

NAME

stat – get file status

SYNOPSIS

(stat = 18.)

sys stat; name; buf

stat(name, buf)

char *name;

struct inode *buf;

DESCRIPTION

Name points to a null-terminated string naming a file; *buf* is the address of a 36(10) byte buffer into which information is placed concerning the file. It is unnecessary to have any permissions at all with respect to the file, but all directories leading to the file must be readable. After *stat*, *buf* has the following structure (starting offset given in bytes):

```
struct {
  char      minor;          /* +0: minor device of i-node */
  char      major;         /* +1: major device */
  int       inumber        /* +2 */
  int       flags;         /* +4: see below */
  char      nlinks;        /* +6: number of links to file */
  char      uid;           /* +7: user ID of owner */
  char      gid;           /* +8: group ID of owner */
  char      size0;         /* +9: high byte of 24-bit size */
  int       size1;         /* +10: low word of 24-bit size */
  int       addr[8];       /* +12: block numbers or device number */
  int       actime[2];     /* +28: time of last access */
  int       modtime[2];   /* +32: time of last modification */
};
```

The flags are as follows:

```
100000  i-node is allocated
060000  2-bit file type:
         000000  plain file
         040000  directory
         020000  character-type special file
         060000  block-type special file.
010000  large file
004000  set user-ID on execution
002000  set group-ID on execution
000400  read (owner)
000200  write (owner)
000100  execute (owner)
000070  read, write, execute (group)
000007  read, write, execute (others)
```

SEE ALSO

stat(I), fstat(II), fs(V)

DIAGNOSTICS

Error bit (c-bit) is set if the file cannot be found. From C, a -1 return indicates an error.