

# Changelog

## **v1.4.7 / 2018-01-09**

- BSD/macOS: Fix possible deadlock on closing the watcher on kqueue (thanks @nhoojr and @glycerine)
- Tests: Fix missing verb on format string (thanks @rchiossi)
- Linux: Fix deadlock in Remove (thanks @aarondl)
- Linux: Watch.Add improvements (avoid race, fix consistency, reduce garbage) (thanks @twpayne)
- Docs: Moved FAQ into the README (thanks @vahe)
- Linux: Properly handle inotify's `IN_Q_OVERFLOW` event (thanks @zeldovich)
- Docs: replace references to OS X with macOS

## **v1.4.2 / 2016-10-10**

- Linux: use InotifyInit1 with `IN_CLOEXEC` to stop leaking a file descriptor to a child process when using fork/exec #178 (thanks @pattysack)

## **v1.4.1 / 2016-10-04**

- Fix flaky inotify stress test on Linux #177 (thanks @pattysack)

## **v1.4.0 / 2016-10-01**

- add a `String()` method to `Event.Op` #165 (thanks @oozie)

## **v1.3.1 / 2016-06-28**

- Windows: fix for double backslash when watching the root of a drive #151 (thanks @brunoqc)

## **v1.3.0 / 2016-04-19**

- Support linux/arm64 by patching `x/sys/unix` and switching to to it from `syscall` (thanks @suihkulokki) #135

## **v1.2.10 / 2016-03-02**

- Fix golint errors in `windows.go` #121 (thanks @tiffanyfj)

## **v1.2.9 / 2016-01-13**

kqueue: Fix logic for `CREATE` after `REMOVE` #111 (thanks @bep)

### **v1.2.8 / 2015-12-17**

- kqueue: fix race condition in Close #105 (thanks @djui for reporting the issue and @ppknap for writing a failing test)
- inotify: fix race in test
- enable race detection for continuous integration (Linux, Mac, Windows)

### **v1.2.5 / 2015-10-17**

- inotify: use epoll\_create1 for arm64 support (requires Linux 2.6.27 or later) #100 (thanks @suihkulokki)
- inotify: fix path leaks #73 (thanks @chamaken)
- kqueue: watch for rename events on subdirectories #83 (thanks @guotie)
- kqueue: avoid infinite loops from symlinks cycles #101 (thanks @illicitonion)

### **v1.2.1 / 2015-10-14**

- kqueue: don't watch named pipes #98 (thanks @evanphx)

### **v1.2.0 / 2015-02-08**

- inotify: use epoll to wake up readEvents #66 (thanks @PieterD)
- inotify: closing watcher should now always shut down goroutine #63 (thanks @PieterD)
- kqueue: close kqueue after removing watches, fixes #59

### **v1.1.1 / 2015-02-05**

- inotify: Retry read on EINTR #61 (thanks @PieterD)

### **v1.1.0 / 2014-12-12**

- kqueue: rework internals #43
  - add low-level functions
  - only need to store flags on directories
  - less mutexes #13
  - done can be an unbuffered channel
  - remove calls to os.NewSyscallError
- More efficient string concatenation for Event.String() #52 (thanks @mdlayher)
- kqueue: fix regression in rework causing subdirectories to be watched #48
- kqueue: cleanup internal watch before sending remove event #51

### **v1.0.4 / 2014-09-07**

- kqueue: add dragonfly to the build tags.

- Rename source code files, rearrange code so exported APIs are at the top.
- Add done channel to example code. #37 (thanks @chenyukang)

### **v1.0.3 / 2014-08-19**

- [Fix] Windows MOVED\_TO now translates to Create like on BSD and Linux. #36

### **v1.0.2 / 2014-08-17**

- [Fix] Missing create events on macOS. #14 (thanks @zhssso)
- [Fix] Make ./path and path equivalent. (thanks @zhssso)

### **v1.0.0 / 2014-08-15**

- [API] Remove AddWatch on Windows, use Add.
- Improve documentation for exported identifiers. #30
- Minor updates based on feedback from golint.

### **dev / 2014-07-09**

- Moved to [github.com/fsnotify/fsnotify](https://github.com/fsnotify/fsnotify).
- Use `os.NewSyscallError` instead of returning `errno` (thanks @hariharan-uno)

### **dev / 2014-07-04**

- kqueue: fix incorrect mutex used in `Close()`
- Update example to demonstrate usage of `Op`.

### **dev / 2014-06-28**

- [API] Don't set the Write `Op` for attribute notifications #4
- Fix for `String()` method on `Event` (thanks Alex Brainman)
- Don't build on Plan 9 or Solaris (thanks @4ad)

### **dev / 2014-06-21**

- Events channel of type `Event` rather than `*Event`.
- [internal] use syscall constants directly for `inotify` and `kqueue`.
- [internal] `kqueue`: rename events to `kevents` and `fileEvent` to `event`.

### **dev / 2014-06-19**

- Go 1.3+ required on Windows (uses `syscall.ERROR_MORE_DATA` internally).
- [internal] remove cookie from `Event` struct (unused).
- [internal] `Event` struct has the same definition across every OS.

- [internal] remove internal watch and removeWatch methods.

## **dev / 2014-06-12**

- [API] Renamed Watch() to Add() and RemoveWatch() to Remove().
- [API] Pluralized channel names: Events and Errors.
- [API] Renamed FileEvent struct to Event.
- [API] Op constants replace methods like IsCreate().

