

Package ‘eoffice’

November 18, 2020

Type Package

Title Export or Graph and Tables to 'Microsoft' Office and Import
Figures and Tables

Version 0.2.1

Description Provides wrap functions to export and import graphics and data frames in R to 'microsoft' office. And This package also provide write out figures with lots of different formats. Since people may work on the platform without GUI support, the package also provide function to easily write out figures to lots of different type of formats. Now this package provide function to extract colors from all types of figures and pdf files.

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Imports officer, rvg, flextable, broom, dplyr, magrittr, ggplotify, R.devices, devEMF, magick, ggplot2, htmlwidgets, plotly

Depends

Encoding UTF-8

LazyData true

Suggests knitr, markdown, rmarkdown

VignetteBuilder knitr

RoxygenNote 7.1.1

NeedsCompilation no

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Repository CRAN

Date/Publication 2020-11-18 21:40:02 UTC

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`.gettext` *get the suffix name*

Description

get the suffix name

Usage

`.gettext(x)`

Arguments

x filename

`.getfilename` *get the prefix name*

Description

get the prefix name

Usage

`.getfilename(x)`

Arguments

x filename

.setcolnames *set first row as column name*

Description

set first row as column name

Usage

.setcolnames(file)

Arguments

file input data frame

Author(s)

Kai Guo

.theme_blank *blank theme*

Description

blank theme

Usage

.theme_blank()

col2hex *col2hex gplots*

Description

col2hex gplots

Usage

col2hex(cname)

Arguments

cname color name

convertplot *convert basic plot to ggplot object*

Description

convert basic plot to ggplot object

Usage

```
convertplot(exp)
```

Arguments

exp expression formula of basic plot

Value

ggplot object

Author(s)

Kai Guo

Examples

```
p <- convertplot(plot(1:10))
class(p)
print(p)
```

indocx *read table from docx*

Description

read table from docx

Usage

```
indocx(filename, header = FALSE)
```

Arguments

filename input filename
header use first row as column name

Author(s)

Kai Guo

Examples

```
totable(t.test(wt ~ am, mtcars), filename = file.path(tempdir(), "mtcars.docx"))
tabs <- indocx(filename = file.path(tempdir(), "mtcars.docx"), header = TRUE)
tabs
```

`infigure`*import figures and extract the colors used in the figures*

Description

import figures and extract the colors used in the figures

Usage

```
infigure(  
  filename,  
  format = NULL,  
  exclude_col = NULL,  
  topn = 10,  
  showfig = FALSE,  
  showcol = FALSE,  
  saveegg = FALSE,  
  density = 300,  
  pages = NULL  
)
```

Arguments

<code>filename</code>	input filename
<code>format</code>	format of input file
<code>exclude_col</code>	vector of colors to be excluded from the analysis
<code>topn</code>	display the most frequent colors
<code>showfig</code>	display the figure or not (default: FALSE)
<code>showcol</code>	display extracted colors or not (default: FALSE)
<code>saveegg</code>	save the figure as ggplot2 object or not (default: FALSE)
<code>density</code>	resolution to render pdf
<code>pages</code>	integer vector with page numbers (pdf file). Defaults to all pages.

Author(s)

Kai Guo

Examples

```
if(interactive()){
  require(ggplot2)
  p <- ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
  tofigure(p,filename = file.path(tempdir(), "mtcars.pdf"))
  pp <- infigure(filename = file.path(tempdir(), "mtcars.pdf"), exclude_col="white")
  pp
}
```

inoffice

read tables from ppt and word

Description

read tables from ppt and word

Usage

```
inoffice(filename, format = NULL, header = TRUE)
```

Arguments

filename	input filename
format	pptx or docx
header	use first row as column name

Author(s)

Kai Guo

Examples

```
## use tempdir for the example
totable(t.test(wt ~ am, mtcars), filename = file.path(tempdir(), "mtcars.docx"))
tabs <- inoffice(filename = file.path(tempdir(), "mtcars.docx"), header = TRUE)
tabs
```

inpptx	<i>read table from pptx</i>
--------	-----------------------------

Description

read table from pptx

Usage

```
inpptx(filename, header = FALSE)
```

Arguments

filename	input filename
header	use first row as column name

Author(s)

Kai Guo

Examples

```
totable(t.test(wt ~ am, mtcars), filename = file.path(tempdir(), "mtcars.pptx"))
tabs <- inpptx(filename = file.path(tempdir(), "mtcars.pptx"), header = TRUE)
tabs
```

todocx	<i>export figure to docx</i>
--------	------------------------------

Description

export figure to docx

Usage

```
todocx(  
  figure = NULL,  
  filename = NULL,  
  title = "",  
  width = 6,  
  height = 6,  
  append = FALSE,  
  devsize = FALSE,  
  units = "in"  
)
```

Arguments

figure	plot figure function
filename	output filename
title	title for the figure
width	width of the output figure
height	height of the output figure
append	append or not
devsize	Boolean value show use device size or not (default = FALSE)
units	the units in which to return the value – inches, cm, or pixels (device units)

Author(s)

Kai Guo

Examples

```
if(interactive()){
  plot(mtcars$mpg, mtcars$disp)
  todocx(filename = file.path(tempdir(), "mtcars.docx"))
  ## use ggplot2
  ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
  todocx(filename = file.path(tempdir(), "mtcars.docx"), height = 6, width = 4)
}
```

toffice

export graph to MS office

Description

export graph to MS office

Usage

```
toffice(
  figure = NULL,
  format = "pptx",
  filename = "temp.pptx",
  nr = 1,
  nc = 1,
  irow = 1,
  icol = 1,
  onsame = FALSE,
  title = "",
  left = 0.15,
  top = 0.15,
```



```

    append = FALSE,
    width = 4,
    height = 4,
    devsize = FALSE,
    units = "in"
  )

