NAME
lfmount — mount logical file system (LFS)

SYNOPSIS
lfmount [char_dev block_dev [−r]]

DESCRIPTION
Lfmount mounts a Logical File System; that is, it associates a UNIX block device with the UNIX character device corresponding to the Logical File System in question. *Lfmount* must be executed before any program attempts to open a LFS. Since it is executed when no LFS is open, access to the LFS software is via a "permanently mounted" pseudo character device called **/dev/lfctl** (minor character device number 255). This same device is used for *lfumount*(1), *lfsync*(1), and *lfupdate*(1). All access to a LFS from user-level programs is by the character device. Thus, making the correspondence between the block device and character device tells the LFS software where the physical storage resides. This character device is specified by a character special file *char_dev* in **/dev**. The block device *block_dev* is also assumed to be in **/dev**, and may refer to physical storage on moving head disks or floppy disks. If the −r option is given, the block device is mounted read-only. That is, any LFS command involving file creation, deletion, writing, or switching is illegal.

If no arguments are given, the current mount table is printed. The printout is of the form:

LFS /dev/*char_dev* **maps to /dev/***block_dev*

or:

LFS /DEV/*char_dev* **maps to /dev/***block_dev* *(Read-only)*

The following example associates block device **lfs3** with character device **lfh0**:

lfmount lfh0 lfs3

The next example associates block device **lfs2** with character device **database1** and makes the mount read-only:

lfmount database1 lfs2 −r

FILES
/etc/lmtab	Mount table
/dev/*char_dev*	Character device, one per LFS
/dev/*block_dev*	Block device, one per LFS
/dev/lfctl	LFS control device (minor device 255)

SEE ALSO
lfumount(1)

DIAGNOSTICS
Diagnostics are given if UNIX returns errors on creating, reading, or writing /etc/lmtab, if *char_dev* or *block_dev* are already present in the internal LFS mount table (and thus presumably, in /etc/lmtab), if the LFS header stored on *block_dev* cannot be accessed, or if *block_dev* is not a Logical File System. The use of *lfmount* is limited to those with root permission. A diagnostic is given otherwise.

WARNINGS
The mount table /etc/lmtab can get out of step with the internal mount table kept by the

operating system. For example, if /etc/lmtab is removed, LFS operations may still proceed without any problems, because the LFS software does not read it. However, typing **lfmount** will imply that nothing is mounted. Similar problems exist with the UNIX *mount*(1) command.

No check is made to see if the character device given really refers to the proper device for the LFS software. If an incorrect device is put in the mount table, succeeding LFS commands will simply fail.

The order of the arguments (including the −r flag) cannot be varied.