https://elixir.bootlin.com/linux/latest/source/include/linux/path.h#L8

struct [**file\_operations**](https://elixir.bootlin.com/linux/latest/C/ident/file_operations) {

struct [**module**](https://elixir.bootlin.com/linux/latest/C/ident/module) \*[**owner**](https://elixir.bootlin.com/linux/latest/C/ident/owner);

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) (\***[llseek](https://elixir.bootlin.com/linux/latest/C/ident/llseek)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), int);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\*[**read**](https://elixir.bootlin.com/linux/latest/C/ident/read)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, char [**\_\_user**](https://elixir.bootlin.com/linux/latest/C/ident/__user) \*, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) \*);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\*[**write**](https://elixir.bootlin.com/linux/latest/C/ident/write)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, const char [**\_\_user**](https://elixir.bootlin.com/linux/latest/C/ident/__user) \*, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) \*);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[read\_iter](https://elixir.bootlin.com/linux/latest/C/ident/read_iter)**) (struct [**kiocb**](https://elixir.bootlin.com/linux/latest/C/ident/kiocb) \*, struct [**iov\_iter**](https://elixir.bootlin.com/linux/latest/C/ident/iov_iter) \*);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[write\_iter](https://elixir.bootlin.com/linux/latest/C/ident/write_iter)**) (struct [**kiocb**](https://elixir.bootlin.com/linux/latest/C/ident/kiocb) \*, struct [**iov\_iter**](https://elixir.bootlin.com/linux/latest/C/ident/iov_iter) \*);

int (\***[iopoll](https://elixir.bootlin.com/linux/latest/C/ident/iopoll)**)(struct [**kiocb**](https://elixir.bootlin.com/linux/latest/C/ident/kiocb) \***[kiocb](https://elixir.bootlin.com/linux/latest/C/ident/kiocb)**, struct [**io\_comp\_batch**](https://elixir.bootlin.com/linux/latest/C/ident/io_comp_batch) \*,

unsigned int flags);

int (\*[**iterate**](https://elixir.bootlin.com/linux/latest/C/ident/iterate)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, struct [**dir\_context**](https://elixir.bootlin.com/linux/latest/C/ident/dir_context) \*);

int (\***[iterate\_shared](https://elixir.bootlin.com/linux/latest/C/ident/iterate_shared)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, struct [**dir\_context**](https://elixir.bootlin.com/linux/latest/C/ident/dir_context) \*);

[**\_\_poll\_t**](https://elixir.bootlin.com/linux/latest/C/ident/__poll_t) (\*[**poll**](https://elixir.bootlin.com/linux/latest/C/ident/poll)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, struct [**poll\_table\_struct**](https://elixir.bootlin.com/linux/latest/C/ident/poll_table_struct) \*);

long (\***[unlocked\_ioctl](https://elixir.bootlin.com/linux/latest/C/ident/unlocked_ioctl)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, unsigned int, unsigned long);

long (\***[compat\_ioctl](https://elixir.bootlin.com/linux/latest/C/ident/compat_ioctl)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, unsigned int, unsigned long);

int (\***[mmap](https://elixir.bootlin.com/linux/latest/C/ident/mmap)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, struct [**vm\_area\_struct**](https://elixir.bootlin.com/linux/latest/C/ident/vm_area_struct) \*);

unsigned long [**mmap\_supported\_flags**](https://elixir.bootlin.com/linux/latest/C/ident/mmap_supported_flags);

int (\*[**open**](https://elixir.bootlin.com/linux/latest/C/ident/open)) (struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*);

int (\*[**flush**](https://elixir.bootlin.com/linux/latest/C/ident/flush)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**fl\_owner\_t**](https://elixir.bootlin.com/linux/latest/C/ident/fl_owner_t) id);

int (\*[**release**](https://elixir.bootlin.com/linux/latest/C/ident/release)) (struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*);

