

**WRITE(c)**

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**NAME**

write -- write to file

**SYNOPSIS**

write = 2.

**ARGUMENTS(input)**

- capability associated with file
- 0 - segment ID
- 1 - word offset into segment
- 2 - byte count
- 3 - block number in file.
- 4 - remaining bytes to be written

**VALUES(returned)**

2 - bytes written

**DESCRIPTION**

*Write* checks the validity of the capability and translates it into a inode table entry in the file manager. *Write* messages must specify a starting block number in the file to be written to as well as a byte count. The File Manager converts the block number into a block number on the particular file system. If the word offset is negative, the offset is from the end of the segment. The sender of the message is required to lock the segment into which the I/O transfer is to be done in memory. If the I/O transfer can be done in one operation, the acknowledgement to this message is sent directly from the particular device driver. Otherwise, the write messages are sent off in parallel to the appropriate device driver and waited for by the file manager.

**SEE ALSO**

creat(II), open(II), creat(c), open(c), falloc(c).

**DIAGNOSTICS**

An error status byte is returned if a bad capability is given, the write would extend beyond the end of the segment or if physical I/O errors occur.