

# Package ‘RIGHT’

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**Type** Package

**Title** R Interactive Graphics via HTML

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**Author** ChungHa Sung, TaeJoon Song, JongHyun Bae, SangGi Hong, Jae W. Lee, and Junghoon Lee

**Maintainer** Jonghyun Bae <bnbbkr@gmail.com>

**Description** Interactive data visualization supporting linked graphs can help users easily explore data and gain valuable insights and enables such visualization and interactive re-analysis using HTML5 canvas and JavaScript. Its R API is designed to create a seamless analysis, visualization, and re-analysis workflow for interactive visualization and analysis. Since HTML5 canvas and JavaScript is supported in virtually all modern web browsers, the visualizations can be delivered to almost any device/platform for presentation purposes.

**License** GPL-3

**Depends** ggplot2

**Imports** plyr, rjson, shiny

**Suggests** testthat

**URL** <https://righthelp.github.io/tutorial/overview>

**BugReports** <https://groups.google.com/forum/?hl=en#!forum/right-user>

**NeedsCompilation** no

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boxplot_RIGHT	<i>Box-whisker</i>
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## Description

Draw a box-whisker of the given data values.

## Usage

```
boxplot_RIGHT(form, data, col = NULL, isString = FALSE)
```

## Arguments

form	a formula describing the x and y variables as $y \sim x$ .
data	a data.frame object.
col	color of the boxes.
isString	a character is expected for x and data if TRUE. It is useful for programming.

## See Also

[boxplot](#)

## Examples

```
## Not run:
RIGHT(boxplot(conc ~ Subject, Theoph))

## End(Not run)
```

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clean	<i>Cleanup RIGHT Object</i>
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**Description**

Cleanup RIGHT Object

**Usage**

```
clean(obj)
```

**Arguments**

obj                   RIGHT object.

**Examples**

```
## Not run:
obj <- RIGHT(plot(conc ~ Time, Theoph), Theoph)
clean(obj)

## End(Not run)
```

---

createGgplot	<i>Extract data object's name</i>
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**Description**

Function to create data object name in ggplot function.

**Usage**

```
createGgplot(data, ...)
```

**Arguments**

data                   a data.frame object.  
...                    other options to draw graph(colour, fill)

**See Also**

[ggplot2](#)

**Examples**

```
## Not run:
RIGHT(print(ggplot(Theoph, aes(Time, conc, colour=Subject)) + geom_point()))

## End(Not run)
```

---

createQplot                      *Extract data object's name*

---

### Description

Function to create data object name in qplot function.

### Usage

```
createQplot(x, y = NULL, ..., data, geom = "point")
```

### Arguments

x	xaxis to draw graph.
y	yaxis to draw graph. Default is NULL
...	other options to draw graph(colour, fill)
data	a data.frame object.
geom	graph type to draw(point, line, bar, boxplot). Default is "point"

### See Also

[qplot](#)

### Examples

```
## Not run:
RIGHT({qplot(x=Time, y=conc, data=Theoph, geom="point", colour=Subject)
       qplot(x=Time, fill=Subject, data=Theoph, geom="bar")})

## End(Not run)
```

---

hist\_RIGHT                      *Histograms*

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### Description

Draw a histogram of the given data values.

### Usage

```
hist_RIGHT(x, data, color = NULL, isString = FALSE)
```

**Arguments**

x	variable name for which the histogram is desired.
data	a data.frame object.
color	column used to define the colors used to fill the bars. Default is NULL.
isString	a character is expected for x, data and color if TRUE. It is useful for programming.

**See Also**

[hist](#)

**Examples**

```
## Not run:
RIGHT(hist(Time, Theoph, color = Subject))

## End(Not run)
```

---

lines_RIGHT	<i>Add Lines to a Plot</i>
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**Description**

lines\_RIGHT draws a sequence of points in the current axis.

**Usage**

```
lines_RIGHT(form, data, by = NULL, isString = FALSE)
```

**Arguments**

form	a formula describing the x and y variables as y ~ x.
data	a data.frame object.
by	column used to group lines. Default is NULL.
isString	a character is expected for data if TRUE. It is useful for programming.

**See Also**

[lines](#)

**Examples**

```
## Not run:
RIGHT({plot(conc ~ Time, Theoph, type = "n")
      lines(conc ~ Time, Theoph)})

## End(Not run)
```

pie\_RIGHT

*Pie Charts*

---

**Description**

Draw a pie chart.

**Usage**

```
pie_RIGHT(x, data, isString = FALSE)
```

**Arguments**

x	variable name for which the histogram is desired.
data	a data.frame object.
isString	a character is expected for x and data if TRUE. It is useful for programming.

**See Also**

[pie](#)

**Examples**

```
## Not run:  
RIGHT(pie(Subject, Theoph))  
  
## End(Not run)
```

---

plot\_RIGHT*X-Y Plotting*

---

**Description**

Function to create x-y scatter and line plots, including the axis.

**Usage**

```
plot_RIGHT(form, data, type = "b", by = color, color = NULL,  
isString = FALSE)
```

**Arguments**

form	a formula describing the x and y variables as y ~ x.
data	a data.frame object.
type	the type of plot. Currently, only "n", "b", "p", "l" are supported. See <a href="#">plot</a> for more details.
by	column used to group lines. Default is the same as color.
color	column used to define line or point color. Default is NULL.
isString	a character is expected for data and color if TRUE. It is useful for programming.