int (\***[fsync](https://elixir.bootlin.com/linux/latest/C/ident/fsync)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), int [**datasync**](https://elixir.bootlin.com/linux/latest/C/ident/datasync));

int (\***[fasync](https://elixir.bootlin.com/linux/latest/C/ident/fasync)**) (int, struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, int);

int (\*lock) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, int, struct [**file\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/file_lock) \*);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[sendpage](https://elixir.bootlin.com/linux/latest/C/ident/sendpage)**) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, struct [**page**](https://elixir.bootlin.com/linux/latest/C/ident/page) \*, int, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) \*, int);

unsigned long (\***[get\_unmapped\_area](https://elixir.bootlin.com/linux/latest/C/ident/get_unmapped_area)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, unsigned long, unsigned long, unsigned long, unsigned long);

int (\***[check\_flags](https://elixir.bootlin.com/linux/latest/C/ident/check_flags)**)(int);

int (\*[**flock**](https://elixir.bootlin.com/linux/latest/C/ident/flock)) (struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, int, struct [**file\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/file_lock) \*);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[splice\_write](https://elixir.bootlin.com/linux/latest/C/ident/splice_write)**)(struct [**pipe\_inode\_info**](https://elixir.bootlin.com/linux/latest/C/ident/pipe_inode_info) \*, struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) \*, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), unsigned int);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[splice\_read](https://elixir.bootlin.com/linux/latest/C/ident/splice_read)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) \*, struct [**pipe\_inode\_info**](https://elixir.bootlin.com/linux/latest/C/ident/pipe_inode_info) \*, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), unsigned int);

int (\***[setlease](https://elixir.bootlin.com/linux/latest/C/ident/setlease)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, long, struct [**file\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/file_lock) \*\*, void \*\*);

long (\***[fallocate](https://elixir.bootlin.com/linux/latest/C/ident/fallocate)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*[**file**](https://elixir.bootlin.com/linux/latest/C/ident/file), int mode, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) offset,

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) len);

void (\***[show\_fdinfo](https://elixir.bootlin.com/linux/latest/C/ident/show_fdinfo)**)(struct [**seq\_file**](https://elixir.bootlin.com/linux/latest/C/ident/seq_file) \*m, struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*f);

#ifndef [**CONFIG\_MMU**](https://elixir.bootlin.com/linux/latest/K/ident/CONFIG_MMU)

unsigned (\***[mmap\_capabilities](https://elixir.bootlin.com/linux/latest/C/ident/mmap_capabilities)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*);

#endif

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[copy\_file\_range](https://elixir.bootlin.com/linux/latest/C/ident/copy_file_range)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*,

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t), unsigned int);

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) (\***[remap\_file\_range](https://elixir.bootlin.com/linux/latest/C/ident/remap_file_range)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \***[file\_in](https://elixir.bootlin.com/linux/latest/C/ident/file_in)**, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) [**pos\_in**](https://elixir.bootlin.com/linux/latest/C/ident/pos_in),

struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \***[file\_out](https://elixir.bootlin.com/linux/latest/C/ident/file_out)**, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) [**pos\_out**](https://elixir.bootlin.com/linux/latest/C/ident/pos_out),

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) len, unsigned int remap\_flags);

int (\***[fadvise](https://elixir.bootlin.com/linux/latest/C/ident/fadvise)**)(struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), [**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t), int);

} [**\_\_randomize\_layout**](https://elixir.bootlin.com/linux/latest/C/ident/__randomize_layout);

struct [**inode\_operations**](https://elixir.bootlin.com/linux/latest/C/ident/inode_operations) {

struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \* (\*[**lookup**](https://elixir.bootlin.com/linux/latest/C/ident/lookup)) (struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, unsigned int);

const char \* (\***[get\_link](https://elixir.bootlin.com/linux/latest/C/ident/get_link)**) (struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**delayed\_call**](https://elixir.bootlin.com/linux/latest/C/ident/delayed_call) \*);

