_old	should the packages be COPIED to the new library folder, thus KEEPing the old package as they are? Or should they be removed?	
do_NOT_override_packages_in_new_R		
	default TRUE If FALSE, then If a package exists in both the "from" and "to"	
	library folders - it would copy to "to" the version of the package from "from".	
	(this parameter should rarely be FALSE)	

### Value

TRUE if it copied (moved) packages, and FALSE if it did not.

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#### See Also

```
get.installed.R.folders
```

# **Examples**

```
## Not run:
copy.packages.between.libraries(ask = T)
# it will ask you from what R version
# to copy the packages into which R version.
# Since (do_NOT_override_packages_in_new_R = T) the function will
# make sure to NOT override your newer packages.
# copy.packages.between.libraries(ask = T, keep_old = F)
# As before, but this time it will MOVE (instead of COPY) the packages.
# e.g: erase them from their old location.
## End(Not run)
```

cranometer

Measures the speed of downloading from different CRAN mirrors

# **Description**

Estimates the speed of each CRAN mirror by measuring the time it takes to download the NEWS file.

### Usage

```
cranometer(ms = getCRANmirrors(all = FALSE, local.only = FALSE), ...)
```

# **Arguments**

```
the output of getCRANmirrors. Defaults to using all of the mirrors.not in use
```

# Details

It works by downloading the latest NEWS file (288 Kbytes at the moment, so not huge) from each of the mirror sites in the CRAN mirrors list. If you want to test it on a subset then call getCRANmirrors yourself and subset it somehow.

It runs on the full CRAN list and while designing this package I've yet to find a timeout or error so I'm not sure what will happen if download.file fails. It returns a data frame like you get from getCRANmirrors but with an extra 't' column giving the elapsed time to get the NEWS file.

CAVEATS: if your network has any local caching then these results will be wrong, since your computer will probably be getting the locally cached NEWS file and not the one on the server. Especially if you run it twice. Oh, I should have put cacheOK=FALSE in the download.file - but

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even that might get overruled somewhere. Also, sites may have good days and bad days, good minutes and bad minutes, your network may be congested on a short-term basis, etc etc.

There may also be a difference in reliability, which would not so easily be measured by an individual user.

Later that year, Barry also wrote Cranography. See: https://www.maths.lancs.ac.uk/~rowlings/R/Cranography/.

#### Value

a data.frame with details on mirror sites and the time it took to download their NEWS file.

### Author(s)

Barry Rowlingson <b.rowlingson@lancaster.ac.uk>

### See Also

freegeoip, myip, cranometer

```
## Not run:
# this can take some time
x <- cranometer()</pre>
time_order <- order(x$t)</pre>
# a quick overview of the fastest mirrors
head(x[time_order,c(1:4, 9)], 20)
# a dotchart of the fastest mirrors
with(x[rev(time_order),],
 dotchart(t, labels =Name,
 cex = .5, xlab = "Timing of CRAN mirror")
 )
# tail(geonames_df)
# tail(x)
require(plyr)
ss <- !(x$Name == "0-Cloud")
gvis_df <- ddply(x[ss,], .(CountryCode), function(xx) {</pre>
  ss <- which.min(xx$t)</pre>
  if(length(ss) == 0) ss <- 1
  data.frame(time = xx$t[ss], name = xx$Name[ss] )
gvis_df <- gvis_df[!is.na(gvis_df$time), ]</pre>
require2("googleVis")
Geo<-gvisGeoMap(gvis_df,</pre>
              locationvar = "CountryCode",
                numvar="time",
```

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create.global.library Creates a global library folder

# Description

Creates a global library folder (above the folder R is currently installed in)

# Usage

```
create.global.library(global_library_folder)
```

# Arguments

```
\label{library_folder} $$ the path of the new global library folder to create. If missing, will be set to $R_path/R/library. (for example: "C:/Program Files/R/library")
```

### Value

TRUE/FALSE if we created a new folder or not.

```
## Not run:
create.global.library()
## End(Not run)
```

```
download_RStudio_CRAN_data
```

Download RStudio CRAN mirror data files into a folder

# **Description**

This function download these files based on the code from the download page (http://cran-logs.rstudio.com/) into a temporary folder.

# Usage

```
download_RStudio_CRAN_data(
   START = as.Date(Sys.time()) - 5,
   END = as.Date(Sys.time()),
   log_folder = tempdir(),
   trunc_END_date_to_today = TRUE,
   override = FALSE,
   message = TRUE,
   ...
)
```

# **Arguments**

START	the defaults is 5 days before today. A character string of the START date for files to be downloaded. The date format is "YYYY-MM-DD".	
END	the defaults is today. A character string of the END date for files to be downloaded. The date format is "YYYY-MM-DD".	
log_folder	the folder into which we would like the files to be downloaded to. Default is the temporary folder picked by tempdir.	
trunc_END_date_to_today		
	default is TRUE. Makes sure that if END date is later then today, the END date will be change to today (since otherwise, we will only get many 404 errors)	
override	boolean (default is FALSE) - should the function download files that are already available in the temp folder	
message	boolean (default is TRUE) - should a message be printed in interesting cases.	
	not in use.	

# **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

# Value

Returns the value of log\_folder.

fetch\_tag\_from\_Rd

### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data,barplot\_package\_users\_per\_day

### **Examples**

fetch\_tag\_from\_Rd

Access tag elements from R's Rd file

# **Description**

A function to extract elements from R's help file.

It is useful, for example, for going through a package and discover who are its authors (useful for me to help me give proper credit in the DESCRIPTION file).

### Usage

```
fetch_tag_from_Rd(package, tag = "\\author", ...)
```

### Arguments

package a character string of the package we are interested in.

tag a character vector of tag(s) to get from a package's Rd files.

... not in use.

### Value

a character vector with the tag's content, and the name of the Rd source of the function the tag came from.

# Author(s)

Thomas J. Leeper <thosjleeper@gmail.com>

20 file.name.from.url

### **Source**

https://stackoverflow.com/questions/17909081/access-elements-from-rs-rd-file

### See Also

package\_authors

# **Examples**

```
## Not run:
fetch_tag_from_Rd("installr", "\\author")
fetch_tag_from_Rd("knitr", "\\author")
fetch_tag_from_Rd("lubridate", "\\author")

fetch_tag_from_Rd("installr", "\\source")

# get all the authors for this package
unique(unname(fetch_tag_from_Rd("installr", "\\author")))

fetch_tag_from_Rd("installr", "\\author")
package_authors("installr")

## End(Not run)
```

file.name.from.url

Extract the file name from some URL

# **Description**

Gets a character of link to some file, and returns the name of the file in this link.

# Usage

```
file.name.from.url(URL, rm.params = FALSE)
```

### Arguments

URL Some url to a file.

rm.params (optional, default=FALSE). Whether or not to remove query parameters from

URL.

# **Details**

The install.packages.zip must use this function, since it is crucial that the name of the file into which the ZIPPED package is downloaded to the computer, will have the same name as the file which is online.

# Value

The name of the file in the URL

### See Also

```
install.URL, install.packages.zip
```

# **Examples**

```
## Not run:
url <- "https://cran.r-project.org/bin/windows/base/R-2.15.3-win.exe"
file.name.from.url(url) # returns: "R-2.15.3-win.exe"

url <- "https://bioconductor.org/packages/R/genetics?version=5.01&f=gz"
file.name.from.url(url, rm.params=TRUE) # returns: "genetics?version=5.01&f=gz"
file.name.from.url(url, rm.params=FALSE) # returns: "genetics"
file.name.from.url(url) # returns: "genetics"
## End(Not run)</pre>
```

format\_RStudio\_CRAN\_data

Format the RStudio CRAN mirror data into the data.table format

# **Description**

This function makes sure the RStudio CRAN mirror data object has correct classes for the columns date, package, country. It also adds the columns weekday and week. Lastly, it also sets a key.

#### **Usage**

```
format_RStudio_CRAN_data(dataset, ...)
```

## **Arguments**

```
dataset the RStudio CRAN mirror data object ... not in use.
```

### **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

### Value

Returns the re-formated data object.

22 freegeoip

### Author(s)

Felix Schonbrodt, Tal Galili

#### Source

```
https://www.nicebread.de/finally-tracking-cran-packages-downloads/
```

### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data, barplot\_package\_users\_per\_day

# **Examples**

```
## Not run:
# The first two functions might take a good deal of time to run (depending on the date range)
RStudio_CRAN_data_folder <-
      download_RStudio_CRAN_data(START = '2013-04-02',
                                 END = '2013-04-05')
                                  # around the time R 3.0.0 was released
my_RStudio_CRAN_data <- read_RStudio_CRAN_data(RStudio_CRAN_data_folder)</pre>
my_RStudio_CRAN_data <- format_RStudio_CRAN_data(my_RStudio_CRAN_data)</pre>
head(my_RStudio_CRAN_data)
lineplot_package_downloads(pkg_names = c("ggplot2", "reshape", "plyr", "installr"),
                           dataset = my_RStudio_CRAN_data)
# older plots:
# barplots: (more functions can easily be added in the future)
barplot_package_users_per_day("installr", my_RStudio_CRAN_data)
barplot_package_users_per_day("plyr", my_RStudio_CRAN_data)
## End(Not run)
```

freegeoip

Geolocate IP addresses in R

# **Description**

This R function uses the free freegeoip.net geocoding service to resolve an IP address (or a vector of them) into country, region, city, zip, latitude, longitude, area and metro codes.

The function require rjson.

# Usage

```
freegeoip(
  ip = myip(),
  format = ifelse(length(ip) == 1, "list", "dataframe"),
   ...
)
```

freegeoip 23

# **Arguments**

```
ip a character vector of ips (default is the output from myip)

format format of the output. Either "list" (default) or "data.frame"

... not in use
```

### Value

a list or data.frame with details on your geo location based on the freegeoip.net service.

# Author(s)

Heuristic Andrew (see source for details)

### **Source**

https://heuristically.wordpress.com/2013/05/20/geolocate-ip-addresses-in-r/.

