

# Package ‘gdtools’

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**Version** 0.0.5

**License** GPL-3

**Title** Utilities for Graphical Rendering

**Description** Useful tools for writing vector graphics devices.

**LazyData** TRUE

**Imports** Rcpp (>= 0.12.0)

**Suggests** htmltools, testthat

**LinkingTo** Rcpp

**SystemRequirements** cairo

**BugReports** <https://github.com/davidgohel/gdtools/issues>

**NeedsCompilation** yes

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`font_family_exists`     *Check if font family exists.*

### Description

Check if font family exists.

### Usage

```
font_family_exists(font_family = "sans")
```

### Arguments

`font_family`     font family name (case sensitive)

### Value

A logical value

### Examples

```
font_family_exists("sans")
font_family_exists("Arial")
font_family_exists("Courier")
```

`raster_str`     *Draw/preview a raster into a string*

### Description

`raster_view` is a helper function for testing. It uses `htmltools` to render a png as an image with base64 encoded data image.

### Usage

```
raster_str(x, width = 480, height = 480, interpolate = FALSE)

raster_view(code)
```

### Arguments

<code>x</code>	A raster object
<code>width, height</code>	Width and height in pixels.
<code>interpolate</code>	A logical value indicating whether to linearly interpolate the image.
<code>code</code>	base64 code of a raster

## Examples

```
r <- as.raster(matrix(hcl(0, 80, seq(50, 80, 10)),  
nrow = 4, ncol = 5))  
code <- raster_str(r, width = 50, height = 50)  
if (interactive() && require("htmltools")) {  
  raster_view(code = code)  
}
```

---

raster\_write

*Draw/preview a raster to a png file*

---

## Description

Draw/preview a raster to a png file

## Usage

```
raster_write(x, path, width = 480, height = 480, interpolate = FALSE)
```

## Arguments

x	A raster object
path	name of the file to create
width,height	Width and height in pixels.
interpolate	A logical value indicating whether to linearly interpolate the image.

## Examples

```
r <- as.raster(matrix(hcl(0, 80, seq(50, 80, 10)),  
nrow = 4, ncol = 5))  
raster_write(x = r, path = "raster.png", width = 50, height = 50)
```

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str\_extents

*Compute string extents.*

---

## Description

Determines the width and height of a bounding box that's big enough to (just) enclose the provided text.

## Usage

```
str_extents(x, fontname = "sans", fontsize = 12, bold = FALSE,  
italic = FALSE)
```

**Arguments**

<code>x</code>	Character vector of strings to measure
<code>fontname</code>	Font name
<code>fontsize</code>	Font size
<code>bold, italic</code>	Is text bold/italic?

**Examples**

```
str_extents(letters)
str_extents("Hello World!", bold = TRUE, italic = FALSE,
            fontname = "sans", fontsize = 12)
```

**str\_metrics** *Get font metrics for a string.*

**Description**

Get font metrics for a string.

**Usage**

```
str_metrics(x, fontname = "sans", fontsize = 12, bold = FALSE,
            italic = FALSE)
```

**Arguments**

<code>x</code>	Character vector of strings to measure
<code>fontname</code>	Font name
<code>fontsize</code>	Font size
<code>bold</code>	Is text bold/italic?
<code>italic</code>	Is text bold/italic?

**Value**

A named numeric vector

**Examples**

```
str_metrics("Hello World!")
```

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