int (\*[**permission**](https://elixir.bootlin.com/linux/latest/C/ident/permission)) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, int);

struct [**posix\_acl**](https://elixir.bootlin.com/linux/latest/C/ident/posix_acl) \* (\***[get\_acl](https://elixir.bootlin.com/linux/latest/C/ident/get_acl)**)(struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, int, [**bool**](https://elixir.bootlin.com/linux/latest/C/ident/bool));

int (\***[readlink](https://elixir.bootlin.com/linux/latest/C/ident/readlink)**) (struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, char [**\_\_user**](https://elixir.bootlin.com/linux/latest/C/ident/__user) \*,int);

int (\*[**create**](https://elixir.bootlin.com/linux/latest/C/ident/create)) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

[**umode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/umode_t), [**bool**](https://elixir.bootlin.com/linux/latest/C/ident/bool));

int (\*[**link**](https://elixir.bootlin.com/linux/latest/C/ident/link)) (struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*);

int (\*[**unlink**](https://elixir.bootlin.com/linux/latest/C/ident/unlink)) (struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*);

int (\***[symlink](https://elixir.bootlin.com/linux/latest/C/ident/symlink)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

const char \*);

int (\***[mkdir](https://elixir.bootlin.com/linux/latest/C/ident/mkdir)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

[**umode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/umode_t));

int (\***[rmdir](https://elixir.bootlin.com/linux/latest/C/ident/rmdir)**) (struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*);

int (\***[mknod](https://elixir.bootlin.com/linux/latest/C/ident/mknod)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

[**umode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/umode_t),[**dev\_t**](https://elixir.bootlin.com/linux/latest/C/ident/dev_t));

int (\*[**rename**](https://elixir.bootlin.com/linux/latest/C/ident/rename)) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, unsigned int);

int (\***[setattr](https://elixir.bootlin.com/linux/latest/C/ident/setattr)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

struct [**iattr**](https://elixir.bootlin.com/linux/latest/C/ident/iattr) \*);

int (\***[getattr](https://elixir.bootlin.com/linux/latest/C/ident/getattr)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, const struct [**path**](https://elixir.bootlin.com/linux/latest/C/ident/path) \*,

struct [**kstat**](https://elixir.bootlin.com/linux/latest/C/ident/kstat) \*, [**u32**](https://elixir.bootlin.com/linux/latest/C/ident/u32), unsigned int);

[**ssize\_t**](https://elixir.bootlin.com/linux/latest/C/ident/ssize_t) (\***[listxattr](https://elixir.bootlin.com/linux/latest/C/ident/listxattr)**) (struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, char \*, [**size\_t**](https://elixir.bootlin.com/linux/latest/C/ident/size_t));

int (\***[fiemap](https://elixir.bootlin.com/linux/latest/C/ident/fiemap)**)(struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**fiemap\_extent\_info**](https://elixir.bootlin.com/linux/latest/C/ident/fiemap_extent_info) \*, [**u64**](https://elixir.bootlin.com/linux/latest/C/ident/u64) start,

[**u64**](https://elixir.bootlin.com/linux/latest/C/ident/u64) len);

int (\***[update\_time](https://elixir.bootlin.com/linux/latest/C/ident/update_time)**)(struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**timespec64**](https://elixir.bootlin.com/linux/latest/C/ident/timespec64) \*, int);

int (\***[atomic\_open](https://elixir.bootlin.com/linux/latest/C/ident/atomic_open)**)(struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*, struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*,

struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) \*, unsigned [**open\_flag**](https://elixir.bootlin.com/linux/latest/C/ident/open_flag),

