



Linux Ubuntu 26.04 Manual Pages on command 'pathconf.3'

\$ man pathconf.3

fpathconf(3) Library Functions Manual fpathconf(3)

NAME

fpathconf, pathconf - get configuration values for files

LIBRARY

Standard C library (libc, -lc)

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 following 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 termi?

nal. 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 error (for example, `EINVAL`, in?

dicating 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 pre?
fix 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)`.

[illegible]

?	Interface	?	Attribute	?	Value	?
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[illegible]

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

[illegible]

STANDARDS

POSIX.1-2008.

HISTORY

POSIX.1-2001.

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)`

Linux man-pages 6.17

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`fpathconf(3)`