

# Package ‘testthatmulti’

February 5, 2024

**Type** Package

**Title** Testing for R Packages with Multiple Attempts for Noisy Tests

**Version** 0.1.0

**Author** Collin Erickson

**Maintainer** Collin Erickson <collinberickson@gmail.com>

**Description** Runs tests using the 'testthat' package but allows for multiple attempts for a single test. This is useful for noisy or flaky tests that generally pass but can fail due to occasional random errors, such as numeric instability or using random data.

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**Suggests** testthat (>= 3.0.0), rlang

**Config/testthat/edition** 3

**Language** en-US

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2024-02-05 20:20:02 UTC

## R topics documented:

ttm . . . . .	2
ttm_expect_equal . . . . .	3
ttm_expect_true . . . . .	4

<b>Index</b>	<b>6</b>
--------------	----------

---

`ttm`*Test that with multiple attempts*

---

**Description**

Test that with multiple attempts

**Usage**

```
ttm(n, expr, verbose = 0)
```

**Arguments**

<code>n</code>	Maximum number of attempts
<code>expr</code>	Expression to evaluate
<code>verbose</code>	Amount that should be printed

**Value**

Nothing

**Examples**

```
set.seed(0)

# 1 attempt, all pass
ttm(1, {
  ttm_expect_true(TRUE)
  ttm_expect_true(1 == 1)
  ttm_expect_true(all(1:5 == 1:5))
})

# Fails first 10 times, then passes
ttm(100, {
  x <- runif(1)
  print(x)
  ttm_expect_true(x < 0.1)
})

# Will always fail regardless of number of attempts
try({
  ttm(3, {
    ttm_expect_true(1 == 2)
  })
})
```

---

ttm_expect_equal	<i>Test that multi: expect equal</i>
------------------	--------------------------------------

---

**Description**

Test that multi: expect equal

**Usage**

```
ttm_expect_equal(
  object,
  expected,
  ...,
  tolerance = if (testthat::edition_get() >= 3) testthat::testthat_tolerance(),
  info = NULL,
  label = NULL,
  expected.label = NULL,
  verbose = 0
)
```

**Arguments**

object	Object to check if equal to expected
expected	Expected value
...	Args passed to testthat::expect_equal()
tolerance	Passed to 'testthat::expect_true()'. Default is 1e-10.
info	Passed to 'testthat::expect_true()'. Default is NULL.
label	Passed to 'testthat::expect_true()'. Default is NULL.
expected.label	Passed to 'testthat::expect_true()'. Default is NULL.
verbose	Amount of info that should be printed. Default is 0.

**Value**

Test result

**Examples**

```
set.seed(0)

# 1 attempt, all pass
ttm(1, {
  ttm_expect_equal(TRUE, TRUE)
  ttm_expect_equal(1, 1)
  ttm_expect_equal(1:5, 1:5)
})
```

```
# Fails first 6 times, then passes
ttm(100, {
  x <- sample(1:6, 1)
  print(x)
  ttm_expect_equal(x, 3)
})

# Will always fail regardless of number of attempts
try({
  ttm(3, {
    ttm_expect_equal(1, 2)
  })
})
```

---

ttm_expect_true	<i>Test that multi: expect true</i>
-----------------	-------------------------------------

---

## Description

See ‘testthat::expect\_true’ for details.

## Usage

```
ttm_expect_true(object, info = NULL, label = NULL, verbose = 0)
```

## Arguments

object	Object to test.
info	Passed to ‘testthat::expect_true()’.
label	Passed to ‘testthat::expect_true()’.
verbose	Amount of info that should be printed.

## Value

Test result

## Examples

```
set.seed(0)

# 1 attempt, all pass
ttm(1, {
  ttm_expect_true(TRUE)
  ttm_expect_true(1 == 1)
  ttm_expect_true(all(1:5 == 1:5))
})

# Fails first 10 times, then passes
ttm(100, {
```

```
x <- runif(1)
print(x)
ttm_expect_true(x < 0.1)
})

# Will always fail regardless of number of attempts
try({
  ttm(3, {
    ttm_expect_true(1 == 2)
  })
})
```

# Index

ttm, [2](#)  
ttm\_expect\_equal, [3](#)  
ttm\_expect\_true, [4](#)