[**umode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/umode_t) [**create\_mode**](https://elixir.bootlin.com/linux/latest/C/ident/create_mode));

int (\***[tmpfile](https://elixir.bootlin.com/linux/latest/C/ident/tmpfile)**) (struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,

struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \*, [**umode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/umode_t));

int (\***[set\_acl](https://elixir.bootlin.com/linux/latest/C/ident/set_acl)**)(struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \*, struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*,

struct [**posix\_acl**](https://elixir.bootlin.com/linux/latest/C/ident/posix_acl) \*, int);

int (\***[fileattr\_set](https://elixir.bootlin.com/linux/latest/C/ident/fileattr_set)**)(struct [**user\_namespace**](https://elixir.bootlin.com/linux/latest/C/ident/user_namespace) \***[mnt\_userns](https://elixir.bootlin.com/linux/latest/C/ident/mnt_userns)**,

struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \***[dentry](https://elixir.bootlin.com/linux/latest/C/ident/dentry)**, struct [**fileattr**](https://elixir.bootlin.com/linux/latest/C/ident/fileattr) \*[**fa**](https://elixir.bootlin.com/linux/latest/C/ident/fa));

int (\***[fileattr\_get](https://elixir.bootlin.com/linux/latest/C/ident/fileattr_get)**)(struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \***[dentry](https://elixir.bootlin.com/linux/latest/C/ident/dentry)**, struct [**fileattr**](https://elixir.bootlin.com/linux/latest/C/ident/fileattr) \*[**fa**](https://elixir.bootlin.com/linux/latest/C/ident/fa));

} [**\_\_\_\_cacheline\_aligned**](https://elixir.bootlin.com/linux/latest/C/ident/____cacheline_aligned);

struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry);

struct [**vfsmount**](https://elixir.bootlin.com/linux/latest/C/ident/vfsmount);

struct [**path**](https://elixir.bootlin.com/linux/latest/C/ident/path) {

struct [**vfsmount**](https://elixir.bootlin.com/linux/latest/C/ident/vfsmount) \***[mnt](https://elixir.bootlin.com/linux/latest/C/ident/mnt)**;

struct [**dentry**](https://elixir.bootlin.com/linux/latest/C/ident/dentry) \***[dentry](https://elixir.bootlin.com/linux/latest/C/ident/dentry)**;

} [**\_\_randomize\_layout**](https://elixir.bootlin.com/linux/latest/C/ident/__randomize_layout);

struct [**file**](https://elixir.bootlin.com/linux/latest/C/ident/file) {

union {

struct [**llist\_node**](https://elixir.bootlin.com/linux/latest/C/ident/llist_node) [**fu\_llist**](https://elixir.bootlin.com/linux/latest/C/ident/fu_llist);

struct [**rcu\_head**](https://elixir.bootlin.com/linux/latest/C/ident/rcu_head) [**fu\_rcuhead**](https://elixir.bootlin.com/linux/latest/C/ident/fu_rcuhead);

} [**f\_u**](https://elixir.bootlin.com/linux/latest/C/ident/f_u);

struct [**path**](https://elixir.bootlin.com/linux/latest/C/ident/path) [**f\_path**](https://elixir.bootlin.com/linux/latest/C/ident/f_path);

struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \***[f\_inode](https://elixir.bootlin.com/linux/latest/C/ident/f_inode)**; */\* cached value \*/*

const struct [**file\_operations**](https://elixir.bootlin.com/linux/latest/C/ident/file_operations) \***[f\_op](https://elixir.bootlin.com/linux/latest/C/ident/f_op)**;

*/\**

*\* Protects f\_ep, f\_flags.*

*\* Must not be taken from IRQ context.*

*\*/*

[**spinlock\_t**](https://elixir.bootlin.com/linux/latest/C/ident/spinlock_t) [**f\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/f_lock);

enum [**rw\_hint**](https://elixir.bootlin.com/linux/latest/C/ident/rw_hint) [**f\_write\_hint**](https://elixir.bootlin.com/linux/latest/C/ident/f_write_hint);

[**atomic\_long\_t**](https://elixir.bootlin.com/linux/latest/C/ident/atomic_long_t) [**f\_count**](https://elixir.bootlin.com/linux/latest/C/ident/f_count);

unsigned int [**f\_flags**](https://elixir.bootlin.com/linux/latest/C/ident/f_flags);

