



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'fsetxattr.2' command

\$ man fsetxattr.2

SETXATTR(2) Linux Programmer's Manual SETXATTR(2)

NAME

setxattr, lsetxattr, fsetxattr - set an extended attribute value

SYNOPSIS

```
#include <sys/types.h>

#include <sys/xattr.h>

int setxattr(const char *path, const char *name,
             const void *value, size_t size, int flags);

int lsetxattr(const char *path, const char *name,
             const void *value, size_t size, int flags);

int fsetxattr(int fd, const char *name,
             const void *value, size_t size, int flags);
```

DESCRIPTION

Extended attributes are name:value pairs associated with inodes (files, directories, symbolic links, etc.). They are extensions to the normal attributes which are associated with all inodes in the system (i.e., the stat(2) data). A complete overview of extended attributes concepts can be found in xattr(7).

setxattr() sets the value of the extended attribute identified by name and associated with the given path in the filesystem. The size argument specifies the size (in bytes) of value; a zero-length value is permitted.

lsetxattr() is identical to setxattr(), except in the case of a sym?

bolic link, where the extended attribute is set on the link itself, not the file that it refers to.

fsetxattr() is identical to setxattr(), only the extended attribute is set on the open file referred to by fd (as returned by open(2)) in place of path.

An extended attribute name is a null-terminated string. The name includes a namespace prefix; there may be several, disjoint namespaces associated with an individual inode. The value of an extended attribute is a chunk of arbitrary textual or binary data of specified length.

By default (i.e., flags is zero), the extended attribute will be created if it does not exist, or the value will be replaced if the attribute already exists. To modify these semantics, one of the following values can be specified in flags:

XATTR_CREATE

Perform a pure create, which fails if the named attribute exists already.

XATTR_REPLACE

Perform a pure replace operation, which fails if the named attribute does not already exist.

RETURN VALUE

On success, zero is returned. On failure, -1 is returned and errno is set appropriately.

ERRORS

EDQUOT Disk quota limits meant that there is insufficient space remaining to store the extended attribute.

EEXIST XATTR_CREATE was specified, and the attribute exists already.

ENODATA

XATTR_REPLACE was specified, and the attribute does not exist.

ENOSPC There is insufficient space remaining to store the extended attribute.

ENOTSUP

The namespace prefix of name is not valid.

ENOTSUP

Extended attributes are not supported by the filesystem, or are disabled,

EPERM The file is marked immutable or append-only. (See `ioctl_iflags(2)`.)

In addition, the errors documented in `stat(2)` can also occur.

ERANGE The size of name or value exceeds a filesystem-specific limit.

VERSIONS

These system calls have been available on Linux since kernel 2.4; glibc support is provided since version 2.3.

CONFORMING TO

These system calls are Linux-specific.

SEE ALSO

`getfattr(1)`, `setfattr(1)`, `getxattr(2)`, `listxattr(2)`, `open(2)`, `removexattr(2)`, `stat(2)`, `symlink(7)`, `xattr(7)`

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

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