

Package ‘rvg’

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Type Package

Title R Graphics Devices for Vector Graphics Output

Version 0.1.0

Description Vector Graphics devices for 'SVG', 'DrawingML' for Microsoft Word, PowerPoint and Excel.

License GPL-3

Depends R (>= 3.0)

Imports grDevices, Rcpp, xml2 (>= 1.0.0), gdtools, utils, R.utils

LinkingTo Rcpp, gdtools

Suggests htmltools, testthat, covr, grid

URL <https://github.com/davidgohel/rvg>

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

RoxygenNote 5.0.1

NeedsCompilation yes

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dml_docx	<i>DrawingML graphic device for Microsoft Word</i>
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Description

Graphics devices for Microsoft Word DrawingML format.

Usage

```
dml_docx(file = "Rplots.dml", width = 6, height = 6, bg = "white",
fontname_serif = "Times New Roman", fontname_sans = "Calibri",
fontname_mono = "Courier New", fontname_symbol = "Symbol",
pointsize = 12, editable = TRUE, id = 1L, next_rels_id = 1L,
raster_prefix = "raster_", standalone = TRUE)
```

Arguments

file	DrawingML file.
height, width	Height and width in inches.
bg	Default background color for the plot (defaults to "white").
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system.
pointsize	default point size.
editable	should vector graphics elements (points, text, etc.) be editable.
id	specifies a unique identifier (integer) within the document that will contain the DrawingML instructions.
next_rels_id	specifies the next 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](#), [dml_docx](#), [dsvg](#)

Examples

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

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", fontname_serif = "Times New Roman",
  fontname_sans = "Calibri", fontname_mono = "Courier New",
  fontname_symbol = "Symbol", pointsize = 12, editable = TRUE, id = 1L,
  next_rels_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").
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system.
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.
next_rels_id	specifies the next 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](#), [dml_docx](#), [dsvg](#)

Examples

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

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", fontname_serif = "Times New Roman",
  fontname_sans = "Calibri", fontname_mono = "Courier New",
  fontname_symbol = "Symbol", pointsize = 12, editable = TRUE, id = 1L,
  next_rels_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").
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system.
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.
next_rels_id	specifies the next 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](#), [dml_docx](#), [dml_pptx](#), [dsvg](#)

Examples

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

dsvg

SVG Graphics Driver

Description

This function produces SVG files (compliant to the current w3 svg XML standard) where elements can be made interactive.

Usage

```
dsvg(file = "Rplots.svg", width = 6, height = 6, bg = "white",
      pointsize = 12, standalone = TRUE, canvas_id = 1,
      fontname_serif = "Times New Roman", fontname_sans = "Calibri",
      fontname_mono = "Courier New", fontname_symbol = "Symbol")
```

Arguments

file	the file where output will appear.
height, width	Height and width in inches.
bg	Default background color for the plot (defaults to "white").
pointsize	default point size.
standalone	Produce a stand alone svg file? If FALSE, omits xml header and default names-pace.
canvas_id	svg id within HTML page.
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system.

Details

Graphic elements are made interactive with jQuery code. To embed an interactive svg file into a web page, check that jQuery javascript file is included.

See Also

[Devices](#), [dml_docx](#), [dml_pptx](#)

Examples

```
dsvg()
plot(rnorm(10), main="Simple Example", xlab = "", ylab = "")
dev.off()
```

`dsvg_view`*Run plotting code and view svg in RStudio Viewer or web browser.*

Description

This is useful primarily for testing. Requires the `htmltools` package.

Usage

```
dsvg_view(code, ...)
```

Arguments

<code>code</code>	Plotting code to execute.
<code>...</code>	Other arguments passed on to <code>dsvg</code> .

Examples

```
if (require("htmltools")) {  
  dsvg_view(plot(1:10))  
  dsvg_view(hist(rnorm(100)))  
}
```

`rvg_tracer_off`*trace off id collection*

Description

get collected id of an rvg device and stop collecting.

Usage

```
rvg_tracer_off()
```

Value

graphical elements id as integer values.

rvg_tracer_on	<i>trace on id collection</i>
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Description

Start collecting id of an rvg device.

Usage

```
rvg_tracer_on()
```

set_attr	<i>set attributes to graphical elements</i>
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Description

set attributes with javascript instructions to graphical elements.

Usage

```
set_attr(ids, attribute, str)
```

Arguments

ids	integer vector of graphical elements identifiers (returned by rvg_tracer_off).
attribute	name of the attribute to set.
str	values to set for the attribute.

write_docx	<i>Microsoft Word Graphics Device</i>
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Description

A graphical device for Microsoft Word documents.

Usage

```
write_docx(file, code, pagesize = c(width = 8.5, height = 11),
  margins = c(left = 1, right = 1, top = 1, bottom = 1), ...)
```

Arguments

file	filename of the Microsoft Word document to produce. File extension must be .docx.
code	Plotting code to execute
pagesize	Word document page size in inches. A named vector (width and height).
margins	Word document margins size in inches. A named vector (left, right, top, bottom).
...	arguments for fun (passed on to dml_docx .)

Examples

```
write_docx(file = "my_plot_1.docx", code = plot(rnorm(10)) )
write_docx(file = "my_plot_2.docx", code = barplot(1:7, col = 1:7))
```

write_pptx

Microsoft PowerPoint Graphics Device

Description

A graphical device for Microsoft PowerPoint documents.

Usage

```
write_pptx(file, code, size = c(width = 10, height = 7.5), ...)
```

Arguments

file	filename of the Microsoft PowerPoint document to produce. File extension must be .pptx.
code	Plotting code to execute
size	slide size in inches.
...	arguments for fun (passed on to dml_pptx .)

Examples

```
write_pptx(file = "my_plot_1.pptx", code = plot(rnorm(10)))
write_pptx(file = "my_plot_2.pptx", code = barplot(1:7, col = 1:7))
```

write_xlsx	<i>Microsoft Excel Graphics Device</i>
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Description

A graphical device for Microsoft Excel documents.

Usage

```
write_xlsx(file, code, size = c(width = 10, height = 7.5), ...)
```

Arguments

file	filename of the Microsoft Excel document to produce. File extension must be .xlsx.
code	Plotting code to execute
size	slide size in inches.
...	arguments for fun (passed on to dml_xlsx .)

Examples

```
write_xlsx(file = "my_plot_1.xlsx", code = plot(rnorm(10)))  
write_xlsx(file = "my_plot_2.xlsx", code = barplot(1:7, col = 1:7))
```

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