Package 'tracee'

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Type Package

Title Easily Save Output and Trace it Back to Code

Version 0.0.2

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Description Simple but crucial functionality related to creation of reproducible and traceable output (plots) back to code. It has a graphics saver with simple automation of plot stamping with source, destination and creation time, a selection of dimensions for use in presentations. A list of plots can be saved at once.

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RoxygenNote 7.2.0

Depends R (>= 3.0.0)

Imports ggplot2, grid, gridExtra, flextable

Suggests knitr

Encoding UTF-8

NeedsCompilation no

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Repository CRAN

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R topics documented:

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canvasSize *Get predefined canvas sizes*

Description

Get predefined canvas sizes

Usage

```
canvasSize(canvas, scale = 1)
```

Arguments

canvas   Can either be a character with one of the values

- "standard" - A powerpoint standard size, and two can be shown side by side - 12 by 9 inch.
- "wide" - For a single wide plot on a powerpoint slide - 16 by 9 inch
- "A4" A full A4 page - 9 by 12 inch
- "square" As reads - 9 by 9 inch
- "wide-screen" For full screen display - 31 by 15 inch

or it can be a list with elements width and height with single values (unit is inches). Example: canvas=list(height=5,width=9).

scale   A scale to apply to both directions of the canvas size. This can be useful in combination with the pre-defined canvas sizes.

Value

A list with numerical elements width and height as used by ggwrite.

See Also

Other Plotting: [ggstamp](), [ggwater](), [ggwrite]()

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fnAppend *paste something before file name extension.*

Description

Append a file name like file.mod to file_1.mod or file_pk.mod. If it's a number, we can pad some zeros if wanted. The separator (default is underscore) can be modified.

Usage

```
fnAppend(fn, x, pad0 = 0, sep = "_")
```

Arguments

fn	The file name to modify
x	A character string or a numeric to add to the file name
pad0	In case x is numeric, a number of zeros to pad before the appended number. This is useful if you are generating say more than 10 files, and your counter will be 01, 02,.., 10,... and not 1, 2,...,10,...
sep	The separator between the exsting file name (until extension) and the addition.

Value

A character string

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ggstamp   *Always stamp your plots with script name*

Description

This function is used to stamp ggplot type plots with datetime and script name. User must provide the script name.

Usage

```
ggstamp(plot, script = "no stamp", file, time = Sys.time())
```

Arguments

plot	The plot to be stamped.
script	the script name. Date and time will be added automatically.
file	An optional output filename to be included in the stamp.
time	The timestamp to be included.

Details

The stamp is adding using the caption label. If a caption is already in the plot, the stamp will be added in a new line.

The caption is derived as caption=paste(c(plot$label$caption,stamp,paste(date.txt,file)),collapse="\n")

ggplot 2.2.1 (which is years old) or newer is required.

Value

the plot with a stamp

A plot object with the stamp added as caption

See Also

Other Plotting: [canvasSize](), [ggwater](), [ggwrite]()

Examples

```
library(ggplot2)
data(ChickWeight)
p1 <- ggplot(ChickWeight,aes(Time,weight,group=Chick,colour=factor(Diet)))+geom_line()
script <- "note"
ggstamp(p1,script)
## Or use ggwrite which will call ggstamp automatically.
ggwrite(p1,script=script,canvas="wide")
```

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ggwater   *Add watermarks to ggplots*

Description

Add watermarks to ggplots

Usage

```
ggwater(text = "Not validated", scale = 1, rot = 30, col = "grey", alpha = 0.5)
```

Arguments

text	What should be written on the plot
scale	the size
rot	rotation of the mark. Don't remember the unit.
col	the colour (a value, not an expression) of the watermark. Default is grey.
alpha	alpha value for the watermark. Default is 0.5.

Details

This used to be based on https://www.r-bloggers.com/adding-watermarks-to-plots/ That solution stopped working, and this new solution is simpler and based on ggplot2 alone.

Value

a layer with a watermark that can be added to a plot

See Also

Other Plotting: [canvasSize](), [ggstamp](), [ggwrite]()

Examples

```
library(ggplot2)
ff <- qplot(1:10, 11:20) + ggwater()
```

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ggwrite	*Export plots created with ggplot (and more) or tables to files (png or pdf) - or show them on screen.*

Description

Export plots created with ggplot (and more) or tables to files (png or pdf) - or show them on screen.

Usage

```
ggwrite(
  plot,
  file,
  script,
  canvas = "standard",
  onefile = FALSE,
  res = 200,
  paper = "special",
  save = TRUE,
  show = !save,
  useNames = FALSE,
  quiet = FALSE
)
```

Arguments

plot	A plot object or a list of plots. Normally generated with ggplot or qplot. But it can also be from grid.arrange or arrangeGrob with class gtable. That is experimental though. Not sure exactly what classes are supported.
file	A file to export to. Must end in .png or .pdf. If plot is a list, see onefile. If missing, plot is shown on screen.
script	This should normally be the path to your script. Requires ggplot >=2.2.1.
canvas	Either a list of height and width or a shortname of predefined canvas size. See ?canvasSize.
onefile	Only applicable if plot is a list. If plot is a list and onefile=TRUE, all plots will be put in a pdf (file must end in pdf) with one plot per page. If plot is a list and onefile=FALSE, numbered files will be created - one per list element.
res	Resolution. Passed to png.
paper	Only used with pdf device. See ?pdf.
save	Save the plot to the given file or just show? Defaults to TRUE. Hint, if you use an "exportFlag", use save=exportFlag.
show	Print the plot to the screen? Defaults to the opposite of save. Hint, combining save and show in knitr can give you both a high quality plot in your pdf and a png optimized for powerpoint.

useNames	If length(plot)>1 use names(plot) in the file names? Default is to use 1:length(plot). Only used if save is TRUE, and length(plot)>1.
quiet	Default is false but use TRUE to suppress messages about what was saved.

Value

Nothing. Files written and/or plots shown, depending on argument values.

See Also

Other Plotting: [canvasSize](), [ggstamp](), [ggwater]()

Examples

```
library(ggplot2)
writeOutput <- FALSE
data(ChickWeight)
p1 <- ggplot(ChickWeight,aes(Time,weight,group=Chick,colour=factor(Diet)))+geom_line()
ggwrite(p1)  ## view plot on screen
script <- "note"
ggwrite(p1,script=script,canvas="wide",file="myplot1.png",save=writeOutput)
## save a data.frame as an image
```

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stampFlextab	*Stamp and write flextab objects to one or multiple formats*

Description

Stamp and write flextab objects to one or multiple formats

Usage

```
stampFlextab(ft, file, script, bg = "#ffffff", time)
```

Arguments

ft	a flextable object
file	The file that the flextable will be written to (no file is written by this function)
script	path to script - will be pasted as caption.
bg	Default bacground colour is #ffffff.
time	The default is to insert a time stamp taken from result of Sys.time(). Using the time argument you can overrule this by setting a fixed string instead. Use "" to omit.

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writeFlextab   *Stamp and write flextab objects to one or multiple formats*

Description

Stamp and write flextab objects to one or multiple formats

Usage

```
writeFlextab(ft, file, script, formats, ...)
```

Arguments

ft	A flextab object.
file	to save to. See formats to generate multiple files.
script	##' @param script path to script - will be pasted as caption.
formats	One or more of png, docx, pptx, rds as a character vector.
...	Arguments passed to stampFlextab.

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