Package 'eoffice'

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Type Package

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

Version 0.2.2

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

Suggests knitr, markdown, rmarkdown

VignetteBuilder knitr

RoxygenNote 7.1.1

NeedsCompilation no

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Repository CRAN

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.getext   *get the suffix name*

Description

get the suffix name

Usage

```
.getext(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,
  savegg = FALSE,
  density = 300,
  pages = NULL
)
```

Arguments

filename	input filename
format	format of input file
exclude_col	vector of colors to be excluded from the analysis
topn	display the most frequent colors
showfig	display the figure or not (default: FALSE)
showcol	display extracted colors or not (default: FALSE)
savegg	save the figure as ggplot2 object or not (default: FALSE)
density	resolution to render pdf
pages	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 *read table from pptx*

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 *export figure to docx*

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   *output figures to different formats*

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   *export as plotly html (only support ggplot2 object)*

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	*write table out to pptx or docx*

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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