



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'fpathconf.3' command***

### ***\$ man fpathconf.3***

FPATHCONF(3)      Linux Programmer's Manual      FPATHCONF(3)

#### NAME

fpathconf, pathconf - get configuration values for files

#### SYNOPSIS

```
#include <unistd.h>

long fpathconf(int fd, int name);

long pathconf(const char *path, int name);
```

#### DESCRIPTION

fpathconf() gets a value for the configuration option name for the open file descriptor fd.

pathconf() gets a value for configuration option name for the filename path.

The corresponding macros defined in <unistd.h> are minimum values; if an application wants to take advantage of values which may change, a call to fpathconf() or pathconf() can be made, which may yield more liberal results.

Setting name equal to one of the following constants returns the fol-

lowing configuration options:

\_PC\_LINK\_MAX

The maximum number of links to the file. If fd or path refer to a directory, then the value applies to the whole directory. The corresponding macro is \_POSIX\_LINK\_MAX.

\_PC\_MAX\_CANON

The maximum length of a formatted input line, where fd or path must refer to a terminal. The corresponding macro is `_POSIX_MAX_CANON`.

#### `_PC_MAX_INPUT`

The maximum length of an input line, where fd or path must refer to a terminal. The corresponding macro is `_POSIX_MAX_INPUT`.

#### `_PC_NAME_MAX`

The maximum length of a filename in the directory path or fd that the process is allowed to create. The corresponding macro is `_POSIX_NAME_MAX`.

#### `_PC_PATH_MAX`

The maximum length of a relative pathname when path or fd is the current working directory. The corresponding macro is `_POSIX_PATH_MAX`.

#### `_PC_PIPE_BUF`

The maximum number of bytes that can be written atomically to a pipe or FIFO. For `fpathconf()`, fd should refer to a pipe or FIFO. For `fpathconf()`, path should refer to a FIFO or a directory; in the latter case, the returned value corresponds to FIFOs created in that directory. The corresponding macro is `_POSIX_PIPE_BUF`.

#### `_PC_CHOWN_RESTRICTED`

This returns a positive value if the use of `chown(2)` and `fchown(2)` for changing a file's user ID is restricted to a process with appropriate privileges, and changing a file's group ID to a value other than the process's effective group ID or one of its supplementary group IDs is restricted to a process with appropriate privileges. According to POSIX.1, this variable shall always be defined with a value other than -1. The corresponding macro is `_POSIX_CHOWN_RESTRICTED`.

If fd or path refers to a directory, then the return value applies to all files in that directory.

#### `_PC_NO_TRUNC`

This returns nonzero if accessing filenames longer than `_POSIX_NAME_MAX` generates an error. The corresponding macro is `_POSIX_NO_TRUNC`.

#### `_PC_VDISABLE`

This returns nonzero if special character processing can be disabled, where `fd` or `path` must refer to a terminal.

#### RETURN VALUE

The return value of these functions is one of the following:

- \* On error, -1 is returned and `errno` is set to indicate the cause of the error (for example, `EINVAL`, indicating that name is invalid).
- \* If name corresponds to a maximum or minimum limit, and that limit is indeterminate, -1 is returned and `errno` is not changed. (To distinguish an indeterminate limit from an error, set `errno` to zero before the call, and then check whether `errno` is nonzero when -1 is returned.)
- \* If name corresponds to an option, a positive value is returned if the option is supported, and -1 is returned if the option is not supported.
- \* Otherwise, the current value of the option or limit is returned.

This value will not be more restrictive than the corresponding value that was described to the application in `<unistd.h>` or `<limits.h>` when the application was compiled.

#### ERRORS

`EACCES` (`pathconf()`) Search permission is denied for one of the directories in the path prefix of `path`.

`EBADF` (`fpathconf()`) `fd` is not a valid file descriptor.

`EINVAL` name is invalid.

`EINVAL` The implementation does not support an association of name with the specified file.

`ELOOP` (`pathconf()`) Too many symbolic links were encountered while resolving path.

`ENAMETOOLONG`

(`pathconf()`) path is too long.

ENOENT (pathconf()) A component of path does not exist, or path is an empty string.

## ENOTDIR

(pathconf()) A component used as a directory in path is not in fact a directory.

## ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

??

?Interface ? Attribute ? Value ?

??

?pathconf(), pathconf() ? Thread safety ? MT-Safe ?

??

## CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

## NOTES

Files with name lengths longer than the value returned for name equal to \_PC\_NAME\_MAX may exist in the given directory.

Some returned values may be huge; they are not suitable for allocating memory.

## SEE ALSO

getconf(1), open(2), statfs(2), confstr(3), sysconf(3)

## 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/>.