### See Also

freegeoip, myip, cranometer

```
## Not run:
freegeoip()
## http://www.students.ncl.ac.uk/keith.newman/r/maps-in-r
# install.packages("maps")
# install.packages("mapdata")
library(maps)
library(mapdata)
                     # Contains the hi-resolution points that mark out the countries.
map('worldHires')
require(installr)
myip_details <- freegeoip(myip())</pre>
my_lati <- myip_details$latitude</pre>
my_long <- myip_details$longitude</pre>
points(my_lati,my_long,col=2,pch=18, cex = 1)
\# lines(c(my_lati,0) ,c(my_long, 50), col = 2)\#'
## End(Not run)
```

24 get.installed.R.folders

```
get.installed.R.folders
```

Returns folder names with R installations

### **Description**

The function finds the folders where there are R installations. This is important for deciding what to uninstall, and where from and to to move libraries. This function ignores installations of R-devel at this point. Also, this function is based on only looking at the folders above the current installation of R. If there are other installations of R outside the above folder, they will not be listed.

### Usage

```
get.installed.R.folders(sort_by_version = TRUE, add_version_to_name = TRUE)
```

# **Arguments**

```
sort_by_version
```

should the returned vector be sorted by the version number? (default is yes - so that the first element is of the newest version of R) should the user be given the option to choose between which two libraries to copy the packages? If FALSE (default), the folders are copied from the before-newest R installation to the newest R installation.

add\_version\_to\_name

should the version number be added to the vector of folders? (default is yes)

# Value

Returns a character vector (possibly named, possibly sorted) of the folders where there are R installations.

### See Also

copy.packages.between.libraries

```
## Not run:
get.installed.R.folders()
# returns the sorted and named vector of
# folder names where R is installed (in different versions).
# The first element is
# the folder of the newest version of R.

get.installed.R.folders(F, F)
# returns the folder names where R is
# installed (in different versions) - no sorting of
# the folder names was performed
```

get\_latest\_r\_version 25

```
## End(Not run)
```

```
get_latest_r_version Fetches latest R version from CRAN
```

# **Description**

Returns the latest version of R available on CRAN as an R system version object.

# Usage

```
get_latest_r_version(cran_mirror = "https://cran.rstudio.com/")
```

### **Arguments**

cran\_mirror The CRAN mirror to use

### References

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

# See Also

getRversion

get\_pid

Find the pid of a process by name

# Description

Returns a vector with the process ID (pid) for all processes with a particular name.

# Usage

```
get_pid(process, exact = FALSE, ...)
```

# Arguments

process a character vector of process names.

exact logical (FALSE). should we get exact match to process name, or can we use just

partial matching.

... not used.

# Value

an integer vector with the process ID (pid) of the processes.

26 get\_Rscript\_PID

### References

tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10)

# See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill
```

# **Examples**

```
## Not run:
get_pid("rsession") # finds it
get_pid("rsession", exact = TRUE) # doesn't find it
get_pid("rsession.exe", exact = TRUE) # finds it
get_pid(c("wininit", "winlogon"), exact = TRUE) # doesn't find it
get_pid(c("wininit", "winlogon")) # finds it
## End(Not run)
```

get\_Rscript\_PID

Get the running "Rscript" processes PID

# **Description**

Returns a vector with the process ID (pid) of the "Rscript" processes which are currently running.

# Usage

```
get_Rscript_PID(...)
```

### **Arguments**

... not used.

# Value

an integer vector with the process ID (pid) of the "Rscript" processes.

### References

```
tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10)
```

### See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill
```

get\_tasklist 27

### **Examples**

```
## Not run:
# create several running processes of Rscript (to shitdown)
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
# here are there pid numbers:
get_Rscript_PID()
# let's kill them:
kill_all_Rscript_s()
# they are gone...
get_Rscript_PID() # we no longer have Rscripts running
## End(Not run)
```

get\_tasklist

Get the running processes in windows task manager

# **Description**

Returns a data.frame with the current running processes (Windows only).

# Usage

```
get_tasklist(...)
```

## **Arguments**

... not used.

### Value

a data.frame with the current running processes.

### References

```
tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10)
```

### See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill kill_pid,
kill_all_Rscript_s
```

28 install.7zip

### **Examples**

```
## Not run:
# create several running processes of Rscript (to shitdown)
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
# here are there pid numbers:
get_Rscript_PID()
# let's kill them:
kill_all_Rscript_s()
# they are gone...
get_Rscript_PID() # we no longer have Rscripts running
## End(Not run)
```

install.7zip

Downloads and installs 7-Zip for windows

# Description

Allows the user to downloads and install the latest version of 7-Zip for Windows.

### Usage

```
install.7zip(
  page_with_download_url = "https://www.7-zip.org/download.html",
   ...
)
```

### **Arguments**

```
page_with_download_url
the URL of the 7-Zip download page.
... extra parameters to pass to install.URL
```

### **Details**

7-Zip is open source software. Most of the source code is under the GNU LGPL license. The un-RAR code is under a mixed license: GNU LGPL + unRAR restrictions. Check license information here: 7-Zip license. You can use 7-Zip on any computer, including a computer in a commercial organization. You don't need to register or pay for 7-Zip. \*The main features of 7-Zip \*High compression ratio in 7z format with LZMA and LZMA2 compression \*Supported formats: \*\*Packing / unpacking: 7z, XZ, BZIP2, GZIP, TAR, ZIP and WIM \*\*Unpacking only: ARJ, CAB, CHM, CPIO, CramFS, DEB, DMG, FAT, HFS, ISO, LZH, LZMA, MBR, MSI, NSIS, NTFS, RAR, RPM, SquashFS, UDF, VHD, WIM, XAR and Z. For ZIP and GZIP formats, 7-Zip provides a compression ratio that is 2-10 \*Strong AES-256 encryption in 7z and ZIP formats \*Self-extracting capability for 7z format \*Integration with Windows Shell \*Powerful File Manager \*Powerful command line version \*Plugin for FAR Manager \*Localizations for 79 languages

install.CMake 29

### Value

TRUE/FALSE - was the installation successful or not.

#### References

```
• 7-zip homepage: https://www.7-zip.org/
```

# **Examples**

```
## Not run:
install.7zip() # installs the latest version of 7-Zip
## End(Not run)
```

install.CMake

Downloads and installs CMake for windows

### **Description**

Allows the user to downloads and install the latest version of CMake for Windows.

# Usage

```
install.CMake(
   URL = "https://github.com/Kitware/CMake/releases",
   cmake_version = NULL,
   ...
)
```

# **Arguments**

```
URL the URL of the CMake download page.

cmake_version NULL by default, but a user can supply the version as a character.

extra parameters to pass to install.URL
```

### **Details**

CMake is a family of tools designed to build, test and package software. CMake is used to control the software compilation process using simple platform and compiler independent configuration files. CMake generates native makefiles and workspaces that can be used in the compiler environment of your choice. If run NOT on Windows (i.e.: max/linux), this would download the file into the working directory. (getwd).

### Value

TRUE/FALSE - was the installation successful or not.

30 install.conda

### References

• CMake homepage: https://cmake.org/download/

# **Examples**

```
## Not run:
install.CMake() # installs the latest version of CMake
## End(Not run)
```

install.conda

Downloads and installs miniconda

# **Description**

Downloads and installs the latest version of miniconda for Windows.

### Usage

```
install.conda(version = 3, bitNo = "auto", ...)
```

# Arguments

```
version 2 or 3. Default is 3
bitNo 32 or 64. Defaults is "auto" to check system.
... extra parameters to pass to install.URL
```

### **Details**

Miniconda is minimal version of anaconda for python.

### Value

TRUE/FALSE - was the installation successful or not.

# Author(s)

Tal Galili and A. Jonathan R. Godfrey and Chanyub Park

```
## Not run:
install.conda()
install.conda(version = 3)
install.conda(3)
## End(Not run)
```

install.Cygwin 31

install.Cygwin

Downloads and installs Cygwin for windows

# **Description**

Allows the user to downloads and install the latest version of Cygwin for Windows.

# Usage

```
install.Cygwin(bit = 32, ...)
```

# Arguments

bit Specify 32 bit or 64 for your particular version of Windows.

... extra parameters to pass to install.URL

### **Details**

Cygwin is a collection of tools which provide a Linux look and feel environment for Windows.

### Value

TRUE/FALSE - was the installation successful or not.

# References

• Cygwin homepage: https://www.cygwin.com/

# **Examples**

```
## Not run:
install.Cygwin() # installs the latest version of Cygwin
## End(Not run)
```

install.FFmpeg

Downloads and installs FFmpeg for windows

# **Description**

Allows the user to downloads the latest version of FFmpeg for Windows. IMPORTANT NOTE: The user (YOU) are responsible for unpacking the 7zip file into the relevant directory. All that this function does is to download the 7zip file and "run" it.

install.git

### Usage

```
install.FFmpeg(
  page_with_download_url = "http://ffmpeg.zeranoe.com/builds/",
  ...
)
```

### **Arguments**

```
page_with_download_url
the URL of the FFmpeg download page.
... extra parameters to pass to install.URL
```

### **Details**

FFmpeg is a complete, cross-platform solution to record, convert and stream audio and video. It includes libavcodec - the leading audio/video codec library. See the documentation for a complete feature list and the Changelog for recent changes. This function downloads current releases and NOT the Development Snapshots. This function is useful for saveVideo() in the animation package.

### References

• FFmpeg homepage: http://FFmpeg.org/

# **Examples**

```
## Not run:
install.FFmpeg() # installs the latest version of FFmpeg
## End(Not run)
```

install.git

Downloads and installs git and git-gui for windows

# **Description**

Allows the user to downloads and install the latest version of git for Windows.

### Usage

```
install.git(URL = "http://git-scm.com/download/win", version = 64, ...)
```

### **Arguments**

```
URL the URL of the git download page.

version numeric - either 32 or 64 (default)

... extra parameters to pass to install.URL
```

install.GitHub 33

### **Details**

Git is a distributed revision control and source code management system with an emphasis on speed.

### Value

TRUE/FALSE - was the installation successful or not.

### References

```
git homepage: http://git-scm.com/ git download page: http://git-scm.com/download/win
```

### **Examples**

```
## Not run:
install.git() # installs the latest version of git
## End(Not run)
```

install.GitHub

Downloads and installs GitHub for windows

# Description

Allows the user to downloads and install the latest version of GitHub for Windows.

### Usage

```
install.GitHub(
   URL = "http://github-windows.s3.amazonaws.com/GitHubSetup.exe",
   ...
)
```

# Arguments

