# Package ‘runittotestthat’

**August 29, 2016**

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<th>Package</th>
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<td>Convert 'RUnit' Test Functions into 'testthat' Tests</td>
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<tr>
<td>Author</td>
<td>Richard Cotton [aut, cre]</td>
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<td>Maintainer</td>
<td>Richard Cotton <a href="mailto:richierocks@gmail.com">richierocks@gmail.com</a></td>
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<tr>
<td>Description</td>
<td>Automatically convert a file or package worth of 'RUnit' test functions into 'testthat' tests.</td>
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<td>Depends</td>
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**convert_brace**

Convert a code block.

**Description**

Converts a `switch` call.

**Usage**

`convert_brace(x)`

**Arguments**

- `x` A call to the brace function.

**Value**

- `x` the input, with a warning.
**convert_checkEquals**

| convert_checkEquals | Convert a checkEquals call. |

**Description**

Converts a checkEquals call.

**Usage**

`convert_checkEquals(x)`

**Arguments**

- **x**: A call to the `checkEquals` function.

**Value**

- **x**: A call to the `expect_equal` function.

---

**convert_checkEqualsNumeric**

| convert_checkEqualsNumeric | Convert a checkEqualsNumeric call. |

**Description**

Converts a checkEqualsNumeric call.

**Usage**

`convert_checkEqualsNumeric(x)`

**Arguments**

- **x**: A call to the `checkEqualsNumeric` function.

**Value**

- **x**: A call to the `expect_equal` function.
convert_checkException

Convert a checkException call.

**Description**

Converts a checkException call.

**Usage**

```plaintext
convert_checkException(x)
```

**Arguments**

x A call to the `checkException` function.

**Value**

x A call to the `expect_error` function.

---

convert_checkIdentical

Convert a checkIdentical call.

**Description**

Converts a checkIdentical call.

**Usage**

```plaintext
convert_checkIdentical(x)
```

**Arguments**

x A call to the `checkIdentical` function.

**Value**

x A call to the `expect_identical` function.
convert_checkTrue

**Description**

Converts a checkTrue call.

**Usage**

convert_checkTrue(x)

**Arguments**

x A call to the checkTrue function.

**Value**

x A call to the expect_true or expect_false function. (The later occurs if the input to checkTrue was negated.)

---

convert_for

**Description**

Converts a for block.

**Usage**

convert_for(x)

**Arguments**

x A call to the for function.

**Value**

x An object of class call.
convert_if

Convert an if block.

Description
Converting an if call.

Usage
convert_if(x)

Arguments
x A call to the if function.

Value
x An object of class call.

convert_line

Convert lines of RUnit code to testthat code

Description
Converts lines of RUnit code to the equivalent testthat code.

Usage
convert_line(x)

Arguments
x An R language object.

Value
An object of class call.
convert_lines

Convert lines of RUnit code to testthat code

Description

Converts lines of RUnit code to the equivalent testthat code.

Usage

convert_lines(lines)

Arguments

lines

An object of class call.

Value

An object of class call.

convert_package_tests

Convert a package worth of RUnit tests to testthat tests

Description

Converts all RUnit tests in a package to testthat tests, and writes them out to a file.

Usage

convert_package_tests(pkg, test_dir = "inst/tests",

    test_file_regexp = "runit.+\.[rR]", test_func_regexp = "^test.+",
    testthat_files = stdout(), ...)

## sS method for class 'package'
convert_package_tests(pkg, test_dir = "inst/tests",

    test_file_regexp = "runit.+\.[rR]", test_func_regexp = "^test.+",
    testthat_files = stdout(), ...)

## sS method for class 'character'
convert_package_tests(pkg, test_dir = "inst/tests",

    test_file_regexp = "runit.+\.[rR]", test_func_regexp = "^test.+",
    testthat_files = stdout(), ...)
**Arguments**

pkg
Either a string containing a path to a package or a devtools::package object.

test_dir
Directory inside the package containing test files.

test_file_regexp
Regular expression determining which files are considered to contain tests.

test_func_regexp
Regular expression determining which functions in the tests files are considered to be tests.

testthat_files
Character vector of paths for the output files. Defaults to stdout() to prevent you overwriting your existing test files. Use runit_files to refer to the original RUnit test files.

... Not currently used.

