

Package ‘egg’

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Type Package

Title Extensions for 'ggplot2', to Align Plots, and Set Panel Sizes

Version 0.2.0

License GPL-3

Description Miscellaneous functions to help customise 'ggplot2' objects. High-level functions are provided to post-process 'ggplot2' layouts and allow alignment between plot panels, as well as setting panel sizes to fixed values.

VignetteBuilder knitr

Depends gridExtra (>= 2.3), ggplot2

Imports gtable, grid, grDevices, stats, utils

Suggests knitr

RoxygenNote 6.0.1

NeedsCompilation no

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expose_layout	<i>expose_layout</i>
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Description

expose_layout

Usage

```
expose_layout(p, draw = TRUE, newpage = TRUE)
```

Arguments

p	ggplot
draw	logical, draw the gtable
newpage	logical

Value

gtable

Examples

```
p1 <- qplot(mpg, wt, data=mtcars, colour=cyl)
p2 <- qplot(mpg, data = mtcars) + ggtitle("title")
p3 <- qplot(mpg, data = mtcars, geom = "dotplot")
p4 <- p1 + facet_wrap(~carb, nrow=1) + theme(legend.position="none") +
  ggtitle("faceted plot")
p1 <- lapply(list(p1,p2, p3, p4), expose_layout, FALSE, FALSE)
grid.arrange(grobs=p1, widths=c(1.2,1,1),
             layout_matrix = rbind(c(1, 2, 3),
                                   c(4, 4, 4)))
```

ggarrange	<i>ggarrange</i>
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Description

ggarrange

Usage

```
ggarrange(..., plots = list(...), nrow = NULL, ncol = NULL,
          widths = NULL, heights = NULL, byrow = TRUE, top = NULL,
          bottom = NULL, left = NULL, right = NULL, padding = unit(0.5, "line"),
          clip = "on", draw = TRUE, newpage = TRUE, debug = FALSE)
```

Arguments

...	ggplot objects
plots	list of ggplots
nrow	number of rows
ncol	number of columns
widths	list of requested widths
heights	list of requested heights
byrow	logical, fill by rows
top	optional string, or grob
bottom	optional string, or grob
left	optional string, or grob
right	optional string, or grob
padding	unit of length one, margin around annotations
clip	argument of gtable
draw	logical: draw or return a grob
newpage	logical: draw on a new page
debug	logical, show layout with thin lines

Value

gtable of aligned plots

Examples

```
library(grid)
p1 <- ggplot(mtcars, aes(mpg, wt, colour = factor(cyl))) +
  geom_point()
p2 <- ggplot(mtcars, aes(mpg, wt, colour = factor(cyl))) +
  geom_point() + facet_wrap(~ cyl, ncol=2, scales = "free") +
  guides(colour="none") +
  theme()
grid.newpage()
grid.draw(ggarrange(p1, p2, widths = c(2,1)))
```

`gtable_frame`

gtable_frame

Description

`gtable_frame`

Usage

```
gtable_frame(g, width = unit(1, "null"), height = unit(1, "null"),
  debug = FALSE)
```

Arguments

<code>g</code>	<code>gtable</code>
<code>width</code>	requested width
<code>height</code>	requested height
<code>debug</code>	logical draw gtable cells

Value

3x3 gtable wrapping the plot

Examples

```
library(grid)
library(gridExtra)
p1 <- ggplot(mtcars, aes(mpg, wt, colour = factor(cyl))) +
  geom_point()

p2 <- ggplot(mtcars, aes(mpg, wt, colour = factor(cyl))) +
  geom_point() + facet_wrap(~ cyl, ncol=2, scales = "free") +
  guides(colour="none") +
  theme()

p3 <- ggplot(mtcars, aes(mpg, wt, colour = factor(cyl))) +
  geom_point() + facet_grid(. ~ cyl, scales = "free")

g1 <- ggplotGrob(p1);
g2 <- ggplotGrob(p2);
g3 <- ggplotGrob(p3);
fg1 <- gtable_frame(g1)
fg2 <- gtable_frame(g2)
fg12 <- gtable_frame(gtable_rbind(fg1,fg2), width=unit(2,"null"), height=unit(1,"null"))
fg3 <- gtable_frame(g3, width=unit(1,"null"), height=unit(1,"null"))
grid.newpage()
combined <- gtable_cbind(fg12, fg3)
grid.draw(combined)
```

set_panel_size

set_panel_size

Description

set_panel_size

Usage

```
set_panel_size(p = NULL, g = ggplot2::ggplotGrob(p), file = NULL,
  margin = unit(1, "mm"), width = unit(4, "cm"), height = unit(4, "cm"))
```

Arguments

p	ggplot2
g	gtable
file	optional output filename
margin	grid unit
width	grid unit, requested panel width
height	grid unit, requested panel height

Value

gtable with fixed panel sizes

Examples

```
p1 <- qplot(mpg, wt, data=mtcars, colour=cyl)
p2 <- p1 + facet_wrap(~carb, nrow=1)
grid.arrange(grobs=lapply(list(p1,p2), set_panel_size))
```

symmetrise_scale *symmetrise_scale*

Description

symmetrise_scale

Usage

```
symmetrise_scale(p, axis = "x")
```

Arguments

p	ggplot2
axis	axis

Value

plot with scales adjusted

Examples

```
library(ggplot2)
p1 <- qplot(mpg, wt, data=mtcars, colour=cyl) + facet_wrap(~carb, nrow=1, scales="free")
symmetrise_scale(p1, "y")
```

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