

Package ‘rasterpdf’

November 22, 2019

Title Plot Raster Graphics in PDF Files

Version 0.1.1

Description The ability to plot raster graphics in PDF files can be useful when one needs multi-page documents, but the plots contain so many individual elements that (the usual) use of vector graphics results in inconveniently large file sizes. Internally, the package plots each individual page as a PNG, and then combines them in one PDF file.

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Imports methods, png

Suggests covr, lintr, pkgdown, ragg, testthat

URL <https://ilarischeinin.github.io/rasterpdf>,
<https://github.com/ilarischeinin/rasterpdf>

BugReports <https://github.com/ilarischeinin/rasterpdf/issues>

Encoding UTF-8

LazyData true

RoxygenNote 7.0.0

NeedsCompilation no

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Repository CRAN

Date/Publication 2019-11-22 18:30:03 UTC

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dev.off	<i>Shut down a graphics device</i>
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Description

Please see the manual page for `grDevices::dev.off()`. Package rasterpdf overrides the function in order to provide functionality of `raster_pdf()`, but internally calls `grDevices::dev.off()`.

Usage

```
dev.off(which = grDevices::dev.cur())
```

Arguments

`which` An integer that specifies the device number. Default is the current device.

See Also

[grDevices::dev.off\(\)](#)

Examples

```
raster_pdf(tempfile(fileext = ".pdf"))
plot(iris)
dev.off()
```

rasterpdf	<i>rasterpdf: Plot Raster Graphics in PDFs.</i>
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Description

rasterpdf is an R package to plot raster graphics in PDF files. This can be useful when one needs multipage documents, but the plots contain so many individual elements that use of vector graphics (with `grDevices::pdf()`) results in inconveniently large file sizes. Internally, rasterpdf plots each individual page as a PNG, and then combines them in one PDF file.

Functions

[raster_pdf\(\)](#) Opens a raster graphics PDF device.

[dev.off\(\)](#) Closes a graphics device.

raster_pdf	<i>Raster PDF graphics device (with PNG pages)</i>
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Description

Open a graphics device for raster PDF files. Internally, a PNG device is used for the individual pages, which are then combined into one PDF file.

Usage

```
raster_pdf(
  filename = "Rplots.pdf",
  width = NULL,
  height = NULL,
  units = NULL,
  res = NULL,
  png_function = NULL,
  pdf_function = NULL,
  ...
)

agg_pdf(...)
```

Arguments

filename	A character string of the output file name.
width	Page width. If NULL, use value of <code>getOption("rasterpdf.width")</code> if set, and default to 7 otherwise.
height	Page height. If NULL, use value of <code>getOption("rasterpdf.height")</code> if set, and default to 7 otherwise.
units	The units in which height and weight are given. Can be "in" (inches), "cm", "mm", or "px" (pixels). If NULL, use value of <code>getOption("rasterpdf.units")</code> if set, and default to "in" otherwise.
res	Resolution in ppi. If NULL, use value of <code>getOption("rasterpdf.res")</code> if set, and default to 72 otherwise.
png_function	A PNG device function. If NULL, use <code>grDevices::png()</code> .
pdf_function	A PDF device function. If NULL, use <code>grDevices::cairo_pdf()</code> if it is available, and <code>grDevices::png()</code> otherwise.
...	Further arguments passed through to the PNG device function specified in <code>png_function</code> .

Details

The ability to plot raster graphics in PDF files can be useful when one needs multipage documents, but the plots contain so many individual elements that use of vector graphics (with `grDevices::pdf()`) results in inconveniently large file sizes

Internally, the function plots each individual page in a PNG file, which are then combined into one PDF file when `dev.off()` is called. By default, the PNGs are generated with `grDevices::png()`, but another device function can also be specified. The PDF is by default generated with `grDevices::cairo_pdf()` if it is available, and `grDevices::pdf()` otherwise. Again, it is possible to specify another PDF device function.

`agg_pdf(...)` is shorthand for `raster_pdf(..., png_function = ragg::agg_png)`.

See Also

`grDevices::pdf()`, `grDevices::cairo_pdf()`, `grDevices::png()`, `ragg::agg_png()`

Examples

```
raster_pdf(tempfile(fileext = ".pdf"))
plot(iris)
dev.off()
```

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