```
URL the URL of the GitHub download page.
... extra parameters to pass to install.URL
```

### **Details**

"The easiest way to use Git on Windows." (at least so they say...)

### Value

TRUE/FALSE - was the installation successful or not.

### References

- GitHub homepage: https://github.com/
- GitHub for windows download page: https://desktop.github.com/

### **Examples**

```
## Not run:
install.GitHub() # installs the latest version of GitHub for windows
## End(Not run)
```

install.GraphicsMagick

Downloads and installs GraphicsMagick for windows

# **Description**

Allows the user to downloads and install the latest version of GraphicsMagick for Windows.

### Usage

```
install.GraphicsMagick(
   URL = "https://sourceforge.net/projects/graphicsmagick/files/latest/download",
   ...
)
```

### **Arguments**

URL the URL of the ImageMagick download page.
... deprecated

### **Details**

GraphicsMagick is the swiss army knife of image processing. Comprised of 282K physical lines (according to David A. Wheeler's SLOCCount) of source code in the base package (or 964K including 3rd party libraries) it provides a robust and efficient collection of tools and libraries which support reading, writing, and manipulating an image in over 88 major formats including important formats like DPX, GIF, JPEG, JPEG-2000, PNG, PDF, PNM, and TIFF. This function downloads Win32 dynamic at 16 bits-per-pixel. No direct file is available to run, You'll need to open/run the file that your browser is now downloading.

# Value

TRUE/FALSE - was the installation successful or not.

### References

• GraphicsMagick homepage: http://www.graphicsmagick.org/

install.ImageMagick 35

### **Examples**

```
## Not run:
install.GraphicsMagick() # installs the latest version of GraphicsMagick
## End(Not run)
```

install.ImageMagick

Downloads and installs ImageMagick for windows

# Description

Allows the user to downloads and install the latest version of ImageMagick for Windows.

### Usage

```
install.ImageMagick(
   URL = "https://www.imagemagick.org/script/download.php",
   ...
)
```

# **Arguments**

URL the URL of the ImageMagick download page.
... extra parameters to pass to install.URL

### **Details**

ImageMagick is a software suite to create, edit, compose, or convert bitmap images. It can read and write images in a variety of formats (over 100) including DPX, EXR, GIF, JPEG, JPEG-2000, PDF, PhotoCD, PNG, Postscript, SVG, and TIFF. Use ImageMagick to resize, flip, mirror, rotate, distort, shear and transform images, adjust image colors, apply various special effects, or draw text, lines, polygons, ellipses and Bezier curves. This function downloads Win32 dynamic at 16 bits-per-pixel.

## Value

TRUE/FALSE - was the installation successful or not.

### References

• ImageMagick homepage: http://www.imagemagick.org/script/index.php

```
## Not run:
install.ImageMagick() # installs the latest version of ImageMagick
## End(Not run)
```

36 install.inno

install.inno

Downloads and installs Inno Setup

# **Description**

Downloads and installs Inno Setup's stable release

# Usage

```
install.inno(quick_start_pack = FALSE, encryption_module = TRUE, ...)
```

# **Arguments**

## Details

Inno Setup is a free installer for Windows programs. First introduced in 1997, it currently rivals many commercial installers in feature set and stability.

See Features for more information.

### Value

TRUE/FALSE - was the installation successful or not.

# Author(s)

Tal Galili and Jonathan M. Hill

```
## Not run:
install.inno()
install.inno(quick_start_pack = TRUE)
## End(Not run)
```

install.java 37

install.java

Install Java - downloads and set path openjdk

#### **Description**

Downloads and set path the latest version of openidk for Windows.

### Usage

```
install.java(
 version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
install.Java(
  version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
install.jdk(
 version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
install.Jdk(
 version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
install.openjdk(
 version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
install.OpenJdk(
 version = 11,
 page_with_download_url = "http://jdk.java.net/java-se-ri/",
 path = "C:/java"
)
```

### **Arguments**

version

9 or 10 is passible. Default is 11.

38 install.LaTeX2RTF

#### **Details**

install openjdk 9 or 10 version for windows.

## Value

TRUE/FALSE - was the installation successful or not.

## Author(s)

Chan-Yub Park And Tal Galili

# **Examples**

```
## Not run:
install.java()
install.java(version = 11)
install.java(11)
## End(Not run)
```

install.LaTeX2RTF

Downloads and installs LaTeX2RTF for windows

## **Description**

Allows the user to downloads and install the latest version of LaTeX2RTF for Windows.

# Usage

```
install.LaTeX2RTF(
   page_with_download_url = "http://sourceforge.net/projects/latex2rtf/",
   ...
)
```

# Arguments

```
page_with_download_url
the URL of the SWFTools download page.
... extra parameters to pass to install.URL
```

install.LyX 39

#### **Details**

Latex2rtf tries to convert your LaTeX file into a RTF file for opening in Microsoft Word. The general idea is to try and get the things that computers are good at correct: character conversion, graphic conversion, etc. Page layout suffers because control in RTF is pretty pathetic compared to TeX. Consequently, it is likely that manual reformatting will be needed.

#### Value

TRUE/FALSE - was the installation successful or not.

#### References

• SWFTools homepage: http://latex2rtf.sourceforge.net/

## **Examples**

```
## Not run:
install.LaTeX2RTF() # installs the latest version of LaTeX2RTF
## End(Not run)
```

install.LyX

Downloads and installs LyX for windows

#### **Description**

Allows the user to downloads and install the latest version of LyX for Windows.

#### Usage

```
install.LyX(
  page_with_download_url = "http://www.lyx.org/Download",
  new_installation,
  ...
)
```

### **Arguments**

40 install.MikTeX

#### **Details**

LyX is an advanced open source document processor running on Linux/Unix, Windows, and Mac OS X. It is called a "document processor", because unlike standard word processors, LyX encourages an approach to writing based on the structure of your documents, not their appearance.#' LyX lets you concentrate on writing, leaving details of visual layout to the software. LyX automates formatting according to predefined rule sets, yielding consistency throughout even the most complex documents. LyX produces high quality, professional output - using LaTeX, an open source, industrial strength typesetting engine, in the background.

#### Value

TRUE/FALSE - was the installation successful or not.

#### References

```
• LyX homepage: http://www.lyx.org/
```

#### **Examples**

```
## Not run:
install.LyX() # installs the latest version of LyX
## End(Not run)
```

install.MikTeX

Downloads and installs MikTeX for windows

### **Description**

Allows the user to downloads and install the latest version of MikTeX for Windows.

### Usage

```
install.MikTeX(page_with_download_url = "https://miktex.org/download", ...)
```

#### Arguments

```
page_with_download_url
the URL of the MikTeX download page.
... extra parameters to pass to install.URL
```

#### **Details**

MiKTeX is a typesetting system for Microsoft Windows that is developed by Christian Schenk. It consists of an implementation of TeX and a set of related programs. MiKTeX provides the tools necessary to prepare documents using the TeX/LaTeX markup language, as well a simple tex editor (TeXworks).

MiKTeX is essential for using Sweave, knitr, and creating Vignette for R packages.

install.nodejs 41

#### Value

TRUE/FALSE - was the installation successful or not.

### References

```
MikTeX homepage: http://miktex.org/MikTeX download page: http://miktex.org/download
```

### **Examples**

```
## Not run:
install.MikTeX() # installs the latest version of MikTeX 62 bit
## End(Not run)
```

install.nodejs

Downloads and installs nodejs LTS or Current

### **Description**

Downloads and installs the latest version of nodejs LTS or Current for Windows.

#### Usage

```
install.nodejs(
  page_with_download_url = "https://nodejs.org/en/download/",
  version_number = "LTS",
  ...
)
```

# Arguments

#### **Details**

Nodejs is a programming language which has two versions under active development. Make sure you know which version is required for the code you have to run, or alternatively, make sure you are developing code that is fit for your chosen version of Nodejs.

### Value

TRUE/FALSE - was the installation successful or not.

42 install.notepadpp

#### Author(s)

Tal Galili and A. Jonathan R. Godfrey and Chanyub Park

# Examples

```
## Not run:
install.nodejs()
install.nodejs(,"Current")
install.nodejs(,"LTS")
## End(Not run)
```

install.notepadpp

Downloads and installs Notepad++ for windows

## **Description**

Allows the user to downloads and install the latest version of Notepad++ for Windows.

### Usage

```
install.notepadpp(
  page_with_download_url = "https://notepad-plus-plus.org/downloads/",
  ...
)
```

#### **Arguments**

```
page_with_download_url
the URL of the Notepad++ download page.
... extra parameters to pass to install.URL
```

### **Details**

Notepad++ is a free (as in "free speech" and also as in "free beer") source code editor and Notepad replacement that supports several languages. Running in the MS Windows environment, its use is governed by GPL License. Based on the powerful editing component Scintilla, Notepad++ is written in C++ and uses pure Win32 API and STL which ensures a higher execution speed and smaller program size. By optimizing as many routines as possible without losing user friendliness, Notepad++ is trying to reduce the world carbon dioxide emissions. When using less CPU power, the PC can throttle down and reduce power consumption, resulting in a greener environment.

#### Value

invisible TRUE/FALSE - was the installation successful or not.

install.npptor 43

#### References

```
homepage: http://notepad-plus-plus.org/ download page: https://notepad-plus-plus.org/downloads/
```

#### **Examples**

```
## Not run:
install.notepadpp() # installs the latest version of Notepad++
## End(Not run)
```

install.npptor

Downloads and installs NppToR for windows

### **Description**

Allows the user to downloads and install the latest version of NppToR extension for Notepad++ for Windows.

## Usage

```
install.npptor(
   URL = "http://sourceforge.net/projects/npptor/files/npptor%20installer/",
   ...
)
```

#### **Arguments**

```
URL the URL of the Notepad++ download page.
... extra parameters to pass to install.URL
```

#### **Details**

Similar to the windows R gui built in editor, NppToR aims to extend the functionality of code passing to the Notepad++ code editor. In addition to passing to the R gui, NppToR provides optional passing to a PuTTY window for passing to an R instance a remote machine.

NppToR is a companion utility that facilitates communication between R and Notepad++. It provides code passing from Notepad++ into the windows R Gui. NppToR also provides an autocompletion database which is dynamically generated from the users' R library of packages, thanks to an addition by Yihui Xie. Notepad++ provides built it R code highlighting and folding.

#### Value

invisible TRUE/FALSE - was the installation successful or not.

### References

