Package 'rvg'

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Type Package

Title R Graphics Devices for Vector Graphics Output

Version 0.2.5

Description Vector Graphics devices for Microsoft
PowerPoint and Excel. Functions extending package 'officer' are provided to
embed 'DrawingML' graphics into 'Microsoft PowerPoint' presentations and
'Microsoft Excel' workbooks.

License GPL-3

Encoding UTF-8

Depends R (>= 3.0)

Imports grDevices, Rcpp (>= 0.12.12), officer (>= 0.3.6), gdtools (>=
0.2.1), xml2 (>= 1.0.0), rlang

LinkingTo Rcpp, gdtools

Suggests rmarkdown, htmltools, testthat, covr, grid, knitr

URL https://davidgohel.github.io/rvg

BugReports https://github.com/davidgohel/rvg/issues

RoxygenNote 7.1.1

VignetteBuilder knitr

NeedsCompilation yes

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Repository CRAN

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R topics documented:

`dml` *Wrap plot instructions for DrawingML plotting in Powerpoint*

Description

A simple wrapper to mark the plot instructions as Vector Graphics instructions. It produces an object of class 'dml' with a corresponding method `ph_with`.

The function enable usage of any R plot with argument `code` and with ggplot objects with argument `ggobj`.

Usage

```
dml(
  code,
  ggobj = NULL,
  bg = "white",
  fonts = list(),
  pointsize = 12,
  editable = TRUE,
  ...
)
```

Arguments

`code`	plotting instructions
`ggobj`	ggplot object to print. argument code will be ignored if this argument is supplied.
`bg, fonts, pointsize, editable`	Parameters passed to `dml_pptx`
`...`	unused arguments

See Also

`ph_with.dml`

Examples

```
anyplot = dml(code = barplot(1:5, col = 2:6), bg = "wheat")

library(officer)
doc <- read_pptx()
doc <- add_slide(doc, "Title and Content", "Office Theme")
doc <- ph_with(doc, anyplot, location = ph_location_fullsize())
fileout <- tempfile(fileext = ".pptx")
# fileout <- "vg.pptx"
print(doc, target = fileout)
```

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dml_pptx *DrawingML graphic device for Microsoft PowerPoint*

Description

Graphics devices for Microsoft PowerPoint DrawingML format.

Usage

```
dml_pptx(
  file = "Rplots.dml",
  width = 6,
  height = 6,
  offx = 1,
  offy = 1,
  bg = "white",
  fonts = list(),
  pointsize = 12,
  editable = TRUE,
  id = 1L,
  last_rel_id = 1L,
  raster_prefix = "raster_",
  standalone = TRUE
)
```

Arguments

file	the file where output will appear.
height, width	Height and width in inches.
offx, offy	top and left origin of the plot
bg	Default background color for the plot (defaults to "white").
fonts	Named list of font names to be aliased with fonts installed on your system. If unspecified, the R default families sans, serif, mono and symbol are aliased to the family returned by match_family().

	When you use specific fonts, you will need that font installed on your system. This can be check with package gdtools and function gdtools::font_family_exists(). An example: list(sans = "Roboto",serif = "Times",mono = "Courier").
pointsize	default point size.
editable	should vector graphics elements (points, text, etc.) be editable.
id	specifies a unique identifier (integer) within the slide that will contain the DrawingML instructions.
last_rel_id	specifies the last unique identifier (integer) within relationship file that will be used to reference embedded raster images if any.
raster_prefix	string value used as prefix for png files produced when raster objects are printed on the graphical device.
standalone	produce a standalone drawingml file? If FALSE, omits xml header and namespaces.

See Also

Devices

Examples

```
dml_pptx( file = tempfile() )
plot(1:11,(-5:5)^2, type='b', main="Simple Example")
dev.off()
```

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dml_xlsx *DrawingML graphic device for Microsoft Excel*

Description

Graphics devices for Microsoft Excel DrawingML format.

Usage

```
dml_xlsx(
  file = "Rplots.dml",
  width = 6,
  height = 6,
  offx = 1,
  offy = 1,
  bg = "white",
  fonts = list(),
  pointsize = 12,
  editable = TRUE,
  id = 1L,
```

```
  last_rel_id = 1L,
  raster_prefix = "raster_",
  standalone = TRUE
)
```

Arguments

file	the file where output will appear.
height, width	Height and width in inches.
offx, offy	top and left origin of the plot
bg	Default background color for the plot (defaults to "white").
fonts	Named list of font names to be aliased with fonts installed on your system. If unspecified, the R default families sans, serif, mono and symbol are aliased to the family returned by match_family().
pointsize	default point size.
editable	should vector graphics elements (points, text, etc.) be editable.
id	specifies a unique identifier (integer) within the slide that will contain the DrawingML instructions.
last_rel_id	specifies the last unique identifier (integer) within relationship file that will be used to reference embedded raster images if any.
raster_prefix	string value used as prefix for png files produced when raster objects are printed on the graphical device.
standalone	produce a standalone drawingml file? If FALSE, omits xml header and namespaces.

See Also

Devices

Examples

```
dml_xlsx( file = tempfile() )
plot(1:11,(-5:5)^2, type='b', main="Simple Example")
dev.off()
```

---

ph_with.dml *add a plot output as vector graphics into a PowerPoint object*

Description

produces a vector graphics output from R plot instructions stored in a dml object and add the result in an rpptx object produced by read_pptx.

Usage

```
## S3 method for class 'dml'
ph_with(x, value, location, ...)
```

Arguments

x	a pptx device
value	dml object
location	a location for a placeholder.
...	Arguments to be passed to methods

Examples

```
anyplot = dml(code = barplot(1:5, col = 2:6), bg = "wheat")

library(officer)
doc <- read_pptx()
doc <- add_slide(doc, "Title and Content", "Office Theme")
doc <- ph_with(doc, anyplot, location = ph_location_fullsize())

fileout <- tempfile(fileext = ".pptx")
print(doc, target = fileout)
```

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rvg-defunct *Defunct Functions in Package rvg*

Description

Defunct Functions in Package rvg

Usage

```
dml_docx(...)

body_add_vg(...)
```

Arguments

...	unused arguments

Details

`dml_docx()` is removed and can be replaced by `devEMF::emf`.

`body_add_vg()` is removed and can be replaced by `officer::body_add_img`.

xl_add_vg *add a plot output as vector graphics into an Excel object*

Description

produces a vector graphics output from R plot instructions and add the result in an Excel sheet. by read_xlsx.

Usage

```
xl_add_vg(x, sheet, code, left, top, width, height, ...)
```

Arguments

x	an rxlsx object produced by officer::read_xlsx
sheet	sheet label/name
code	plot instructions
left, top	left and top origin of the plot on the slide in inches.
height, width	Height and width in inches.
...	arguments passed on to dml_xlsx.

Examples

```
library(officer)
my_ws <- read_xlsx()
my_ws <- xl_add_vg(my_ws, sheet = "Feuil1",
  code = barplot(1:5, col = 2:6), width = 6, height = 6, left = 1, top = 2 )
fileout <- tempfile(fileext = ".xlsx")
print(my_ws, target = fileout)
```

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