[**fmode\_t**](https://elixir.bootlin.com/linux/latest/C/ident/fmode_t) [**f\_mode**](https://elixir.bootlin.com/linux/latest/C/ident/f_mode);

struct [**mutex**](https://elixir.bootlin.com/linux/latest/C/ident/mutex) [**f\_pos\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/f_pos_lock);

[**loff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/loff_t) [**f\_pos**](https://elixir.bootlin.com/linux/latest/C/ident/f_pos);

struct [**fown\_struct**](https://elixir.bootlin.com/linux/latest/C/ident/fown_struct) [**f\_owner**](https://elixir.bootlin.com/linux/latest/C/ident/f_owner);

const struct [**cred**](https://elixir.bootlin.com/linux/latest/C/ident/cred) \***[f\_cred](https://elixir.bootlin.com/linux/latest/C/ident/f_cred)**;

struct [**file\_ra\_state**](https://elixir.bootlin.com/linux/latest/C/ident/file_ra_state) [**f\_ra**](https://elixir.bootlin.com/linux/latest/C/ident/f_ra);

[**u64**](https://elixir.bootlin.com/linux/latest/C/ident/u64) [**f\_version**](https://elixir.bootlin.com/linux/latest/C/ident/f_version);

#ifdef [**CONFIG\_SECURITY**](https://elixir.bootlin.com/linux/latest/K/ident/CONFIG_SECURITY)

void \***[f\_security](https://elixir.bootlin.com/linux/latest/C/ident/f_security)**;

#endif

*/\* needed for tty driver, and maybe others \*/*

void \***[private\_data](https://elixir.bootlin.com/linux/latest/C/ident/private_data)**;

#ifdef [**CONFIG\_EPOLL**](https://elixir.bootlin.com/linux/latest/K/ident/CONFIG_EPOLL)

*/\* Used by fs/eventpoll.c to link all the hooks to this file \*/*

struct [**hlist\_head**](https://elixir.bootlin.com/linux/latest/C/ident/hlist_head) \***[f\_ep](https://elixir.bootlin.com/linux/latest/C/ident/f_ep)**;

#endif */\* #ifdef CONFIG\_EPOLL \*/*

struct [**address\_space**](https://elixir.bootlin.com/linux/latest/C/ident/address_space) \***[f\_mapping](https://elixir.bootlin.com/linux/latest/C/ident/f_mapping)**;

[**errseq\_t**](https://elixir.bootlin.com/linux/latest/C/ident/errseq_t) [**f\_wb\_err**](https://elixir.bootlin.com/linux/latest/C/ident/f_wb_err);

[**errseq\_t**](https://elixir.bootlin.com/linux/latest/C/ident/errseq_t) [**f\_sb\_err**](https://elixir.bootlin.com/linux/latest/C/ident/f_sb_err); */\* for syncfs \*/*

} [**\_\_randomize\_layout**](https://elixir.bootlin.com/linux/latest/C/ident/__randomize_layout)

*/\*\**

*\* struct address\_space - Contents of a cacheable, mappable object.*

*\* @host: Owner, either the inode or the block\_device.*

*\* @i\_pages: Cached pages.*

*\* @invalidate\_lock: Guards coherency between page cache contents and*

*\* file offset->disk block mappings in the filesystem during invalidates.*

*\* It is also used to block modification of page cache contents through*

*\* memory mappings.*

*\* @gfp\_mask: Memory allocation flags to use for allocating pages.*

*\* @i\_mmap\_writable: Number of VM\_SHARED mappings.*

*\* @nr\_thps: Number of THPs in the pagecache (non-shmem only).*

*\* @i\_mmap: Tree of private and shared mappings.*

*\* @i\_mmap\_rwsem: Protects @i\_mmap and @i\_mmap\_writable.*

*\* @nrpages: Number of page entries, protected by the i\_pages lock.*

*\* @writeback\_index: Writeback starts here.*

*\* @a\_ops: Methods.*

*\* @flags: Error bits and flags (AS\_\*).*

*\* @wb\_err: The most recent error which has occurred.*

*\* @private\_lock: For use by the owner of the address\_space.*

*\* @private\_list: For use by the owner of the address\_space.*

*\* @private\_data: For use by the owner of the address\_space.*

*\*/*

struct [**address\_space**](https://elixir.bootlin.com/linux/latest/C/ident/address_space) {