```
download page: https://sourceforge.net/projects/npptor/
```

44 install.packages.zip

### **Examples**

```
## Not run:
install.npptor() # installs the latest version of NppToR
## End(Not run)
```

## **Description**

Gets a character with a link to an R package Binary, downloads it, and installs it.

### Usage

```
install.packages.zip(zip_URL)
```

### **Arguments**

zip\_URL a link to a ZIP R package Binary.

#### **Details**

To my knowledge, there is currently three ways to install packages on R: 1. To get the package through a repository (such as CRAN or RForge) through install.packages. 2. To manually download a ZIP file locally to the computer, and use install.packages on it. 3. To get the package from github, by using devtools (but this will require you to first install RTools, and not everyone wishes to do it for just some package). This function aims to combine option 1 and 2, by automatically downloading the ZIP file locally and then running install.packages on it. After being downloaded and installed, the binary is erased from the computer.

#### Value

Invisible NULL

## See Also

```
install.packages, installPackages
```

## **Examples**

```
## Not run:
install.packages.zip("https://cran.r-project.org/bin/windows/contrib/r-release/devtools_1.1.zip")
## End(Not run)
```

install.pandoc 45

install.pandoc	Downloads and installs pandoc

#### **Description**

Downloads and installs the latest version of pandoc for Windows.

## Usage

```
install.pandoc(
   URL = "https://github.com/jgm/pandoc/releases",
   use_regex = TRUE,
   to_restart,
   ...
)
```

## **Arguments**

URL a link to the list of download links of pandoc

use\_regex (default TRUE) - deprecated (kept for legacy purposes).

to\_restart boolean. Should the computer be restarted after pandoc is installed? (if missing then the user is prompted for a decision)

... extra parameters to pass to install.URL

#### **Details**

pandoc is a free open source software for converting documents from many filetypes to many filetypes. For details, see <a href="https://johnmacfarlane.net/pandoc/">https://johnmacfarlane.net/pandoc/</a>.

Credit: the code in this function is based on GERGELY DAROCZIs coding in his answer on the Q&A forum StackOverflow, and also G. Grothendieck for the non-XML addition to the function. I thank them both!

# Value

TRUE/FALSE - was the installation successful or not.

# Author(s)

```
GERGELY DAROCZI, G. Grothendieck, Tal Galili
```

#### Source

https://stackoverflow.com/questions/15071957/is-it-possible-to-install-pandoc-on-windows-using-an-

install.python

#### **Examples**

```
## Not run:
install.pandoc()
## End(Not run)
```

install.python

Downloads and installs python 2 or 3

## **Description**

Downloads and installs the latest version of python 2 or 3 for Windows.

### Usage

```
install.python(
  page_with_download_url = "https://www.python.org/downloads/windows/",
  version_number = 3,
  x64 = TRUE,
  ...
)
```

## **Arguments**

#### **Details**

Python is a programming language which has two versions under active development. Make sure you know which version is required for the code you have to run, or alternatively, make sure you are developing code that is fit for your chosen version of Python. In addition, the Python installers are specific to 32 or 64 bit windows architectures.

#### Value

TRUE/FALSE - was the installation successful or not.

## Author(s)

Tal Galili and A. Jonathan R. Godfrey

install.R 47

#### **Examples**

```
## Not run:
install.python()
install.python(,3)
install.python(,2)
## End(Not run)
```

install.R

Downloads and installs the latest R version

# Description

Fetches the latest (not development!) R version

## Usage

```
install.R(
  page_with_download_url = "https://cran.rstudio.com/bin/windows/base/",
  pat = "R-[0-9.]+.+-win\\.exe",
  to_checkMD5sums = TRUE,
  keep_install_file = FALSE,
  download_dir = tempdir(),
  silent = FALSE,
  ...
)
```

### **Arguments**

page\_with\_download\_url

URL from which the latest stable version of R can be downloaded from.

pat the pattern of R .exe file to download

to\_checkMD5sums

Should we check that the new R installation has the files we expect it to (by checking the MD5 sums)? default is TRUE. It assumes that the R which was installed is the latest R version.

keep\_install\_file

If TRUE - the installer file will not be erased after it is downloaded and run.

download\_dir A character of the directory into which to download the file. (default is tem-

pdir())

silent If TRUE - enables silent installation mode.

... extra parameters to pass to install.URL

48 install.Rdevel

#### **Details**

If you are not sure if you need to update R or not, It is better to use updateR for updating R, since it includes more options. But in case you wish to only install R, with no other steps taken (for example, taking care of your old packages), then you can use install.R()

See the install.Rdevel function for installing the latest R-devel version.

#### Value

TRUE/FALSE - was the installation of R successful or not.

#### References

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

#### See Also

```
uninstall.R, install.Rdevel, updateR, system
```

### **Examples**

```
## Not run:
install.R()
## End(Not run)
```

install.Rdevel

Downloads and installs the latest Rdevel version

## **Description**

Fetches the latest (development!) R version

# Usage

```
install.Rdevel(
   exe_URL = "https://cran.rstudio.com/bin/windows/base/R-devel-win.exe",
   ...
)
```

#### **Arguments**

```
exe_URL A character with a link to an installer file (with the .exe file extension)
... extra parameters to pass to install.URL
```

### **Details**

This is a development version of R. It likely contains bugs, so be careful if you use it. Please don't report bugs in this version through the usual R bug reporting system, please report them on the r-devel mailing list —but only if they persist for a few days.

install.RStudio 49

## Value

TRUE/FALSE - was the installation of R successful or not.

#### References

```
https://cran.r-project.org/bin/windows/base/rdevel.html
```

#### See Also

```
install.R, updateR
```

## **Examples**

```
## Not run:
install.Rdevel()
## End(Not run)
```

install.RStudio

Downloads and installs RStudio for windows

# Description

Allows the user to downloads and install the latest version of RStudio for Windows.

## Usage

```
install.RStudio(page_with_download_url, ...)
```

### **Arguments**

```
page_with_download_url
the URL of the RStudio download page.
... extra parameters to pass to install.URL
```

### **Details**

RStudio is a free and open source integrated development environment (IDE) for R, a programming language for statistical computing and graphics.

## Value

TRUE/FALSE - was the installation successful or not.

### References

• RStudio homepage: https://www.rstudio.com/

50 install.Rtools

#### **Examples**

```
### devtools::source_url
## Not run:
install.RStudio() # installs the latest version of RStudio
## End(Not run)
```

install.Rtools

Downloads and installs Rtools

#### **Description**

Install compatible version of Rtools for Windows. By default, the function searches if a compatible Rtools is installed, if not, it offers to install the latest compatible version.

### Usage

```
install.Rtools(check = TRUE, check_r_update = TRUE, GUI = TRUE, ...)
```

## **Arguments**

```
check checks if we need to install Rtools or not.

check_r_update checks if there is an R update available (ignores patch versions), if so, asks if user wants to install the R update first. (defaults to TRUE)

Should a GUI be used when asking the user questions? (defaults to TRUE)

extra parameters to pass to install.URL
```

#### **Details**

Rtools is a collection of software for building packages for R under Microsoft Windows, or for building R itself (version 1.9.0 or later). The original collection was put together by Prof. Brian Ripley; it is currently being maintained by Duncan Murdoch.

### Value

invisible(TRUE/FALSE) - was the installation successful or not.

### References

Rtools homepage: https://cran.r-project.org/bin/windows/Rtools/

install.SWFTools 51

#### **Examples**

```
## Not run:
# installs the latest compatible version of Rtools if a compatible version is not yet installed
install.Rtools()
# (re)installs the latest compatible version of Rtools
install.Rtools(check = F)
# skip R version check
install.Rtools(checkRupdate = F)
## End(Not run)
```

install.SWFTools

Downloads and installs SWFTools for windows

## **Description**

Allows the user to downloads and install the latest version of SWFTools for Windows.

## Usage

```
install.SWFTools(
  page_with_download_url = "http://swftools.org/download.html",
  ...
)
```

### **Arguments**

```
page_with_download_url
the URL of the SWFTools download page.
... extra parameters to pass to install.URL
```

#### **Details**

SWFTools is a collection of utilities for working with Adobe Flash files (SWF files). The tool collection includes programs for reading SWF files, combining them, and creating them from other content (like images, sound files, videos or sourcecode). SWFTools is released under the GPL. This function downloads current releases and NOT the Development Snapshots. This function is useful for saveSWF() in the animation package.

## Value

TRUE/FALSE - was the installation successful or not.

### References

• SWFTools homepage: http://swftools.org/

52 install.Texmaker

### **Examples**

```
## Not run:
install.SWFTools() # installs the latest version of SWFTools
## End(Not run)
```

install.Texmaker

Downloads and installs Texmaker for windows

## **Description**

Allows the user to downloads and install the latest version of Texmaker for Windows.

## Usage

```
install.Texmaker(
   URL = "http://www.xm1math.net/texmaker/texmakerwin32_install.exe",
   ...
)
```

# **Arguments**

URL the URL of the GitHub download page.
... extra parameters to pass to install.URL

#### **Details**

Texmaker is a free, modern and cross-platform LaTeX editor for linux, macosx and windows systems that integrates many tools needed to develop documents with LaTeX, in just one application.

### Value

logical - was the installation successful or not.

### References

• Texmaker homepage: http://www.xm1math.net/texmaker/

# **Examples**

```
## Not run:
install.Texmaker() # installs the latest version of Texmaker for windows
## End(Not run)
```

install.URL 53

install.URL

Downloads and runs a .exe installer file for some software from a URL

# Description

Gets a character with a link to an installer file, downloads it, runs it, and then erases it.

### Usage

```
install.URL(
  exe_URL,
  keep_install_file = FALSE,
  wait = TRUE,
  download_dir = tempdir(),
  message = TRUE,
  installer_option = NULL,
  download_fun = download.file,
  ...
)
```

### **Arguments**

exe\_URL A character with a link to an installer file (with the .exe file extension) keep\_install\_file If TRUE - the installer file will not be erased after it is downloaded and run. should the R interpreter wait for the command to finish? The default is to NOT wait wait. download dir A character of the directory into which to download the file. (default is temboolean. Should a message on the file be printed or not (default is TRUE) message installer\_option A character of the command line arguments a function to use for downloading. Default is download.file. We can also use download\_fun curl\_download (but it doesn't give as good of an output while downloading the file). parameters passed to 'shell'

## **Details**

This function is used by many functions in the installr package. The .exe file is downloaded into a temporary directory, where it is erased after installation has started (by default - though this can be changed)

54 installr

#### Value

invisible(TRUE/FALSE) - was the installation successful or not. (this is based on the output of shell of running the command being either 0 or 1/2. 0 means the file was successfully installed, while 1 or 2 means there was a failure in running the installer.)

#### Author(s)

