

## Op:ftw.h

ftw.h - file tree traversal

```
#include <ftw.h>
```

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### DESCRIPTION

The `<ftw.h>` header shall define the **FTW** structure that includes at least the following members:

```
int base
int level
```

The `<ftw.h>` header shall define macros for use as values of the third argument to the application-supplied function that is passed as the second argument to `ftw()` and `nftw()`:

FTW\_F 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.

The `<ftw.h>` header shall define macros for use as values of the fourth argument to `nftw()`:

`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.

#### **RELATED**

`<sys/stat.h>`, the System Interfaces volume of IEEE Std 1003.1-2001, `ftw()`, `nftw()`

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