



*Full credit is given to the above companies including the OS that this PDF file was generated!*

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

***\$ man fnmatch.3p***

FNMATCH(3P)            POSIX Programmer's Manual            FNMATCH(3P)

### 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.

### NAME

fnmatch ? match a filename string or a pathname

### SYNOPSIS

```
#include <fnmatch.h>
```

```
int fnmatch(const char *pattern, const char *string, int flags);
```

### DESCRIPTION

The `fnmatch()` function shall match patterns as described in the Shell and Utilities volume of POSIX.1?2017, Section 2.13.1, Patterns Matching a Single Character and Section 2.13.2, Patterns Matching Multiple Characters. It checks the string specified by the `string` argument to see if it matches the pattern specified by the `pattern` argument.

The `flags` argument shall modify the interpretation of `pattern` and `string`. It is the bitwise-inclusive OR of zero or more of the flags defined in `<fnmatch.h>`. If the `FNM_PATHNAME` flag is set in `flags`, then a `<slash>` character (`'/'`) in `string` shall be explicitly matched by a `<slash>` in `pattern`; it shall not be matched by either the `<asterisk>` or `<question-mark>` special characters, nor by a bracket expression. If the

FNM\_PATHNAME flag is not set, the <slash> character shall be treated as an ordinary character.

If FNM\_NOESCAPE is not set in flags, a <backslash> character in pattern followed by any other character shall match that second character in string. In particular, "\\" shall match a <backslash> in string. If pattern ends with an unescaped <backslash>, fnmatch() shall return a non-zero value (indicating either no match or an error). If FNM\_NOESCAPE is set, a <backslash> character shall be treated as an ordinary character.

If FNM\_PERIOD is set in flags, then a leading <period> ('.') in string shall match a <period> in pattern; as described by rule 2 in the Shell and Utilities volume of POSIX.1-2017, Section 2.13.3, Patterns Used for Filename Expansion where the location of "leading" is indicated by the value of FNM\_PATHNAME:

- \* If FNM\_PATHNAME is set, a <period> is "leading" if it is the first character in string or if it immediately follows a <slash>.
- \* If FNM\_PATHNAME is not set, a <period> is "leading" only if it is the first character of string.

If FNM\_PERIOD is not set, then no special restrictions are placed on matching a period.

## RETURN VALUE

If string matches the pattern specified by pattern, then fnmatch() shall return 0. If there is no match, fnmatch() shall return FNM\_NO\_MATCH, which is defined in <fnmatch.h>. If an error occurs, fnmatch() shall return another non-zero value.

## ERRORS

No errors are defined.

The following sections are informative.

## EXAMPLES

None.

## APPLICATION USAGE

The fnmatch() function has two major uses. It could be used by an application or utility that needs to read a directory and apply a pattern

against each entry. The find utility is an example of this. It can also be used by the pax utility to process its pattern operands, or by applications that need to match strings in a similar manner.

The name `fnmatch()` is intended to imply filename match, rather than pathname match. The default action of this function is to match filename strings, rather than pathnames, since it gives no special significance to the `<slash>` character. With the `FNM_PATHNAME` flag, `fnmatch()` does match pathnames, but without tilde expansion, parameter expansion, or special treatment for a `<period>` at the beginning of a filename.

## RATIONALE

This function replaced the `REG_FILENAME` flag of `regcomp()` in early proposals of this volume of POSIX.1-2017. It provides virtually the same functionality as the `regcomp()` and `regexexec()` functions using the `REG_FILENAME` and `REG_FSLASH` flags (the `REG_FSLASH` flag was proposed for `regcomp()`, and would have had the opposite effect from `FNM_PATHNAME`), but with a simpler function and less system overhead.

## FUTURE DIRECTIONS

None.

## SEE ALSO

`glob()`, Section 2.6, Word Expansions

The Base Definitions volume of POSIX.1-2017, `<fnmatch.h>`

## COPYRIGHT

Portions of this text are reprinted and reproduced in electronic form from IEEE Std 1003.1-2017, Standard for Information Technology -- Portable Operating System Interface (POSIX), The Open Group Base Specifications Issue 7, 2018 Edition, Copyright (C) 2018 by the Institute of Electrical and Electronics Engineers, Inc and The Open Group. In the event of any discrepancy between this version and the original IEEE and The Open Group Standard, the original IEEE and The Open Group Standard is the referee document. The original Standard can be obtained online at <http://www.opengroup.org/unix/online.html>.

Any typographical or formatting errors that appear in this page are most likely to have been introduced during the conversion of the source

files to man page format. To report such errors, see [https://www.kernel.org/doc/man-pages/reporting\\_bugs.html](https://www.kernel.org/doc/man-pages/reporting_bugs.html).

IEEE/The Open Group

2017

FNMATCH(3P)