file tree traversal

Prolog

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

Synopsis

#include <ftw.h>

Description

The <ftw.h> header shall define the FTW structure, which shall include at least the following members:

```
int base int level
```

The $\langle ftw.h \rangle$ header shall define the following symbolic constants for use as values of the third argument to the application-supplied function that is passed as the second argument to ftw():

```
FTW_F
```

Non-directory file.

FTW D

Directory.

FTW DNR

Directory without read permission.

FTW DP

Directory with subdirectories visited.

FTW_NS

Unknown type; stat() failed.

FTW SL

Symbolic link.

FTW_SLN

Symbolic link that names a nonexistent file.

FTW_PHYS

Physical walk, does not follow symbolic links. Otherwise, *nftw*() follows links but does not walk down any path that crosses itself.

FTW MOUNT

The walk does not cross a mount point.

FTW DEPTH

All subdirectories are visited before the directory itself.

FTW CHDIR

The walk changes to each directory before reading it.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
int ftw(const char *, int (*)(const char *, const struct stat *,
   int), int);
int nftw(const char *, int (*)(const char *, const struct stat *,
   int, struct FTW *), int, int);
```

The <ftw.h> header shall define the **stat** structure and the symbolic names for st_mode and the file type test macros as described in <sys/stat.h>.

Inclusion of the <ftw.h> header may also make visible all symbols from <sys/stat.h>.

The following sections are informative.

Application Usage

None.

Rationale

None.

Future Directions

None.

See Also

<sys stat.h>

The System Interfaces volume of POSIX.1-2017, ftw(), nftw()

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Referenced By

ftw(3p), nftw(3p).

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