

Package ‘testthatdocs’

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Type Package

Title Automated and Idempotent Unit Tests Documentation for Reproducible Quality Assurance

Version 1.0.23

Description Automates documentation of test_that() calls within R test files.

The package scans test sources, extracts human-readable test titles (even when composed with functions like paste() or glue::glue(), ... etc.), and generates reproducible roxygen2-style listings that can be inserted both globally and per-section. It ensures idempotent updates and supports customizable numbering templates with hierarchical indices. Designed for developers, QA teams, and package maintainers seeking consistent, self-documenting test inventories.

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Encoding UTF-8

Depends R (>= 3.5)

Suggests testthat (>= 3.0.0), glue, knitr, rmarkdown, withr

VignetteBuilder knitr

URL <https://github.com/urniaz/testthatdocs>

BugReports <https://github.com/urniaz/testthatdocs/issues>

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NeedsCompilation no

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Index**6****document***Recursively generate test listings across a testthat tree***Description**

Walks the tests/testthat directory (by default), finds test files, and runs [document_file](#) on each matching file. All options from `document_file()` are available here as pass-through parameters.

Usage

```
document(
  root = "tests/testthat",
  pattern = "^[Tt]est.*\\.[rR]$",
  recurse = TRUE,
  exclude = c("testthat.R"),
  section_prefix = "# -",
  template = c("simple", "advanced", "custom"),
  global_fmt = NULL,
  section_fmt = NULL,
  encoding = "UTF-8",
  backup = TRUE,
  write = TRUE,
  quiet = FALSE
)
```

Arguments

<code>root</code>	Character. Root directory to search. Default "tests/testthat".
<code>pattern</code>	Regular expression used with <code>list.files(..., pattern=)</code> to select test files. Default matches typical testthat files: "^[Tt]est.*\\.[rR]\$".
<code>recurse</code>	Logical. Whether to search subdirectories recursively. Default TRUE.
<code>exclude</code>	Character vector of basenames to exclude (e.g., "testthat.R"). Default <code>c("testthat.R")</code> .
<code>section_prefix</code>	Character scalar. Lines starting with this prefix denote sections and are converted to #' @testsSection. Default "# -".
<code>template</code>	One of <code>c("simple", "advanced", "custom")</code> . Controls the default numbering format(s). Default "simple".
<code>global_fmt</code>	Character. Numbering template for the global listing. Uses placeholders {g}, {s}, {i}, {l}. If NULL, it is derived from <code>template</code> .
<code>section_fmt</code>	Character. Numbering template for section listings. If NULL, it is derived from <code>template</code> .
<code>encoding</code>	File encoding for reading and writing. Default "UTF-8".
<code>backup</code>	Logical. If TRUE, save a timestamped backup before overwriting. Default TRUE.
<code>write</code>	Logical. If TRUE, write changes back to path. If FALSE, return the would-be modified text without writing. Default TRUE.
<code>quiet</code>	Logical. If FALSE (default), prints progress messages.

Value

A list with components:

- **files**: character vector of processed file paths
- **results**: named list of `tests_listing_result` objects per file
- **listing**: combined data frame with a `file` column
- **backups**: character vector of backup paths (for files that were written)

Examples

```
## Not run:  
all_res <- document(  
  root = "tests/testthat",  
  template = "advanced",  
  backup = TRUE,  
  write = TRUE  
)  
head(all_res$listing)  
  
## End(Not run)
```

document_file

Generate idempotent listings of test_that() titles with sections

Description

Scans an R text file for `test_that()` calls, generates a global listing and per-section listings as roxygen comments, and inserts them right after the corresponding markers. The function is **idempotent**: it only replaces content between existing `@testsList` and `@testsSection` markers and leaves other code/comments unchanged. If section headers are given using a plain-text prefix (e.g., `"# -"`), they are converted to roxygen markers `#' @testsSection` (with any following text treated as the section title).

Usage

```
document_file(  
  path,  
  section_prefix = "# -",  
  template = c("simple", "advanced", "full", "custom"),  
  global_fmt = NULL,  
  section_fmt = NULL,  
  encoding = "UTF-8",  
  backup = TRUE,  
  write = TRUE  
)
```

Arguments

path	Character. Path to the text file to process (typically a test file).
section_prefix	Character scalar. Lines starting with this prefix denote sections and are converted to #' @testsSection. Default "# -".
template	One of c("simple", "advanced", "custom"). Controls the default numbering format(s). Default "simple".
global_fmt	Character. Numbering template for the global listing. Uses placeholders {g}, {s}, {i}, {l}. If NULL, it is derived from template.
section_fmt	Character. Numbering template for section listings. If NULL, it is derived from template.
encoding	File encoding for reading and writing. Default "UTF-8".
backup	Logical. If TRUE, save a timestamped backup before overwriting. Default TRUE.
write	Logical. If TRUE, write changes back to path. If FALSE, return the would-be modified text without writing. Default TRUE.

Details

The title extracted from `test_that()` is the first argument as a *raw expression*. If that argument is a single, quoted string (single/double/backtick), the outer quotes are stripped for cleaner listings. If it is constructed via functions like `paste()` or `glue::glue()`, the raw expression is listed without evaluation (and inner quotes remain).

Numbering is customizable via templates using placeholders:

- {g} – global incremental index across all tests
- {s} – section index (1-based, order of appearance)
- {i} – local index within a section (1-based)
- {l} – line index (line number in the final, modified text)
- aliases: {local} → {i}, {line} → {l}

Two presets are available via `template`:

- "simple" → "{g}"
- "advanced" → "{g}.{s}.{i}"
- "full" → "{g}.{s}.{i}.{l}"

You may fully override formats using `global_fmt` and `section_fmt`.

After inserting listings, the file is rescanned to compute the **final** `test_that()` line numbers reported in the returned data frame.

Value

A list with components:

- `text`: the final modified text (character vector, one element per line)
- `listing`: data frame of discovered tests with columns g, s, i, l (final line), `title_raw`, `section_title`.
- `written`: logical, whether the file was written
- `backup`: path to backup file (or NULL)

Examples

```
## Not run:  
res <- document_file("tests/testthat/test-example.R",  
                      section_prefix = "# -",  
                      template = "advanced")  
res$listing  
  
## End(Not run)
```

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