

NAME

find – find files

SYNOPSIS

find pathname-list expression

DESCRIPTION

Find recursively descends the directory hierarchy for each pathname in the *pathname-list* (i.e., one or more pathnames) seeking files that match a boolean *expression* written in the primaries given below. In the descriptions, the argument *n* is used as a decimal integer where *+n* means more than *n*, *-n* means less than *n* and *n* means exactly *n*.

- name** filename True if the *filename* argument matches the current file name. Normal Shell argument syntax may be used if escaped (watch out for '[', '?' and '*').
- perm** onum True if the file permission flags exactly match the octal number *onum* (see *chmod*(I)). If *onum* is prefixed by a minus sign, more flag bits (017777, see *stat*(II)) become significant and the flags are compared: *(flags&onum)==onum*.
- type** c True if the type of the file is *c*, where *c* is **b**, **c**, **d** or **f** for block special file, character special file, directory or plain file.
- links** n True if the file has *n* links.
- user** uname True if the file belongs to the user *uname*.
- group** gname As it is for **-user** so shall it be for **-group** (someday).
- size** n True if the file is *n* blocks long (512 bytes per block).
- atime** n True if the file has been accessed in *n* days.
- mtime** n True if the file has been modified in *n* days.
- exec** command True if the executed command returns a zero value as exit status. The end of the command must be punctuated by an escaped semicolon. A command argument '{ }' is replaced by the current pathname.
- ok** command Like **-exec** except that the generated command line is printed with a question mark first, and is executed only if the user responds **y**.
- print** Always true; causes the current pathname to be printed.

The primaries may be combined with these operators (ordered by precedence):

- !** Prefix *not*.
- a** Infix *and*, second operand evaluated only if first is true.
- o** Infix *or*, second operand evaluated only if first is false.
- (expression)** Parentheses for grouping. (Must be escaped.)

To remove all files named 'a.out' or '*.o' that have not been accessed for a week:

```
find / "(" -name a.out -o -name "*.o" ")" -a -atime +7 -a -exec rm { } ";"
```

FILES

/etc/passwd

SEE ALSO

sh(I), if(I), fs(V)

BUGS

Test (see *if(I)*) can be useful with *find*. However, since *test* is implemented within the Shell, you must use something like:

```
-exec sh -c "test args" ";"
```