struct [**inode**](https://elixir.bootlin.com/linux/latest/C/ident/inode) \*host;

struct [**xarray**](https://elixir.bootlin.com/linux/latest/C/ident/xarray) [**i\_pages**](https://elixir.bootlin.com/linux/latest/C/ident/i_pages);

struct [**rw\_semaphore**](https://elixir.bootlin.com/linux/latest/C/ident/rw_semaphore) [**invalidate\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/invalidate_lock);

[**gfp\_t**](https://elixir.bootlin.com/linux/latest/C/ident/gfp_t) [**gfp\_mask**](https://elixir.bootlin.com/linux/latest/C/ident/gfp_mask);

[**atomic\_t**](https://elixir.bootlin.com/linux/latest/C/ident/atomic_t) [**i\_mmap\_writable**](https://elixir.bootlin.com/linux/latest/C/ident/i_mmap_writable);

#ifdef [**CONFIG\_READ\_ONLY\_THP\_FOR\_FS**](https://elixir.bootlin.com/linux/latest/K/ident/CONFIG_READ_ONLY_THP_FOR_FS)

*/\* number of thp, only for non-shmem files \*/*

[**atomic\_t**](https://elixir.bootlin.com/linux/latest/C/ident/atomic_t) [**nr\_thps**](https://elixir.bootlin.com/linux/latest/C/ident/nr_thps);

#endif

struct [**rb\_root\_cached**](https://elixir.bootlin.com/linux/latest/C/ident/rb_root_cached) [**i\_mmap**](https://elixir.bootlin.com/linux/latest/C/ident/i_mmap);

struct [**rw\_semaphore**](https://elixir.bootlin.com/linux/latest/C/ident/rw_semaphore) [**i\_mmap\_rwsem**](https://elixir.bootlin.com/linux/latest/C/ident/i_mmap_rwsem);

unsigned long [**nrpages**](https://elixir.bootlin.com/linux/latest/C/ident/nrpages);

[**pgoff\_t**](https://elixir.bootlin.com/linux/latest/C/ident/pgoff_t) [**writeback\_index**](https://elixir.bootlin.com/linux/latest/C/ident/writeback_index);

const struct [**address\_space\_operations**](https://elixir.bootlin.com/linux/latest/C/ident/address_space_operations) \***[a\_ops](https://elixir.bootlin.com/linux/latest/C/ident/a_ops)**;

unsigned long flags;

[**errseq\_t**](https://elixir.bootlin.com/linux/latest/C/ident/errseq_t) [**wb\_err**](https://elixir.bootlin.com/linux/latest/C/ident/wb_err);

[**spinlock\_t**](https://elixir.bootlin.com/linux/latest/C/ident/spinlock_t) [**private\_lock**](https://elixir.bootlin.com/linux/latest/C/ident/private_lock);

struct [**list\_head**](https://elixir.bootlin.com/linux/latest/C/ident/list_head) [**private\_list**](https://elixir.bootlin.com/linux/latest/C/ident/private_list);

void \***[private\_data](https://elixir.bootlin.com/linux/latest/C/ident/private_data)**;

} [**\_\_attribute\_\_**](https://elixir.bootlin.com/linux/latest/C/ident/__attribute__)(([**aligned**](https://elixir.bootlin.com/linux/latest/C/ident/aligned)(sizeof(long)))) [**\_\_randomize\_layout**](https://elixir.bootlin.com/linux/latest/C/ident/__randomize_layout);