**See Also**[plot](#)**Examples**

```
## Not run:  
RIGHT(plot(conc ~ Time, Theoph, type = "b", color = Subject))  
  
## End(Not run)
```

---

points\_RIGHT

*Add Points to a Plot*

---

**Description**

points\_RIGHT draws a sequence of points in the current axis.

**Usage**

```
points_RIGHT(form, data, isString = FALSE)
```

**Arguments**

form	a formula describing the x and y variables as y ~ x.
data	a data.frame object.
isString	a character is expected for data if TRUE. It is useful for programming.

**See Also**[points](#)**Examples**

```
## Not run:  
RIGHT({plot(conc ~ Time, Theoph, type = "n")  
      points(conc ~ Time, Theoph)})  
  
## End(Not run)
```

---

```
print.RIGHT
```

*Print RIGHT Object*

---

**Description**

Print RIGHT Object

**Usage**

```
## S3 method for class 'RIGHT'
print(x, ...)
```

**Arguments**

```
x
```

RIGHT object.

```
...
```

additional arguments affecting the summary produced.

**Examples**

```
## Not run:
obj <- RIGHT(plot(conc ~ Time, Theoph), Theoph)
print(obj)

## End(Not run)
```

---

```
RIGHT
```

*Entry Function for RIGHT*

---

**Description**

Entry Function for RIGHT

**Usage**

```
RIGHT(expr = { }, ..., title = "RIGHT: R Interactive Graphics via HTML",
       ncol = NULL, dir = tempfile(), overwrite = FALSE,
       browser = getOption("browser"), supportRIGHT = getOption("supportRIGHT"))
```

**Arguments**

```
expr
```

plotting expression to evaluate

```
...
```

data.frame objects used in expr. If they are used in one of the plotting functions, it is not necessary to list them.

```
title
```

title of the visualization. The default value is "RIGHT: R Interactive Graphics via HTML."



ncol	support improved layout to group related plots together
dir	directory name to store files used for the visualization. Temporary directory is created under the current working directory by default.
overwrite	rewrite exiting files if the directory name matches. FALSE by default.
browser	a character string giving the name of the browser. It should be in the PATH, or a full path specified. <code>getOption("browser")</code> by default.
supportRIGHT	allow inserting Google AdSense to support further development of RIGHT. Use <a href="#">options</a> and <a href="#">getOption</a> to set and retrieve global option supportRIGHT.

### Examples

```
{
  RIGHT({plot(conc ~ Time, Theoph, type = "p", color = "Subject")
  lines(conc ~ Time, Theoph, by="Subject")
  hist(Wt, Theoph)
  boxplot(conc ~ Time, Theoph)
  pie(Subject, Theoph)
  search(Theoph)
  table(Theoph)})
}
```

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runServer	<i>shiny server-offloading</i>
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### Description

Function to create server-offloading graph.

### Usage

```
runServer(expr = { })
```

### Arguments

expr            a formula to draw server-offloading graph and return result of formula.

### See Also

[shiny](#)

### Examples

```
## Not run:
obj <- RIGHT({plot(conc ~ Time, Theoph, type="p", color = Subject)
  loessArray <- runServer({obj <- loess(conc ~ Time, data = Theoph)
  xRange <- range(Theoph$Time)
  simArray <- data.frame(Time = seq(xRange[1], xRange[2], length.out = 132))
  simArray$conc <- predict(obj, newdata = simArray)
```

```

        return(simArray)})
      lines(conc ~ Time, loessArray)})
print(obj)

## End(Not run)

```

---

 search\_RIGHT

*Add a Search Box*


---

### Description

search\_RIGHT adds a search box for a data.frame object.

### Usage

```
search_RIGHT(data, isString = FALSE)
```

### Arguments

data            a data.frame object.  
 isString        a character is expected for data if TRUE. It is useful for programming.

### Examples

```

## Not run:
RIGHT({plot(conc ~ Time, Theoph, type = "p", color = Subject)
       search(Theoph)})

## End(Not run)

```

---

 summary.RIGHT

*Summarize RIGHT Object*


---

### Description

Summarize RIGHT Object

### Usage

```
## S3 method for class 'RIGHT'
summary(object, ...)
```

### Arguments

object            RIGHT object.  
 ...                additional arguments affecting the summary produced.

**Examples**

```
## Not run:  
obj <- RIGHT(plot(conc ~ Time, Theoph), Theoph)  
summary(obj)  
  
## End(Not run)
```

---

table_RIGHT	<i>Add an Interactive Table</i>
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---

**Description**

table\_RIGHT adds an interactive table for a data.frame object.

**Usage**

```
table_RIGHT(data, height = 200L, isString = FALSE)
```

**Arguments**

data            a data.frame object.  
height         height of the table. The default is 200.  
isString       a character is expected for data if TRUE. It is useful for programming.

**Examples**

```
## Not run:  
RIGHT({plot(conc ~ Time, Theoph, type = "p", color = Subject)  
      table(Theoph)})  
  
## End(Not run)
```

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