

# 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>

**RoxygenNote** 7.3.2

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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| document | <i>Recursively generate test listings across a testthat tree</i> |
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### 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

|                |   |
|----------------|---|
| root           | Character. Root directory to search. Default "tests/testthat".  |
| pattern        | Regular expression used with <code>list.files(..., pattern=)</code> to select test files. Default matches typical testthat files: "[Tt]est.*\\.[rR]\$". |
| recurse        | Logical. Whether to search subdirectories recursively. Default TRUE.  |
| exclude        | Character vector of basenames to exclude (e.g., "testthat.R"). Default c("testthat.R").   |
| 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}, {1}. 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.                                |
| quiet          | 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)
```

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document\_file

*Generate idempotent listings of test\_that() titles with sections*

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## 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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