```
GERGELY DAROCZI, Tal Galili
```

#### See Also

shell

## **Examples**

```
## Not run:
install.URL("adfadf") # shows the error produced when the URL is not valid.
## End(Not run)
```

installr

Installing software from R

### **Description**

Gives the user the option to download software from within R.

# Usage

```
installr(GUI = TRUE, ...)
```

# **Arguments**

a logical indicating whether a graphics menu should be used if available. If TRUE, and on Windows, it will use winDialog, otherwise it will use menu.

... not in use

#### Value

TRUE/FALSE - if the software was installed successfully or not.

# See Also

updateR, install.R, install.RStudio, install.Rtools, install.pandoc, install.MikTeX, install.git, install.git, install.GraphicsMagick, install.ImageMagick, check.for.updates.R, install.URL, install.packages.zip,

is.empty 55

### **Examples**

```
## Not run:
installr()
## End(Not run)
```

is.empty

Checks if an object is empty (e.g. of zero length)

# Description

Checks if an object is empty (e.g. of zero length) and returns TRUE/FALSE

## Usage

```
is.empty(x, mode = NULL, ...)
```

### Arguments

x an object

mode is the object an empty (zero length) object of this mode (can be "integer", "nu-

meric", and so on...)

... none are available.

## **Details**

Uses identical and avoids any attribute problems by using the fact that it is the empty set of that class of object and combine it with an element of that class.

## Value

Returns TRUE/FALSE if the object is empty or not.

### Author(s)

```
James (https://stackoverflow.com/users/269476/james)
```

### **Source**

```
https://stackoverflow.com/questions/6451152/how-to-catch-integer0
```

#### See Also

```
integer, identical
```

56 is.exe.installed

## **Examples**

```
is.empty(integer(0)) #TRUE
is.empty(0L)  #FALSE
is.empty(numeric(0)) #TRUE
is.empty(NA) # FALSE
is.empty(FALSE) # FALSE
is.empty(NULL) # FALSE (with a warning)

a <- which(1:3 == 5)
b <- numeric(0)
is.empty(a)
is.empty(a, "numeric")
is.empty(b)
is.empty(b, "integer")</pre>
```

is.exe.installed

Checks if some .exe is available in on the Windows machine search PATH

## **Description**

Checks the existence of an .exe extention in the search path for executable files

# Usage

```
is.exe.installed(exe_file)
```

# Arguments

exe\_file

a character with the name of the executable to be looked for

### Value

A boolean vector indicating the existence of each program's availability on the system.

# **Examples**

```
## Not run:
is.exe.installed(c("zip.exe", "Rgui.exe", "blablabla")) # [1] TRUE TRUE FALSE
is.exe.installed("7z")
## End(Not run)
```

is.Rgui 57

is.Rgui

Checks if the R session is running within Rgui (Windows OS)

# Description

Returns TRUE/FALSE if the R session is running within Rgui or not.

## Usage

```
is.Rgui(...)
```

### **Arguments**

... none are available.

## **Details**

This function is used in order to check if a GUI can be added to the session or not.

#### Value

Returns TRUE/FALSE if the R session is running within Rgui or not.

## See Also

```
is.RStudio, is.windows
```

# **Examples**

```
## Not run:
is.Rgui()
## End(Not run)
```

is.RStudio

Checks if the R session is running within RStudio

# Description

Returns TRUE/FALSE if the R session is running within RStudio or not.

```
is.RStudio(...)
```

58 is.windows

## **Arguments**

... none are available.

#### **Details**

This function is used in order to check if a GUI can be added to the session or not.

## Value

Returns TRUE/FALSE if the R session is running within RStudio or not.

## **Examples**

```
## Not run:
is.RStudio()
## End(Not run)
```

is.windows

Checks if the running OS is windows

## **Description**

Returns TRUE/FALSE if the R session is running on Windows or not.

#### **Usage**

```
is.windows(...)
```

### **Arguments**

... none are available.

## **Details**

This function is run when the 'installr' package is first loaded in order to check if the current running OS is Windows. If you are running a different OS, then the installr package (at its current form) does not have much to offer you.

#### Value

Returns TRUE/FALSE if the R session is running on Windows or not.

# **Examples**

```
## Not run:
is.windows() # returns TRUE on my machine.
## End(Not run)
```

is.x64 59

is.x64

Checks if the running OS is x64

#### **Description**

Returns TRUE/FALSE if the R session is running on Windows 64-bit or not.

### Usage

```
is.x64(...)
```

## Arguments

... none are available.

## **Details**

This function is run when the 'installr' package is first loaded in order to check if the current running OS is Windows 64-bit. If you are running a different OS, then the installr package (at its current form) does not have much to offer you.

#### Value

Returns TRUE/FALSE if the R session is running on Windows 64-bit or not.

## **Examples**

```
is.x64() # returns TRUE on my machine.
```

```
is_in_.First_in_Rprofile.site
```

Remove a code line from Rprofile.site .First

# Description

Goes through

# Usage

```
is_in_.First_in_Rprofile.site(code, fixed = TRUE, ...)
```

## **Arguments**

code	A character scalar with code to add at the beginning of the .First function in
	Rprofile.site
fixed	passed to grep

... passed to grep

60 kill\_all\_Rscript\_s

#### Value

logical, if code is in Rprofile.site or not.

#### References

```
https://stackoverflow.com/questions/1395301/how-to-get-r-to-recognize-your-working-directory-as-it https://stackoverflow.com/questions/1189759/expert-r-users-whats-in-your-rprofile http://www.noamross.net/archives/2012-11-02-rprofile/https://www.statmethods.net/interface/customizing.html
```

## **Examples**

```
## Not run:
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
add_to_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # TRUE
remove_from_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
# this would still leave .First
## End(Not run)
```

```
kill_all_Rscript_s kill (i.e.: stop) all running "Rscript" processes
```

#### Description

kill (i.e.: stop) all running "Rscript" processes based on their process ID (pid)

## Usage

```
kill_all_Rscript_s(s = 0, m = 0, h = 0, ...)
```

#### **Arguments**

```
s numeric. number of seconds to wait before killing the processes
m numeric. number of minutes to wait before killing the processes
h numeric. number of hours to wait before killing the processes
... not used.
```

#### Value

an integer vector with the process ID (pid) of the "Rscript" processes.

#### References

```
tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10) pskill details from microsoft homepage: https://docs.microsoft.com/en-us/sysinternals/downloads/pskill
```

kill\_pid 61

#### See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill
```

### **Examples**

```
## Not run:
# create several running processes of Rscript (to shitdown)
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
# here are there pid numbers:
get_Rscript_PID()
# let's kill them:
kill_all_Rscript_s()
# they are gone...
get_Rscript_PID() # we no longer have Rscripts running
## End(Not run)
```

kill\_pid

kill (i.e.: stop) running processes by there pid

#### **Description**

kill (i.e.: stop) running processes by there pid. It spawns a new Rscript which runs pskill on the pid-s

## Usage

```
kill_pid(pid, s = 0, m = 0, h = 0, ...)
```

#### **Arguments**

pid	an integer vector with process id numbers (i.e.: can kill several pid at once!)
S	numeric. number of seconds to wait before killing the processes
m	numeric. number of minutes to wait before killing the processes
h	numeric. number of hours to wait before killing the processes
	not used.

#### Value

output from system

### References

```
tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10) pskill details from microsoft homepage: https://docs.microsoft.com/en-us/sysinternals/downloads/pskill
```

62 kill\_process

### See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill
```

## **Examples**

```
## Not run:
# create several running processes of Rscript (to shitdown)
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
# here are there pid numbers:
get_Rscript_PID()
# let's kill them:
kill_pid(get_Rscript_PID())
# they are gone...
get_Rscript_PID() # we no longer have Rscripts running
## End(Not run)
```

kill\_process

kill (i.e.: stop) running processes by there process name

### **Description**

kill (i.e.: stop) running processes by there process name It spawns a new Rscript which runs pskill on the pid-s per process name.

### Usage

```
kill_process(process, s = 0, m = 0, h = 0, exact = FALSE, ...)
```

### **Arguments**

process	a character vector of process names.
S	numeric. number of seconds to wait before killing the processes
m	numeric. number of minutes to wait before killing the processes
h	numeric. number of hours to wait before killing the processes
exact	logical (FALSE). should we get exact match to process name, or can we use just partial matching.
	not used.

#### Value

output from system

#### References

```
tasklist details from microsoft homepage: https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-xp/bb491010(v=technet.10) pskill details from microsoft homepage: https://docs.microsoft.com/en-us/sysinternals/downloads/pskill
```

#### See Also

```
get_tasklist, get_Rscript_PID, get_pid, kill_pid, kill_all_Rscript_s, pskill
```

#### **Examples**

```
## Not run:
# create several running processes of Rscript (to shitdown)
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
system("Rscript -e repeat{2+2}", wait = FALSE) # this process should be stuck
# here are there pid numbers:
get_Rscript_PID()
# let's kill them:
kill_process("Rscript")
# they are gone...
get_Rscript_PID() # we no longer have Rscripts running
## End(Not run)
```

lineplot\_package\_downloads

barplot for the number of users installation of a package

# Description

This function gets a vector of package names, and returns a line plot of number of downloads for these packages per week.

#### Usage

```
lineplot_package_downloads(
  pkg_names,
  dataset,
  by_time = c("date", "week"),
  ...
)
```

## **Arguments**

pkg\_names a character vector of packages we are interested in checking.

dataset a dataset output from running read\_RStudio\_CRAN\_data, after going through format\_RStudio\_CRAN\_data.

