

## STAT(II)

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### 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 inode {
    char    minor;          /* +0: minor device of i-node */
    char    major;         /* +1: major device */
    int     inumber;       /* +2 i-node number */
    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: extents 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
070000	3-bit file type:
000000	plain file
040000	directory
020000	character-type special file
060000	block-type special file.
070000	record-type special file
010000	large file
004000	set user-ID on execution
002000	set group-ID on execution
001000	save text image after execution
000400	read (owner)
000200	write (owner)
000100	execute (owner)
000070	read, write, execute (group)
000007	read, write, execute (others)

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**SEE ALSO**

ls (I), fstat (II), file system (g), stat(c)

**DIAGNOSTICS**

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

**WARNING**

The inode structure returned by this call will have a changed format in the future. Prepare for this by using the *-l7* option with *cc* or *ld*. See *INTRO* (II).