```

Arguments

figure	plot figure function
format	file format
filename	output filename
nr, nc	two numbers to indicate the figures will be drawn in an nr-by-nc array on the device by columns or rows, respectively.
irow, icol	two number to indicate which row or column for the figure to be drawn
onsame	Boolean value show to draw on same slide or not
title	title for the figure
left, top	two numbers which gives the number of lines of margin to be specified on the left and right sides of the plot
append	append or not
width	width of the output figure
height	height of the output figure
devsize	Boolean value show use device size or not (default = FALSE)
units	the units in which to return the value – inches, cm, or pixels (device units)

Author(s)

Kai Guo

Examples

```

if(interactive()){
  plot(mtcars$mpg, mtcars$disp)
  toffice(filename = file.path(tempdir(), "mtcars.pptx"), format = "pptx")
  ## use ggplot2
  ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
  toffice(filename = file.path(tempdir(), "mtcars.pptx"), format = "pptx")
}

```

tofigure	<i>output figures to different formats</i>
----------	--

Description

output figures to different formats

Usage

```
tofigure(figure, format = NULL, filename = "temp.pdf")
```

Arguments

figure	output figure function, set NULL output the current figure
format	output format (could be ingored)
filename	output filename with different format as suffix

Author(s)

Kai Guo

Examples

```
require(ggplot2)
p <- ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
tofigure(p, filename = file.path(tempdir(), "mtcars.pdf"))
## or use ggplot directly
tofigure(ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) +
geom_point(), filename = file.path(tempdir(), "mtcars.eps"))

## if you use basic plot function or other plot function you
## need first use convertplot to convert it to ggplot object
## when you are working on the platform without GUI
p <- convertplot(plot(1:10))
tofigure(p, filename = file.path(tempdir(), "mtcars.pdf"))
topptx(p, filename = file.path(tempdir(), "mtcars.pptx"))
```

tohtml	<i>export as plotly html (only support ggplot2 object)</i>
--------	--

Description

export as plotly html (only support ggplot2 object)

Usage

```
tohtml(figure, filename = "temp.html", save = TRUE)
```

Arguments

figure	output figure function, set NULL output the current figure
filename	output format (could be ingored)
save	save figure or not (default: TRUE)

Author(s)

Kai Guo

Examples

```
if(interactive()){
  require(ggplot2)
  p <- ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
  tohtml(p, filename = file.path(tempdir(), "mtcars.html"))
  ## or use ggplot directly
  ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) +
  geom_point()
  tohtml(save = FALSE)
}
```

topptx

export figure to pptx

Description

export figure to pptx

Usage

```
topptx(
  figure = NULL,
  filename = NULL,
  nr = 1,
  nc = 1,
  irow = 1,
  icol = 1,
  onsame = FALSE,
  title = "",
  left = 0.15,
  top = 0.15,
  width = 6,
  height = 6,
```

```

    append = FALSE,
    devsize = FALSE,
    units = "in"
  )

```

Arguments

figure	plot figure function
filename	output filename
nr, nc	two numbers to indicate the figures will be drawn in an nr-by-nc array on the device by columns or rows, respectively.
irow, icol	the number to indicate which row or column for the figure to be drawn
onsame	Boolean value show to draw on same slide or not
title	title for the figure
left, top	two numbers which gives the number of lines of margin to be specified on the left and right sides of the plot
width	width of the output figure
height	height of the output figure
append	append or not
devsize	Boolean value show use device size or not (default = FALSE)
units	the units in which to return the value – inches, cm, or pixels (device units)

Author(s)

Kai Guo

Examples

```

if(interactive()){
  plot(mtcars$mpg, mtcars$disp)
  topptx(filename = file.path(tempdir(), "mtcars.pptx"))
  ## use ggplot2
  ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()
  topptx(filename = file.path(tempdir(), "mtcars.pptx"))
}

```

totable	<i>write table out to pptx or docx</i>
---------	--

Description

write table out to pptx or docx

Usage

```
totable(data, filename, format = NULL, append = FALSE)
```

Arguments

data	datasets
filename	output filename
format	pptx or docx
append	append into file

Author(s)

Kai Guo

Examples

```
tt <- t.test(wt ~ am, mtcars)
totable(tt, filename = file.path(tempdir(), "mtcars.pptx"))
totable(t.test(wt ~ am, mtcars), filename = file.path(tempdir(), "mtcars.pptx"))
totable(head(mtcars), filename = file.path(tempdir(), "mtcars.docx"))
```

toxlsx

export figure to pptx

Description

export figure to pptx

Usage

```
toxlsx(
  figure = NULL,
  filename = NULL,
  width = 6,
  height = 6,
  devsize = FALSE,
  units = "in"
)
```

Arguments

figure	plot figure function
filename	output filename
width	width of the output figure
height	height of the output figure
devsize	Boolean value show use device size or not (default = FALSE)
units	the units in which to return the value – inches, cm, or pixels (device units)

Author(s)

Kai Guo

Examples

```
if(interactive()){  
  plot(mtcars$mpg, mtcars$disp)  
  toxlsx(filename = file.path(tempdir(), "mtcars.xlsx"))  
  ## use ggplot2  
  ggplot(mtcars, aes(mpg, disp, color = factor(cyl))) + geom_point()  
  toxlsx(filename = file.path(tempdir(), "mtcars.xlsx"))  
}
```

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