

Package ‘rvg’

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Type Package

Title R Graphics Devices for Vector Graphics Output

Version 0.1.2

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 (>= 0.1.0), 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 5.0.1.9000

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",
  fonts = list(), pointsize = 12, editable = TRUE, id = 1L,
  last_rel_id = 1L, next_rels_id, raster_prefix = "raster_",
  standalone = TRUE, fontname_serif = NULL, fontname_sans = NULL,
  fontname_mono = NULL, fontname_symbol = NULL)
```

Arguments

file	DrawingML file.
height, width	Height and width in inches.
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 <code>match_family()</code> .
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.
last_rel_id	specifies the last unique identifier (integer) within relationship file that will be used to reference embedded raster images if any.
next_rels_id	deprecated. Use last_rel_id instead.
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.
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system. These arguments are deprecated in favor of the fonts argument.

Note

Text rendering is not optimal, this device should not be considered as a valid R graphical device.

The DrawingML implementation for 'Microsoft Word' is different from standard DrawingML particularly with text boxes. The major point is that the exact size and position of text boxes cannot be exactly defined regarding to text widths and heights.

Autofit option has been set as a workaround, this moves text slightly on the produced graphic when edited in 'Microsoft Word' but this makes sure the text can be read.

See Also

[Devices](#)

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", fonts = list(), pointsize = 12,
  editable = TRUE, id = 1L, last_rel_id = 1L, next_rels_id,
  raster_prefix = "raster_", standalone = TRUE, fontname_serif = NULL,
  fontname_sans = NULL, fontname_mono = NULL, fontname_symbol = NULL)
```

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 <code>match_family()</code> .
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.
next_rels_id	deprecated. Use last_rel_id instead.
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.
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system. These arguments are deprecated in favor of the fonts argument.

See Also

[Devices](#)

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", fonts = list(), pointsize = 12,
  editable = TRUE, id = 1L, last_rel_id = 1L, next_rels_id,
  raster_prefix = "raster_", standalone = TRUE, fontname_serif = NULL,
  fontname_sans = NULL, fontname_mono = NULL, fontname_symbol = NULL)
```

Arguments

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

See Also

[Devices](#)

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, fonts = list(),
      fontname_serif = NULL, fontname_sans = NULL, fontname_mono = NULL,
      fontname_symbol = NULL)
```

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 namespace.
canvas_id	svg id within HTML page.
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 <code>match_family()</code> .
fontname_serif, fontname_sans, fontname_mono, fontname_symbol	font names for font faces. Used fonts should be available in the operating system. These arguments are deprecated in favor of the fonts argument.

See Also

[Devices](#)

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 Plotting code to execute.
... Other arguments passed on to [dsvg](#).

Examples

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

rvg_tracer_off	<i>trace off id collection</i>
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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	<i>Microsoft PowerPoint Graphics Device</i>
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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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