```
by_timeby what time frame should packages be plotted? defaults to "date", but can also be "week"not in use.
```

#### **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

#### Value

invisible aggregated data that was used for the plot

#### Author(s)

Felix Schonbrodt, Tal Galili

#### Source

```
https://www.nicebread.de/finally-tracking-cran-packages-downloads/
```

#### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data,barplot\_package\_users\_per\_day

## **Examples**

```
## Not run:
# The first two functions might take a good deal of time to run (depending on the date range)
RStudio_CRAN_data_folder <-
      download_RStudio_CRAN_data(START = '2013-04-02',
                                  END = '2013-04-05')
                                  # around the time R 3.0.0 was released
my_RStudio_CRAN_data <- read_RStudio_CRAN_data(RStudio_CRAN_data_folder)</pre>
my_RStudio_CRAN_data <- format_RStudio_CRAN_data(my_RStudio_CRAN_data)</pre>
head(my_RStudio_CRAN_data)
lineplot_package_downloads(pkg_names = c("ggplot2", "reshape", "plyr", "installr"),
                            dataset = my_RStudio_CRAN_data)
# older plots:
# barplots: (more functions can easily be added in the future)
barplot_package_users_per_day("installr", my_RStudio_CRAN_data)
barplot_package_users_per_day("plyr", my_RStudio_CRAN_data)
## End(Not run)
```

load\_installr\_on\_startup 65

```
load_installr_on_startup
```

Have the installr package load on startup

## **Description**

Load installr on startup.

### Usage

```
load_installr_on_startup(...)
```

#### Arguments

... not used. (but good for future backward compatibility)

#### Value

```
invisible(NULL)
```

#### References

```
https://stackoverflow.com/questions/1395301/how-to-get-r-to-recognize-your-working-directory-as-it https://stackoverflow.com/questions/1189759/expert-r-users-whats-in-your-rprofile http://www.noamross.net/archives/2012-11-02-rprofile/https://www.statmethods.net/interface/customizing.html
```

#### **Examples**

```
## Not run:
load_installr_on_startup()
## End(Not run)
```

```
most_downloaded_packages
```

Most downloaded packages

### **Description**

Gives the top "x" most downloaded packages.

```
most_downloaded_packages(dataset, n = 6L, ...)
```

## Arguments

 $a\ dataset \qquad a\ dataset\ output\ from\ running\ read\_RStudio\_CRAN\_data,\ after\ going\ through$ 

format\_RStudio\_CRAN\_data.

n the number of top packages to show.

... not in use.

#### **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

#### Value

a table of top packages by downloads (a numeric vector with packages as names)

#### **Source**

```
https://www.nicebread.de/finally-tracking-cran-packages-downloads/
```

#### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data,barplot\_package\_users\_per\_day

## **Examples**

myip 67

myip

What is my IP

## **Description**

Retrieving your public IP via <a href="https://api.ipify.org">https://api.ipify.org</a>. (old solution used: <a href="http://api.exip.org/based">http://api.exip.org/based</a> on <a href="http://stackoverflow.com/questions/3097589/getting-my-public-ip-via-api">http://stackoverflow.com/questions/3097589/getting-my-public-ip-via-api</a>)

## Usage

```
myip(...)
```

# Arguments

... not in use

### Value

your current ip (character string)

#### **Source**

```
https://api.ipify.org
```

#### See Also

freegeoip, myip, cranometer

# **Examples**

```
## Not run:
myip() # "37.132.25.15"
## End(Not run)
```

os.hibernate

Hibernate the operating system (Windows) through a shell command

# Description

This Hibernates Windows after set amount of time.

```
os.hibernate(s = 0, m = 0, h = 0, first_turn_hibernate_on = TRUE)
```

68 os.lock

### **Arguments**

time to wait before shutting down (in seconds), added to m and h; passed to s Sys.sleep time to wait before shutting down (in minutes), added to s and h; passed to m Sys.sleep time to wait before shutting down (in hours), added to s and m; passed to h Sys.sleep first\_turn\_hibernate\_on default is TRUE. This runs "powercfg -hibernate on" in order to turn hibernate

on, in cases where it was off.

#### Value

The status code of shell.

#### Author(s)

Tal Galili

### References

```
https://superuser.com/questions/42124/how-can-i-put-the-computer-to-sleep-from-command-prompt-run-
, https://www.howtogeek.com/howto/windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-win
```

### See Also

```
system, shell, Sys. sleep, is. windows, os. shutdown, os. sleep, os. hibernate, os. lock, os. restart
```

#### **Examples**

```
## when your code is extremely time-consuming,
# you may need this function to run at the
# end of the simulation.
os.hibernate()
## End(Not run)
```

os.lock

Locks the operating system (Windows) through a shell command

#### **Description**

This locks Windows after set amount of time.

```
os.lock(s = 0, m = 0, h = 0)
```

os.manage 69

#### Arguments

S	time to wait before shutting down (in seconds), added to m and h; passed to Sys.sleep
m	time to wait before shutting down (in minutes), added to s and h; passed to $Sys.sleep$
h	time to wait before shutting down (in hours), added to s and m; passed to Sys.sleep

#### Value

The status code of shell.

## Author(s)

Tal Galili

#### References

```
https://superuser.com/questions/42124/how-can-i-put-the-computer-to-sleep-from-command-prompt-run-,https://www.howtogeek.com/howto/windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-ic
```

## See Also

```
system, shell, Sys.sleep, is.windows, os.shutdown, os.sleep, os.hibernate, os.lock, os.restart
```

### **Examples**

```
## Not run:
## when your code is extremely time-consuming,
# you may need this function to run at the
# end of the simulation.
os.lock()
## End(Not run)
```

os.manage Gives managing option to the current OS (shutdown, restart, sleep, hibernate, etc...)

## **Description**

A central function to run functions for shutting down, restarting, sleeping (etc.) your computer. This will run these functions immediately.

```
os.manage(GUI = TRUE, ask = TRUE, ...)
```

70 os.restart

## **Arguments**

GUI	a logical indicating whether a graphics menu should be used if available. If TRUE, and on Windows, it will use winDialog, otherwise it will use menu.
ask	a logical indicating whether to ask the user for the number of minutes in which to perform the operation.
	not in use

#### Value

The status code of system.

#### References

```
https://superuser.com/questions/42124/how-can-i-put-the-computer-to-sleep-from-command-prompt-run-, https://www.howtogeek.com/howto/windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-i
```

#### See Also

```
system, shell, Sys.sleep, is.windows, os.shutdown, os.sleep, os.hibernate, os.lock, os.restart
```

## **Examples**

```
## Not run:
## when your code is extremely time-consuming,
# you may need this function;
# e.g. you wish to go to sleep,
# while keeping R running with a long computation...
# complex graphics... and long long computation...
# at last,
os.manage()
## the next day you wake up, "thank you, R" :)
## End(Not run)
```

os.restart

Restarts the operating system (Windows) through a shell command

## **Description**

This restarts Windows after set amount of time.

```
os.restart(s = 0, m = 0, h = 0)
```

os.shutdown 71

## **Arguments**

S	time to wait before shutting down (in seconds), added to m and h; passed to Sys.sleep
m	time to wait before shutting down (in minutes), added to s and h; passed to $Sys.sleep$
h	time to wait before shutting down (in hours), added to s and m; passed to Sys.sleep

#### Value

The status code of shell.

#### Author(s)

Tal Galili

#### References

```
https://superuser.com/questions/42124/how-can-i-put-the-computer-to-sleep-from-command-prompt-run-, https://www.howtogeek.com/howto/windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-vista/quick-tip-create-shutdown-restart-lock-i
```

## See Also

```
system, shell, Sys. sleep, is. windows, os. shutdown, os. sleep, os. hibernate, os. lock, os. restart
```

#### **Examples**

```
## Not run:
os.restart()
## End(Not run)
```

os.shutdown

Shut down the operating system with the command 'shutdown'

## **Description**

There is a command shutdown in both Windows and Linux, and this function uses it to shut down a computer.

After the time wait has passed, R will execute shutdown -s -t 0 (for Windows) or shutdown -h now to shut down the computer.

This function is a modified version of Yihui's shutdown function from the fun package.

```
os.shutdown(s = 0, m = 0, h = 0)
```

72 os.sleep

## **Arguments**

S	time to wait before shutting down (in seconds), added to m and h; passed to Sys.sleep
m	time to wait before shutting down (in minutes), added to s and h; passed to $\ensuremath{Sys.sleep}$
h	time to wait before shutting down (in hours), added to s and m; passed to $Sys.sleep$

## Value

The status code of system.

#### Author(s)

```
Yihui Xie <a href="https://yihui.org/">https://yihui.org/</a>, and Tal Galili
```

#### References

```
https://github.com/yihui/fun/blob/master/R/shutdown.R
```

#### See Also

```
system, shell, Sys.sleep, is.windows, os.shutdown, os.sleep, os.hibernate, os.lock, os.restart
```

## **Examples**

```
## Not run:
## when your code is extremely time-consuming,
# you may need this function;
# e.g. you wish to go to sleep, while keeping R running long computation...
os.shutdown()
## the next day you wake up, "thank you, R" :)
## End(Not run)
```

os.sleep

Sleeps the operating system (Windows) through a shell command

# Description

This sleeps Windows after set amount of time.

