# Package: tinysnapshot (via r-universe)

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for R. Includes expectations to test base R and 'ggplot2' plots as well as console output from print().				
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Contents				
tinysnapshot-package				
Index				

tinysnapshot-package Snapshots for Unit Tests using the 'tinytest' Framework

# Description

Snapshots for unit tests using the 'tinytest' framework for R. Includes expectations to test base R and 'ggplot2' plots as well as console output from print().

#### **Package Content**

Index: This package was not yet installed at build time.

#### Maintainer

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```
expect_equivalent_images
```

Test if two image files are equivalent

### Description

Test if two image files are equivalent

#### Usage

```
expect_equivalent_images(
   current,
   target,
   tol = getOption("tinysnapshot_tol", default = 0),
   metric = getOption("tinysnapshot_metric", default = "AE"),
   fuzz = getOption("tinysnapshot_fuzz", default = 0),
   diffpath = NULL
)
```

expect\_snapshot\_plot 3

#### **Arguments**

current	path to an image file
target	path to an image file
tol	distance estimates larger than this threshold will trigger a test failure. Scale depends on the metric argument. With the default metric="AE" (absolute error), the tolerance corresponds roughly to the number of pixels of difference between the plot and the reference image.
metric	string with a metric from magick::metric_types() such as "AE" or "phash".
fuzz	relative color distance between 0 and 100 to be considered similar.
diffpath	path where to save an image which shows the differences between current and target. NULL means that the diff image is not saved.

#### Value

A tinytest object. A tinytest object is a logical with attributes holding information about the test that was run

expect\_snapshot\_plot Test if the new plot matches a target (snapshot) plot

#### **Description**

This expectation can be used with tinytest to check if the new plot matches a target plot.

When the expectation is checked for the first time, the expectation fails and a reference plot is saved to the inst/tinytest/\_tinysnapshot folder.

When the expectation fails, the reference plot, the new plot, and a diff are saved to the inst/tinytest/label folder. Call the review() function to compare.

To update a snapshot, delete the reference file from the \_tinysnapshot folder and run the test suite again.

See the package README file or website for detailed examples.

#### Usage

```
expect_snapshot_plot(
   current,
   label,
   width = getOption("tinysnapshot_width", default = NULL),
   height = getOption("tinysnapshot_height", default = NULL),
   tol = getOption("tinysnapshot_tol", default = 0),
   metric = getOption("tinysnapshot_metric", default = "AE"),
   fuzz = getOption("tinysnapshot_fuzz", default = 0),
   device = getOption("tinysnapshot_device", default = "svg"),
   device_args = getOption("tinysnapshot_device_args", default = list()),
   os = getOption("tinysnapshot_os", default = Sys.info()["sysname"])
)
```

#### **Arguments**

current	an object of class ggplot or a function which returns a base R plot.
label	a string to identify the snapshot (alpha-numeric, hyphens, or underscores). Each plot in the test suite must have a unique label.
width	of the snapshot. PNG default: 480 pixels. SVG default: 7 inches.
height	of the snapshot. PNG default: 480 pixels. SVG default: 7 inches.
tol	distance estimates larger than this threshold will trigger a test failure. Scale depends on the metric argument. With the default metric="AE" (absolute error), the tolerance corresponds roughly to the number of pixels of difference between the plot and the reference image.
metric	string with a metric from magick::metric_types() such as "AE" or "phash".
fuzz	relative color distance between 0 and 100 to be considered similar.
device	"svg", "png", "ragg" or "svglite"
device_args	list of arguments to pass to the device call (e.g., $user\_fonts$ for $svglite$ device).
os	character vector of operating systems on which the test should be run (e.g., "Windows", "Linux", "Darwin"). Tests are skipped when no element of the vector matches the output of: $sys.info()["sysname"]$

#### Value

A tinytest object. A tinytest object is a logical with attributes holding information about the test that was run

expect\_snapshot\_print Test if printed output matches a target printout

### **Description**

This expectation can be used with tinytest to check if the new plot matches a target plot.

When the expectation is checked for the first time, the expectation fails and a reference text file is saved to the inst/tinytest/\_tinysnapshot folder.

To update a snapshot, delete the reference file from the \_tinysnapshot folder and run the test suite again.

See the package README file or website for detailed examples.

# Usage

```
expect_snapshot_print(
  current,
  label,
  mode = getOption("tinysnapshot_mode", default = "unified"),
  format = getOption("tinysnapshot_format", default = "ansi256"),
  ...
)
```

expect\_snapshot\_print 5

# Arguments

current an object which returns text to the console when calling print(x)'

label a string to identify the snapshot (alpha-numeric, hyphens, or underscores). Each

plot in the test suite must have a unique label.

mode "unified", "sidebyside", "context", or "auto". See ?diffobj::diffPrint format "raw", "ansi8", "ansi256", "html", or "auto". See ?diffobj::diffPrint

... Additional arguments are passed to diffobj::diffPrint()

# Value

A tinytest object. A tinytest object is a logical with attributes holding information about the test that was run

# **Index**

```
* package
        tinysnapshot-package, 2

expect_equivalent_images, 2
expect_snapshot_plot, 3
expect_snapshot_print, 4

tinysnapshot (tinysnapshot-package), 2
tinysnapshot-package, 2
```