Rocky Enterprise Linux 9.2 Manual Pages on command 'fpathconf.3'

C:\>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 de?

scriptor 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 applica?

tion 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 configu?

ration options:

_PC_LINK_MAX

The maximum number of links to the file. If fd or path refer to a direc?

tory, 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 termi?
nal. 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 of 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 privi?
leges, 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 gen?
erates 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 indetermi? nate, -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 speci? fied 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 direc? tory.

ATTRIBUTES

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

Interface	Attribute	Value
fpathconf(), 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

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