Package 'svgedit'

December 11, 2025

Title Insert Graphs, Images and Text in SVG Files

Version 1.0.0

Description Edit SVG files created in 'Inkscape' by replacing placeholders (e.g. a rectangle element or {} in a text box) by 'ggplot2' objects, images or text. This helps automate the creation of figures with complex layouts.

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Encoding UTF-8

RoxygenNote 7.3.3

Imports cli, rlang, xml2, ggplot2, base64enc

Suggests palmerpenguins, testthat (>= 3.0.0), svglite, knitr, rmarkdown

Config/testthat/edition 3

VignetteBuilder knitr

URL https://github.com/DanielThedie/svgedit

BugReports https://github.com/DanielThedie/svgedit/issues

NeedsCompilation no

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Repository CRAN

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Contents

`draw` *Replace an svg object by a ggplot2 graph*

Description

Replace an svg object by a ggplot2 graph

Usage

```
draw(
  input_svg,
  output_svg,
  plots = NULL,
  plot_scale = NULL,
  text = NULL,
  images = NULL,
  dpi = 150
)
```

Arguments

`input_svg`	Path to the input svg file
`output_svg`	Path to the output svg file
`plots`	A named list of ggplot2 objects. The list names should correspond to the labels of the svg elements to be replaced.
`plot_scale`	A named list of numeric values to scale the inserted plots. The names should correspond to the labels of the svg elements to be replaced.
`text`	A named list of character vectors. The list names should correspond to the labels of the svg text elements to be modified. Each character vector will be used to replace "" placeholders in the text element in order.
`images`	A named list of paths to image files. The list names should correspond to the labels of the svg image elements to be replaced.
`dpi`	The resolution to use when rendering the ggplot2 objects.

Value

Invisibly returns NULL. The output svg file is written to `output_svg`.

Examples

```
library(ggplot2)
# Create a simple plot
p <- ggplot(mtcars, aes(x = mpg, y = wt)) + geom_point()
# Use draw() to insert the plot into an SVG template
input_svg <- system.file("examples", "Template.svg", package = "svgedit")
```

```
draw(
  input_svg = input_svg,
  output_svg = tempfile(fileext = ".svg"),
  plots = list(panel_A = p)
)
```

`find_element` *Find an element by label in an Inkscape SVG document*

Description

Find an element by label in an Inkscape SVG document

Usage

```
find_element(doc, label)
```

Arguments

`doc`	An xml2 SVG document
`label`	The label of the element to find

Value

The xml2 node corresponding to the element with the given id

`get_doc_unit` *Get the unit used in the SVG document*

Description

Get the unit used in the SVG document

Usage

```
get_doc_unit(doc)
```

Arguments

`doc`	An xml2 SVG document

Value

The unit used in the SVG document (e.g., "px", "mm", "cm", "in")

get_element_dimensions *Get the dimensions of an SVG element*

Description

Get the dimensions of an SVG element

Usage

```
get_element_dimensions(
  element,
  doc_unit,
  dpi = 150,
  call = rlang::caller_env()
)
```

Arguments

element	An xml2 node corresponding to an SVG element
doc_unit	The unit used in the SVG document (e.g., "px", "mm", "cm", "in")
dpi	The resolution to use when interpreting pixel units
call	The calling environment for error reporting

Details

The function expects the element to have 'x', 'y', 'width', and 'height' attributes.

Value

A list with x, y, width, and height of the element

insert_image *Insert a raster image (PNG/JPG) into an SVG document, replacing a target element*

Description

Insert a raster image (PNG/JPG) into an SVG document, replacing a target element

Usage

```
insert_image(doc, label, image_file, dpi = 150)
```

Arguments

doc	An xml2 SVG document
label	The label of the target element to be replaced
image_file	Path to the PNG or JPG image to be inserted
dpi	The resolution to use when interpreting pixel units (in the template svg)

Value

The modified SVG document (doc) with the image added and the target removed

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insert_svg *Add an element to an SVG document, replacing a target element*

Description

Add an element to an SVG document, replacing a target element

Usage

```
insert_svg(doc, label, insert_file, dpi = 150)
```

Arguments

doc	An xml2 SVG document
label	The label of the target element to be replaced
insert_file	Path to the SVG file to be inserted
dpi	The resolution to use when interpreting pixel units

Value

The modified xml2 SVG document (doc) with the svg file added and the target removed

insert_text *Replace "" in a text element by provided values*

Description

Replace "" in a text element by provided values

Usage

```
insert_text(doc, label, values)
```

Arguments

doc	An SVG document
label	The label of the text element to edit
values	A character vector to replace each "" in order

Value

The modified SVG document (doc) with the text inserted

unit_to_inch *Convert a measurement to inches based on the unit*

Description

Convert a measurement to inches based on the unit

Usage

```
unit_to_inch(val, unit, dpi = 150)
```

Arguments

val	The measurement value
unit	The unit of the measurement (e.g., "px", "mm", "cm", "in")
dpi	The resolution to use when interpreting pixel units

Value

The measurement converted to inches

Index