```
os.sleep(s = 0, m = 0, h = 0, first_turn_hibernate_off = TRUE)
```

os.sleep 73

# **Arguments**

S	time to wait before shutting down (in seconds), added to m and h; passed to
	Sys.sleep

m time to wait before shutting down (in minutes), added to s and h; passed to Sys.sleep

h time to wait before shutting down (in hours), added to s and m; passed to Sys.sleep

first\_turn\_hibernate\_off

The command rundll32.exe powrprof.dll,SetSuspendState 0,1,0 for sleep is correct - however, it will hibernate instead of sleep if you don't turn the hibernation off. I'm not sure this is true, but that's what is explained in the linke (see bellow)

#### Value

The status code of shell.

### Author(s)

Tal Galili

#### References

```
https://superuser.com/questions/42124/how-can-i-put-the-computer-to-sleep-from-command-prompt-run-, https://www.howtogeek.com/howto/windows-vista/quick-tip-create-shutdown-restart-lock-icons-in-windows-//superuser.com/a/135450/28536
```

## See Also

```
system, shell, Sys. sleep, is. windows, os. shutdown, os. sleep, os. hibernate, os. lock, os. restart
```

```
## Not run:
## when your code is extremely time-consuming,
# you may need this function to run at the end of
# the simulation.
os.sleep()
## End(Not run)
```

74 package\_authors

package\_authors

Access (and clean) author elements from R's Rd file

## **Description**

Find authors.

## Usage

```
package_authors(
  package,
  to_strsplit = TRUE,
  split = c(",|and"),
  to_table = FALSE,
  ...
)
```

## **Arguments**

package a character string of the package we are interested in.

to\_strsplit logical (TRUE). Should the authors strings be split (in cases of a "and" or a comma ",")?

split a character scalar to be passed to strsplit split parameter. default is c(",land)

to\_table logical (FALSE). Should the authors strings be listed in a table - showing a count of how many .Rd files they were listed in? If not - a unique list is produced.

... not used.

#### **Details**

List authors for a package from its "author" tag elements from its Rd files. The function also separate lists of authors, and cleans the output a bit (from spaces at the beginning of the strings).

## Value

a character vector with a package authors (as extracted from the author tag in the .Rd files)

#### References

```
Useful for updating your DESCRIPTION file:
```

```
https://cran.r-project.org/doc/manuals/R-exts.html \verb|#The-DESCRIPTION-file| and the state of t
```

#### See Also

```
fetch_tag_from_Rd
```

## **Examples**

```
## Not run:
# before:
fetch_tag_from_Rd("installr", "\\author")
# after:
package_authors("installr")
sort(package_authors("installr")) # sorted name list...
## From the top R packages list:
## https://www.r-statistics.com/2013/06/top-100-r-packages-for-2013-jan-may/
package_authors("plyr")
package_authors("digest")
package_authors("ggplot2")
package_authors("colorspace")
package_authors("stringr") # empty string.
package_authors("knitr")
package_authors("MASS")
package_authors("rpart")
package_authors("Rcpp")
## End(Not run)
```

pkgDNLs\_worldmapcolor Worldmap colored by the number of downloads for a given package

## **Description**

Plots a worldmap colored by the number of users installation for a given package

# Usage

```
pkgDNLs_worldmapcolor(pkg_name, dataset, remove_dups = TRUE, ...)
```

## **Arguments**

```
pkg_name a character string of the package we are interested in.
dataset a dataset output from running read_RStudio_CRAN_data.
```

remove\_dups logical (default is TRUE). Should the duplicate user ids (based on their ips) be

removed.

... not in use.

## **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

### Value

a ggplot object

## Author(s)

Boris Hejblum

#### **Source**

https://www.nicebread.de/finally-tracking-cran-packages-downloads/

#### See Also

 $download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data, barplot\_package\_users\_per\_day, gg-plot$ 

## **Examples**

```
read_RStudio_CRAN_data
```

Reads RStudio CRAN mirror data files from a folder

## **Description**

This function reads files downloaded from the download page (http://cran-logs.rstudio.com/).

This function relies on data.table to run faster. WARNING: this function can be quite slow...

### Usage

```
read_RStudio_CRAN_data(
  log_folder = tempdir(),
  use_data_table = TRUE,
  packages,
  ...
)
```

#### **Arguments**

log\_folder the folder which contains the RStudio CRAN log files that were downloaded to.

Default is the temporary folder picked by tempdir.

use\_data\_table default is TRUE. A switch for wether or not to use the data.table package in

order to merge the log files using rbindlist. This function is MUCH faster then

the alternative.

packages a character vector containing the names of packages for which information is

extracted. If not specified, all packages are included, but this can cause out-of-

memory problems if there are many log files.

... not in use.

#### **Details**

RStudio maintains its own CRAN mirror, https://cran.rstudio.com/ and offers its log files.

## Value

Returns the combined data file.

## Author(s)

Felix Schonbrodt, Tal Galili

#### Source

https://www.nicebread.de/finally-tracking-cran-packages-downloads/

#### See Also

download\_RStudio\_CRAN\_data, read\_RStudio\_CRAN\_data,barplot\_package\_users\_per\_day

```
# barplots: (more functions can easily be added in the future)
barplot_package_users_per_day("installr", my_RStudio_CRAN_data)
barplot_package_users_per_day("plyr", my_RStudio_CRAN_data)
## End(Not run)
```

remove.installr.GUI

Removes the menu based GUI for updating R within Rgui

# Description

Removes the menu based GUI for updating R within Rgui.

## Usage

```
remove.installr.GUI()
```

#### **Details**

This function is used during .Last.lib to remove the menus for the installr package in Rgui.

## Value

```
invisible(NULL)
```

# **Examples**

```
## Not run:
add.installr.GUI() # add menus
remove.installr.GUI() # remove them
## End(Not run)
```

```
{\tt remove\_from\_.First\_in\_Rprofile.site}
```

Remove a code line from Rprofile.site .First

# Description

Goes through Rprofile.site text, finds a line of code - and removes it.

```
remove_from_.First_in_Rprofile.site(code, fixed = TRUE, ...)
```

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#### **Arguments**

```
A character scalar with code to add at the beginning of the .First function in Rprofile.site

fixed passed to grep

passed to grep
```

## Value

logical. Did we remove that line or not (in case it was not there)

#### References

```
https://stackoverflow.com/questions/1395301/how-to-get-r-to-recognize-your-working-directory-as-it https://stackoverflow.com/questions/1189759/expert-r-users-whats-in-your-rprofile http://www.noamross.net/archives/2012-11-02-rprofile/https://www.statmethods.net/interface/customizing.html
```

#### **Examples**

```
## Not run:
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
add_to_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # TRUE
remove_from_.First_in_Rprofile.site("suppressMessages(library(installr))")
is_in_.First_in_Rprofile.site("suppressMessages(library(installr))") # FALSE
# this would still leave .First

## End(Not run)
```

rename\_r\_to\_R

Rename files' extensions in a folder from .r to .R

# Description

Rename files' extensions in a folder from .r to .R.

```
rename_r_to_R(
   subdir = ".",
   recursive = FALSE,
   message = TRUE,
   text_to_find = "\\.r$",
   new_extension = ".R",
   ...
)
```

80 rename\_r\_to\_R

# Arguments

subdir (character) sub folder from the current working directory in which the files should be changed. Default is "".

recursive (logical) FALSE. Should the function keep going into folders and check them as well?

message (logical) should we output how many files were changed. (default is FALSE)

text\_to\_find old file extension (should have \$ at the end!)

new\_extension new file extension...

not used.

#### **Details**

This came after a discussion with Hadley, JJ, and Martin leading to the realization that since we are using the R language (and not the r language), the standard is to use .R files instead of .r

Be careful when using the recursive argument. And remember that source("miao.r") and source("miao.R") Are NOT the same...

#### Value

(integer) the number of files changed

```
## Not run:
rename_r_to_R() # changes only .r in the current wd
rename_r_to_R("R") # fixing the file ending inside a package directory
rename_r_to_R(recursive = TRUE) # Changes
rename_r_to_R(recursive = TRUE, message = FALSE) # Changes
# ALL of the .r files underneath the current
# working directory
# source: http://stackoverflow.com/questions/52950/how-to-make-git-ignore-changes-in-case
# First run the following in git bash:
# git config core.ignorecase false
rename_r_to_R(recursive = TRUE, text_to_find="\\.R$", new_extension = ".b")
# mmm, since it does not work nicely, you'd need to run the following:
# and commit between the two.
rename_r_to_R(recursive = TRUE, text_to_find="\\.r$", new_extension = ".b")
rename_r_to_R(recursive = TRUE, text_to_find="\\.b$", new_extension = ".R")
## End(Not run)
```

require2 81

	Loading Packages (and Installing them if they are missing)
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	Zaciding Telentinges (time Instituting intentity interfere missing)

### **Description**

require2 load add-on packages by passing it to require. However, if the package is not available on the system, it will first install it (through install.packages), and only then try to load it again.

## Usage

```
require2(package, ask = FALSE, character.only = FALSE, min_version = 0)
```

## **Arguments**

package A character of the name of a package (can also be without quotes).

ask Should the user be asked to install the require packaged, in case it is missing?

(default is FALSE)

character.only logical (FALSE) - a logical indicating whether package or help can be assumed

to be character strings. Passed to require.

min\_version Minimum version of package

#### Value

returns (invisibly) a logical indicating whether the required package is available.

# Examples

```
## Not run:
require2("devtools")
require2(geonames)
require2(pkgbuild, min_version = "1.1.0")
data_table_loaded <- require2("data.table")
## End(Not run)</pre>
```

restart\_RGui

Restart RGui from RGui

## **Description**

Start a new RGui session and then quits the current one.

This is a Windows only function.

```
restart_RGui(...)
```

```
Arguments
```

```
... passed to q()
```

#### Value

```
q(...)
```

## **Examples**

```
## Not run:
restart_RGui()
## End(Not run)
```

```
rm_installr_from_startup
```

Remove installr from startup

## **Description**

Have the installr package NOT load on startup

## Usage

```
rm_installr_from_startup(...)
```

## **Arguments**

... not used. (but good for future backward compatibility)

## Value

```
invisible(NULL)
```

### References

```
https://stackoverflow.com/questions/1395301/how-to-get-r-to-recognize-your-working-directory-as-it https://stackoverflow.com/questions/1189759/expert-r-users-whats-in-your-rprofile http://www.noamross.net/archives/2012-11-02-rprofile/https://www.statmethods.net/interface/customizing.html
```

```
## Not run:
load_installr_on_startup()
rm_installr_from_startup()
## End(Not run)
```

R\_version\_in\_a\_folder

R\_version\_in\_a\_folder Get the version of the R installed in a folder

## **Description**

Get the version of the R installed in a folder based on the structure of the filename README.R... (where ... is a version number for R). This function helps detect the version number of an R installation even if the name of the folder is not standard. If multiple versions were installed, overwriting each other, the most recent is selected.

### Usage

```
R_version_in_a_folder(folder)
```

### **Arguments**

folder

The folder for which we wish to know the R version.

### Value

Returns a character vector of the R version (or NA, if this is not an R installation folder)

### See Also

```
get.installed.R.folders
```

### **Examples**

```
## Not run:
R_version_in_a_folder(folder = R.home())
# returns the version of the current R installation
## End(Not run)
```

source.https

Read R Code from a File in an https URL

## **Description**

source.https causes R to accept its input from a File in an https URL. Input is read and parsed from that file until the end of the file is reached, then the parsed expressions are evaluated sequentially in the chosen environment.

