NAME

inotify_add_watch − add a watch to an initialized inotify instance

SYNOPSIS

#include <sys/inotify.h>

int inotify_add_watch(int *fd***, const char ****pathname***, uint32_t** *mask***);**

DESCRIPTION

inotify_add_watch() adds a new watch, or modifies an existing watch, for the file whose location is specified in *pathname*; the caller must have read permission for this file. The *fd* argument is a file descriptor referring to the inotify instance whose watch list is to be modified. The events to be monitored for *pathname* are specified in the *mask* bit-mask argument. See **inotify**(7) for a description of the bits that can be set in *mask*.

A successful call to **inotify_add_watch**() returns the unique watch descriptor associated with *pathname* for this inotify instance. If *pathname* was not previously being watched by this inotify instance, then the watch descriptor is newly allocated. If *pathname* was already being watched, then the descriptor for the existing watch is returned.

The watch descriptor is returned by later **read**(2)s from the inotify file descriptor. These reads fetch *inotify_event* structures (see **inotify**(7)) indicating file system events; the watch descriptor inside this structure identifies the object for which the event occurred.

RETURN VALUE

On success, **inotify_add_watch**() returns a non-negative watch descriptor. On error −1 is returned and *errno* is set appropriately.

ERRORS

EACCES
Read access to the given file is not permitted.

EBADF
The given file descriptor is not valid.

EFAULT
pathname points outside of the process's accessible address space.

EINVAL
The given event mask contains no valid events; or *fd* is not an inotify file descriptor.

ENOMEM
Insufficient kernel memory was available.

ENOSPC
The user limit on the total number of inotify watches was reached or the kernel failed to allocate a needed resource.

VERSIONS

Inotify was merged into the 2.6.13 Linux kernel.

CONFORMING TO

This system call is Linux-specific.

SEE ALSO

inotify_init(2), **inotify_rm_watch**(2), **inotify**(7)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.