Package 'watcher'

November 7, 2026

Type Package

Title Watch the File System for Changes

Version 0.2.2

Description R binding for 'libfswatch', a file system monitoring library. Watch files, or directories recursively, for changes in the background. Log activity, or call an R function, upon every change event.

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URL https://watcher.r-lib.org, https://github.com/r-lib/watcher

BugReports https://github.com/r-lib/watcher/issues

Depends R (>= 3.5)

Imports later, R6, rlang

Suggests testthat (>= 3.0.0)

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SystemRequirements 'libfswatch' (optional, bundled copy compiled otherwise)

NeedsCompilation yes

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`watcher` *Watch a Filesystem Location*

Description

Create a 'Watcher' on a filesystem location to monitor for changes in the background.

Usage

```
watcher(path = getwd(), callback = NULL, latency = 1)
```

Arguments

`path`	Character path to a file, or directory to watch recursively, or a vector of paths. Defaults to the current working directory.
`callback`	A function or formula (see rlang::as_function), which takes at least one argument. It will be called back with a character vector comprising the paths of all files that have changed. The default, `NULL`, causes the paths that have changed to be written to `stdout` instead.
`latency`	Numeric latency in seconds for events to be reported or callbacks triggered. The default is 1s.

Details

Uses an optimal event-driven API for each platform: 'ReadDirectoryChangesW' on Windows, 'FSEvents' on MacOS, 'inotify' on Linux, 'kqueue' on BSD, and 'File Events Notification' on Solaris/Illumos.

Note: the `latency` setting controls how often the changes are processed, and does not mean that changes are polled for at this interval. The changes are monitored in an event-driven fashion by the platform-specific monitor. Events are 'bubbled' such that a single change that triggers multiple filesystem events will cause the callback to be called only once, and the paths reported by a single callback are always unique.

It is possible to set a watch on a path that does not currently exist, and it will be monitored once created.

Value

A 'Watcher' R6 class object.

Watcher Methods

A `Watcher` is an R6 class with the following methods:

- `$start()` starts background monitoring. Returns logical `TRUE` upon success, `FALSE` otherwise.
- `$stop()` stops background monitoring. Returns logical `TRUE` upon success, `FALSE` otherwise.
- `$get_path()` returns the watched path as a character string.
- `$is_running()` returns logical `TRUE` or `FALSE` depending on whether the monitor is running.

Examples

```
w <- watcher(tempdir())
w$start()
w
w$get_path()
w$stop()
w$is_running()

Sys.sleep(1)
```

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