NAME

stat − get file status

SYNOPSIS

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

ls(1), fstat(2), fs(5)

DIAGNOSTICS

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