## **dev / 2014-06-12**

- Fix data race on kevent buffer (thanks @tilaks) #98

## **dev / 2014-05-23**

- [API] Remove current implementation of WatchFlags.
  - current implementation doesn't take advantage of OS for efficiency
  - provides little benefit over filtering events as they are received, but has extra bookkeeping and mutexes
  - no tests for the current implementation
  - not fully implemented on Windows #93

## **v0.9.3 / 2014-12-31**

- kqueue: cleanup internal watch before sending remove event #51

## **v0.9.2 / 2014-08-17**

- [Backport] Fix missing create events on macOS. #14 (thanks @zhssso)

## **v0.9.1 / 2014-06-12**

- Fix data race on kevent buffer (thanks @tilaks) #98

## **v0.9.0 / 2014-01-17**

- IsAttrib() for events that only concern a file's metadata #79 (thanks @abustany)
- [Fix] kqueue: fix deadlock #77 (thanks @cespare)
- [NOTICE] Development has moved to [code.google.com/p/go.exp/fsnotify](http://code.google.com/p/go.exp/fsnotify) in preparation for inclusion in the Go standard library.

## **v0.8.12 / 2013-11-13**

- [API] Remove FD\_SET and friends from Linux adapter

### **v0.8.11 / 2013-11-02**

- [Doc] Add Changelog #72 (thanks @nathany)
- [Doc] Spotlight and double modify events on macOS #62 (reported by @paulhammond)

### **v0.8.10 / 2013-10-19**

- [Fix] kqueue: remove file watches when parent directory is removed #71 (reported by @mdwhatcott)
- [Fix] kqueue: race between Close and readEvents #70 (reported by @bernerschaefer)
- [Doc] specify OS-specific limits in README (thanks @debrando)

### **v0.8.9 / 2013-09-08**

- [Doc] Contributing (thanks @nathany)
- [Doc] update package path in example code #63 (thanks @paulhammond)
- [Doc] GoCI badge in README (Linux only) #60
- [Doc] Cross-platform testing with Vagrant #59 (thanks @nathany)

### **v0.8.8 / 2013-06-17**

- [Fix] Windows: handle ERROR\_MORE\_DATA on Windows #49 (thanks @jbowtie)

### **v0.8.7 / 2013-06-03**

- [API] Make syscall flags internal
- [Fix] inotify: ignore event changes
- [Fix] race in symlink test #45 (reported by @srid)
- [Fix] tests on Windows
- lower case error messages

### **v0.8.6 / 2013-05-23**

- kqueue: Use EVT\_ONLY flag on Darwin
- [Doc] Update README with full example

### **v0.8.5 / 2013-05-09**

- [Fix] inotify: allow monitoring of “broken” symlinks (thanks @tsg)

### **v0.8.4 / 2013-04-07**

- [Fix] kqueue: watch all file events #40 (thanks @ChrisBuchholz)

### **v0.8.3 / 2013-03-13**

- [Fix] inotify/kqueue memory leak #36 (reported by @nbkolchin)
- [Fix] kqueue: use fsnFlags for watching a directory #33 (reported by @nbkolchin)

### **v0.8.2 / 2013-02-07**

- [Doc] add Authors
- [Fix] fix data races for map access #29 (thanks @fsouza)

### **v0.8.1 / 2013-01-09**

- [Fix] Windows path separators
- [Doc] BSD License

### **v0.8.0 / 2012-11-09**

- kqueue: directory watching improvements (thanks @vmirage)
- inotify: add IN\_MOVED\_TO #25 (requested by @cpisto)
- [Fix] kqueue: deleting watched directory #24 (reported by @jakerr)

### **v0.7.4 / 2012-10-09**

- [Fix] inotify: fixes from <https://codereview.appspot.com/5418045/> (ugorji)
- [Fix] kqueue: preserve watch flags when watching for delete #21 (reported by @robfig)
- [Fix] kqueue: watch the directory even if it isn't a new watch (thanks @robfig)
- [Fix] kqueue: modify after recreation of file

### **v0.7.3 / 2012-09-27**

- [Fix] kqueue: watch with an existing folder inside the watched folder (thanks @vmirage)
- [Fix] kqueue: no longer get duplicate CREATE events

### **v0.7.2 / 2012-09-01**

- kqueue: events for created directories

### **v0.7.1 / 2012-07-14**

- [Fix] for renaming files

### **v0.7.0 / 2012-07-02**

- [Feature] FSNotify flags
- [Fix] inotify: Added file name back to event path

### **v0.6.0 / 2012-06-06**

- kqueue: watch files after directory created (thanks @tmc)

### **v0.5.1 / 2012-05-22**

- [Fix] inotify: remove all watches before Close()

### **v0.5.0 / 2012-05-03**

- [API] kqueue: return errors during watch instead of sending over channel
- kqueue: match symlink behavior on Linux
- inotify: add DELETE\_SELF (requested by @taralx)
- [Fix] kqueue: handle EINTR (reported by @robfig)
- [Doc] Godoc example [#1] (thanks @davecheney)

### **v0.4.0 / 2012-03-30**

- Go 1 released: build with go tool
- [Feature] Windows support using winfsnotify
- Windows does not have attribute change notifications
- Roll attribute notifications into IsModify

### **v0.3.0 / 2012-02-19**

- kqueue: add files when watch directory

### **v0.2.0 / 2011-12-30**

- update to latest Go weekly code

### **v0.1.0 / 2011-10-19**

- kqueue: add watch on file creation to match inotify
- kqueue: create file event
- inotify: ignore IN\_IGNORED events
- event String()
- linux: common FileEvent functions
- initial commit