**Value**

A list of lists of calls. Each call element is a testthat test. The names of the top level list correspond to the names of the input test files. The names of the sublists correspond to the names of the RUnit test functions in that file. Each list element has an environment containing the original RUnit, stored in attr(, "runit_tests").

**Note**

RUnit tests will be evaluated when they are read in, so make sure that all your tests pass before you convert them.

**See Also**

convert_test_file, convert_test

---

**convert_repeat**

Convert a repeat block.

**Description**

Converts a repeat call.

**Usage**

convert_repeat(x)

**Arguments**

x A call to the repeat function.

**Value**

x An object of class call.
**convert_switch**

Convert a switch block.

**Description**

Converts a switch call.

**Usage**

```r
convert_switch(x)
```

**Arguments**

- `x` A call to the `switch` function.

**Value**

`x` the input, with a warning.

---

**convert_test**

Convert an RUnit test to a testthat test

**Description**

Converts a single RUnit test to a testthat test.

**Usage**

```r
convert_test(runit_test_fn, test_description = assertive::get_name_in_parent(runit_test_fn))
```

**Arguments**

- `runit_test_fn` An RUnit test function.
- `test_description` A string describing the test, defaulting to the name of the RUnit test function.

**Value**

A call to `test_that`, containing a testthat test equivalent to the input RUnit test.

**See Also**

`convert_package_tests, convert_test_file`
Examples

test_truth <- function()
{
  x <- all(runif(10) > 0)
  checkTrue(x)
}
convert_test(test_truth)

test_equality <- function()
{
  x <- sqrt(1:5)
  expected <- c(1, 4, 9, 16, 25)
  checkEquals(expected, x ^ 2)
}
convert_test(test_equality)

test_error <- function()
{
  checkException("1" + "2")
}
convert_test(test_error)

convert_test_file  
Convert a file worth of RUnit tests to testthat tests

Description

Converts all RUnit tests in a file to testthat tests, and writes them out to another file.

Usage

convert_test_file(runit_file, test_func_regexp = "^test.+", testthat_file = stdout())

Arguments

runit_file  A path to an file containing RUnit tests.
test_func_regexp  Regular expression determining which functions in the tests files are considered to be tests.
testthat_file  String of path for the output file. Defaults to stdout() to prevent you overwriting your existing test files. See note.

Value

A list of calls to test_that is invisibly returned. This list is also written to an output connection (defaulting to stdout). An environment containing the original RUnit is stored in attr(, "runit_tests").
Note

RUnit tests will be evaluated when they are read in, so make sure that all your tests pass before you convert them.

The testthat_file argument can be based upon the runit_file argument. For example, if you use the traditional RUnit test file naming strategy, something like sub("^runit", "testthat", runit_file) may be appropriate.

See Also

convert_package_tests, convert_test

Examples

tmp <- tempfile("test-convert_test_file")
writelines(
  "test_truth <- function()
  {
    x <- all(runif(10) > 0)
    checkTrue(x)
  }
  test_equality <- function()
  {
    x <- sqrt(1:5)
    expected <- c(1, 4, 9, 16, 25)
    checkEquals(expected, x ^ 4)
  }
  test_error <- function()
  {
    checkException("'1' + '2'")
  }"
  , tmp
)
convert_test_file(tmp)
unlink(tmp)

---

convert.While  
Convert a while block.

Description

Converts a while call.

Usage

convert_while(x)

Arguments

x  
A call to the while function.
Value

- An object of class call.

---

get_filename

*Get a quoted filename*

---

**Description**

Gets a single quoted filename from a connection or path.

**Usage**

get_filename(x)

**Arguments**

- `x` A connection object or a character vector of file paths.

**Value**

A character vector of paths to files.

---

**runittotestthat**

*Convert RUnit tests to testthat tests.*

---

**Description**

`testthat` has some nice features like test caching that aren’t supported by RUnit. This package lets you automatically convert your existing RUnit tests to testthat tests.

**Details**

There are three functions of interest:

1. `convert_test` converts an individual RUnit test to a call to a testthat test.
2. `convert_test_file` sources all the tests in a file, converts each one, then outputs them to a file (or file connection; `stdout` by default).
3. `convert_package_tests` takes a string naming a package, or a `devtools::package` object and loops over the files in ‘inst/tests’ (or wherever you specify), converting the tests, and outputting to files or `stdout`.
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