

# Package ‘svgedit’

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**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.

**License** MIT + file LICENSE

**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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draw	<i>Replace an svg object by a ggplot2 graph</i>
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### 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

<code>input_svg</code>	Path to the input svg file
<code>output_svg</code>	Path to the output svg file
<code>plots</code>	A named list of ggplot2 objects. The list names should correspond to the labels of the svg elements to be replaced.
<code>plot_scale</code>	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.
<code>text</code>	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.
<code>images</code>	A named list of paths to image files. The list names should correspond to the labels of the svg image elements to be replaced.
<code>dpi</code>	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	<i>Find an element by label in an Inkscape SVG document</i>
--------------	---

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**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	<i>Get the unit used in the SVG document</i>
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**Description**

Get the unit used in the SVG document

**Usage**

```
get_doc_unit(doc)
```

**Arguments**

doc	An xml2 SVG document
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**Value**

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

---

`get_element_dimensions`*Get the dimensions of an SVG element*

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**Description**

Get the dimensions of an SVG element

**Usage**

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

**Arguments**

<code>element</code>	An xml2 node corresponding to an SVG element
<code>doc_unit</code>	The unit used in the SVG document (e.g., "px", "mm", "cm", "in")
<code>dpi</code>	The resolution to use when interpreting pixel units
<code>call</code>	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

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`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**

<code>doc</code>	An xml2 SVG document
<code>label</code>	The label of the target element to be replaced
<code>image_file</code>	Path to the PNG or JPG image to be inserted
<code>dpi</code>	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

---

<code>insert_svg</code>	<i>Add an element to an SVG document, replacing a target element</i>
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---

**Description**

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

**Usage**

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

**Arguments**

<code>doc</code>	An xml2 SVG document
<code>label</code>	The label of the target element to be replaced
<code>insert_file</code>	Path to the SVG file to be inserted
<code>dpi</code>	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	<i>Replace "" in a text element by provided values</i>
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**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

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unit_to_inch	<i>Convert a measurement to inches based on the unit</i>
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**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

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