```
source.https(URL, ..., remove_r_file = T)
```

84 system.PATH

## **Arguments**

```
URL the URL of the .r file to download and source.

... parameters to pass to source

remove_r_file if to remove the .r file after it was sourced.
```

### **Details**

"The easiest way to use Git on Windows." (at least so they say...)

### Value

Nothing.

### References

Other solutions to the source.https problem:

- Using RCurl
- · devtools::source\_url
- A relevant (OLD) discussion: https://stackoverflow.com/questions/7715723/sourcing-r-scriptover-https

#### See Also

source

## **Examples**

```
## Not run:
source.https("https://raw.github.com/talgalili/installr/master/R/install.r")
## End(Not run)
```

system.PATH

Returns the search path for executable files

# Description

Returns the search path for executable files based on

## Usage

```
system.PATH()
```

## Value

A character vector with the search path for executable files

turn.number.version 85

### References

 $http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx?mfr=true/documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/xp/all/proddocs/en-us/ntcmds\_shelloverview.mspx.documentation/windows/wi$ 

## **Examples**

```
## Not run:
system.PATH() #
## End(Not run)
```

turn.number.version

Turns a vector of version-numbers back to version-character

# Description

Version Num to char

## Usage

```
turn.number.version(number_to_dots)
```

## **Arguments**

number\_to\_dots A numeric vector - of the number-version of R

## Value

A vector of "numbers" representing the versions (for example: 2015002). The names of the vector is the original version character.

```
## Not run:
turn.number.version(turn.version.to.number(c("2.15.2", "2.15.2")))
turn.number.version(2015011) # "2.15.11"
## End(Not run)
```

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```
turn.version.to.number
```

*Turns version to number (for a vector of values)* 

# Description

Turns version to number (for a vector of values)

### Usage

```
turn.version.to.number(version_with_dots)
```

# **Arguments**

```
version_with_dots
```

- A character vector - of the version of R (for example 2.15.2)

#### Value

A vector of "numbers" representing the versions (for example: 2015002). The names of the vector is the original version character.

## **Examples**

```
## Not run:
turn.version.to.number(c("2.15.2", "2.15.2"))
## End(Not run)
```

turn.version.to.number1

Turns version to number (for 1 value only)

## **Description**

Turns version to number (for 1 value only)

## Usage

```
turn.version.to.number1(version_with_dots)
```

## **Arguments**

```
version_with_dots
```

A character value - of the version of R (for example 2.15.2)

uninstall.packages 87

## Value

A "number" representation of the version (for example: 2015002)

#### See Also

turn.version.to.number

## **Examples**

```
## Not run:
turn.version.to.number1("2.15.2")
turn.version.to.number1("3.0.1")
## End(Not run)
```

uninstall.packages

uninstalls (removes) Installed Packages

### **Description**

A wrapper for remove.packages. Useful since it also works if the package is currently loaded into the workspace.

## Usage

```
uninstall.packages(pkgs, lib, warning = TRUE, ...)
```

## **Arguments**

pkgs a character vector with the names of the packages to be removed.

1ib a character vector giving the library directories to remove the packages from. If

missing, defaults to the first element in .libPaths.

warning boolean (TRUE), should a message be printed in various cases.

... currently ignored.

# Value

Invisible NULL

#### See Also

```
install.packages, remove.packages, install.packages.zip
```

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## **Examples**

```
## Not run:
install.packages(c("reshape", "plyr"))
require(plyr)
uninstall.packages(c("reshape", "plyr"))
install.packages(c("reshape", "plyr"))
## End(Not run)
```

uninstall.R

Uninstall an R version

## **Description**

Choose an R version to uninstall via a menubar. By default, the function allows the user to pick an R version to uninstall from a list. Also, the function can be called with using "r\_version", where multiple R versions can be supplied and all will be uninstalled.

#### Usage

```
uninstall.R(r_version, GUI = TRUE)
```

### **Arguments**

r\_version a character vector for R versions to uninstall (the format is of the style: "2.15.3").

default is empty - resulting in a prompt message asking the user what to do.

GUI If asking the user which R version to uninstall, should the GUI be used? (default

is TRUE)

#### Value

the output of system running the uninstaller

## See Also

```
install.R, updateR, system
```

```
## Not run:
uninstall.R() # choose an R version to uninstall
uninstall.R("2.15.3") # will uninstall R 2.15.3
uninstall.R(c("2.15.3", "2.14.0")) # will uninstall two R versions (if both exists)
uninstall.R("10.10.0") # would pop up the menu options (until R 10.10.0 will be released :D)
## End(Not run)
```

updateR 89

updateR	Checks for the latest $R$ version, and if there is a newer version of $R$ -
	downloads and installs it.

## Description

This function performs the following steps:

- Check what is the latest R version. If the current installed R version is up-to-date, the function ends (and returns FALSE)
- If a newer version of R is available, the user is asked if to review the NEWS of the latest R version in order to decide if to install the newest R or not.
- If the user wishes to the function will download and install it. (you will need to press the "next" buttons on your own)
- Once the installation is done, you should press "any-key", and the function will proceed with copying all of your packages from your old (well, current) R installation, into your newer R installation.
- You can then erase all of the packages in your old R installation.
- After your packages are moved (and the old ones possibly erased), you will get the option to update all of your packages in the new version of R.
- You will be asked if to open the Rgui of your new R.
- Lastly you can close the current session of your old R.

```
updateR(
  fast = FALSE,
  browse_news,
  install_R,
  copy_packages,
  copy_site_files,
  keep_old_packages,
  update_packages,
  start_new_R,
  quit_R,
  print_R_versions = TRUE,
  GUI = TRUE,
  to_checkMD5sums = FALSE,
  keep_install_file = FALSE,
  download_dir = tempdir(),
  silent = FALSE,
  setInternet2 = TRUE,
  cran_mirror = "https://cran.rstudio.com/",
)
```

90 updateR

#### **Arguments**

fast logical (default is FALSE). If TRUE, it overrides other parameters and uses a

set of defaults to make the R installation as fast as possible: no news, installr R, copy packages and Rprofile, keep old packages, updated packages, without quitting current R or starting the new R. don't use GUI, check MD5sums, keep

installed file in the getwd.

if TRUE (and if there is a newer version of R) - it opens the browser to the browse\_news

NEWS of the latest version of R, for the user to read through

install\_R TRUE/FALSE - if to install a new version of R (if one is available). If missing

> (this is the default) - the user be asked if to download R or not.Of course the installation part itself (the running of the .exe file) is dependent on the user.

TRUE/FALSE - if to copy your packages from the old version of R to the new copy\_packages

version of R. If missing (this is the default) - the user will be asked for his preference (he should say yes, unless he is using a global library folder).

copy\_site\_files

logical - if to copy your Rprofile.site and Renviron.site from the old version of R to the new version of R. If missing (this is the default) - the user will be asked for his preference (he should say yes, unless he is using a global library folder).

keep\_old\_packages

- if the keep the packages in the library of the old R installation. If missing (this is the default) - the user will be asked for his preference (he should say yes, unless he is using a global library folder).

update\_packages

TRUE/FALSE - if to update your packages in the new version of R (all packages will be updated without asking confirmation per package) If missing (this is the default) - the user will be asked for his preference (he should say yes, unless he is using a global library folder). This is done by calling the Rscript in the new R.

TRUE/FALSE - if to start the new R (Rgui) after we will quit the old R. Default start\_new\_R

> is TRUE. It will try to start the 64 bit R version, if it does not exist, the 32 bit will be started. This may be less useful for people using RStudio or the likes.

TRUE/FALSE - if to quit R after the installation and package copying or not. If quit\_R missing (this is the default) - the user is asked what to do.

print\_R\_versions

if to tell the user what version he has and what is the latest version (default is

TRUE)

GUI a logical indicating whether a graphics menu should be used if available. If

TRUE, and on Windows, it will use winDialog, otherwise it will use menu.

to checkMD5sums

Should we check that the new R installation has the files we expect it to (by checking the MD5 sums)? default is TRUE. It assumes that the R which was installed is the latest R version. parameter is passed to install.R()

keep\_install\_file

If TRUE - the installer file will not be erased after it is downloaded and run.

up\_folder 91

download\_dir A character of the directory into which to download the file. (default is tempdir())

silent If TRUE - enables silent installation mode.

setInternet2 logical. Should setInternet2(TRUE) be run. (only relevant for versions of R before 3.3.0)

cran\_mirror URL of your preferred CRAN mirror. (default is https://cran.rstudio.com/)

... Other arguments (this is currently not used in any way)

#### Details

It is worth noting that the function assumes that you are installing R in the same directory as before. That is, if the old R was on: D:RR-3.0.0 then the new R will be on D:RR-3.0.1.

### Value

a TRUE/FALSE value on whether or not R was updated.

### See Also

check.for.updates.R, install.R, copy.packages.between.libraries, uninstall.R

## **Examples**

```
## Not run:

updateR(TRUE) # This sets "fast" to be TRUE
# # the fastest/safest upgrade option:
# install R while keeping a copy in the working directory,
# copy packages, keep old packages,
# update packages in the new installation.

updateR() # will ask you what you want at every decision.
## End(Not run)
```

up\_folder

Performs "up-level" on a folder string

## Description

Gets a character vector of folder strings and returns the same vector after removing the end of the folder path.

```
up_folder(FOLDER, n = -1, ...)
```

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## **Arguments**

FOLDER a character vector of folders

n passed to n in function head

not used.

## Value

The name of the file in the URL

## **Examples**

```
up_folder(FOLDER = c("D:/R/R-3.0.1", "D:/R/R-3.0.2", "D:/R/R-3.0.3"))
```

xlsx2csv

Converts xls(x) to csv using VB

# Description

Converts xls(x) to csv using VB script. Not that important now that we have the readxl package.

## Usage

```
xlsx2csv(xlsx, csv, path, ...)
```

## **Arguments**

xlsx	the (character) name of the xlsx (or xls) file to convert. if xlsx has a full path, it will override the path parameter.
CSV	the (character) name of the csv file to convert to (default will be the name of the xlsx file)
path	the path for the files (default is the working directory).
	ignored.

# Source

This is based on the code from plang's answer here: https://stackoverflow.com/questions/1858195/convert-xls-to-csv-on-command-line

```
## Not run:
xlsx2csv("c:/some_file.xlsx")
## End(Not run)
```

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