NAME

fdformat – format floppy diskette or PCMCIA memory card

SYNOPSIS

fdformat [**–dDeEfHlLmMUqvx**] [**–b** *label*] [**–B** *filename*] [**–t** *dostype*] [*devname*]

AVAILABILITY

SUNWcsu

DESCRIPTION

fdformat is a utility for formatting both diskettes and PCMCIA memory cards. All new, blank diskettes or PCMCIA memory cards must be formatted before they can be used. **fdformat** formats and verifies the media, and indicates whether any bad sectors were encountered. All existing data on the diskette or PCMCIA memory card, if any, is destroyed by formatting. If no device name is given, fdformat uses the diskette as a default.

By default, **fdformat** uses the configured capacity of the drive to format the diskette. A 3.5 inch high-density drive uses diskettes with a formatted capacity of 1.44 megabytes. A 5.25 inch high-density drive uses diskettes with a formatted capacity of 1.2 megabytes. In either case, a density option does not have to be specified to **fdformat**. However, a density option must be specified when using a diskette with a lower capacity than the drive's default. Use the –**H** option to format high-density diskettes (1.44-megabyte capacity) in an extra-high-density (ED) drive. Use the –**D** option, the –**l** option, or the –**L** option to format double-density (or "low-density") diskettes (720KB capacity) in an HD or ED drive. To format medium-density diskettes (1.2-megabyte capacity), use the –**M** option with –**t nec** (this is the same as using the –**m** option with –**t nec**).

Extended density uses double-sided, extended-density (or extra-high-density) (DS/ED) diskettes. Medium and high densities use the same media: double-sided, high-density (DS/HD) diskettes. Double ("low") density uses double-sided, double-density (DS/DD) diskettes. Substituting diskettes of one density for diskettes of either a higher or lower density generally will not work. Data integrity cannot be assured whenever a diskette is formatted to a capacity not matching its density.

A PCMCIA memory card with densities from 512 KBytes to 64 MBytes may be formatted.

fdformat writes new identification and data fields for each sector on all tracks unless the –**x** option is specified. For diskettes, if the –**v** option is specified, each sector is verified.

After formatting and verifying, **fdformat** writes an operating-system label on block 0. Use the –**t dos** option (same as the –**d** option) to put an MS-DOS file system on the diskette or PCMCIA memory card after the format is done. Use the –**t nec** option with the –**M** option (same as the –**m** option) to put an NEC-DOS file system on a diskette. Otherwise, **fdformat** writes a SunOS label in block 0.

OPTIONS

–**D** Format a 720KB (3.5 inch) or 360KB (5.25 inch) double-density diskette (same as the –**l** or –**L** options). This is the default for double-density type drives. It is needed if the drive is a high- or extended-density type.

–**e** Eject the diskette when done. (This feature is not available on all systems).

–**E** Format a 2.88-megabyte (3.5 inch) extended-density diskette. This is the default for extended-density type drives.

–f Force. Do not ask for confirmation before starting format.

–H Format a 1.44-megabyte (3.5 inch) or 1.2-megabyte (5.25 inch) high-density diskette. This is the default for high-density type drives; it is needed if the drive is the extended-density type.

–M Write a 1.2-megabyte (3.5 inch) medium-density format on a high-density diskette (use only with the –**t nec** option). This is the same as using –**m**. (This feature is not available on all systems.)

–U **umount** any file systems and then format.

–q Quiet; do not print status messages.

–v Verify each block of the diskette after the format.

–x Skip the format, and only write a SunOS label or an MS-DOS file system.

–b *label* Label the media with volume *label*. A SunOS volume label is restricted to 8 characters. A DOS volume label is restricted to 11 upper-case characters.

–B *filename* Install special boot loader in *filename* on an MS-DOS diskette. This option is only meaningful when the –**d option** (or –**t dos**) is also specified.

–t dos Install an MS-DOS file system and boot sector formatting. This is equivalent to the DOS format command or the –**d** option.

–t nec Install an NEC-DOS file system and boot sector on the disk after formatting. This should be used only with the –**M** option. (This feature is not available on all systems).

devname Replace *devname* with **rdiskette0** (systems without Volume Management) or **floppy0** (systems with Volume Management) to use the first drive or **rdiskette1** (systems without Volume Management) or **floppy1** (systems with Volume Management) to use the second drive. If *devname* is omitted, the first drive, if one exists, will be used.

For PCMCIA memory cards, replace *devname* with the device name for the PCMCIA memory card which resides in **/dev/rdsk/c***N***t***N***d***N***s***N* or **/dev/dsk/c***N***t***N***d***N***s***N*.

If *devname* is omitted, the default diskette drive, if one exists, will be used.

N represents a decimal number and can be specified as follows:

c*N* Controller *N*

t*N* Technology type *N*:

0x1	**ROM**
0x2	**OTPROM**
0x3	**EPROM**
0x4	**EEPROM**
0x5	**FLASH**
0x6	**SRAM**
0x7	**DRAM**

d*N* Technology region in type *N*

s*N* Slice *N*

The following options are provided for compatibility with previous versions of **fdformat**; their use is discouraged.

–d Format an MS-DOS floppy diskette or PCMCIA memory card. (same as **–t dos**). This is equivalent to the MS-DOS **FORMAT** command.

–l Format a 720KB (3.5 inch) or 360KB (5.25 inch) double-density diskette (same as –**D** or –**L**). This is the default for double-density type drives; it is needed if the drive is the high- or extended-density type.

–L Format a 720KB (3.5 inch) or 360KB (5.25 inch) double-density diskette (same as –**l** or –**D**). This is the default for double-density type drives; it is needed if the drive is the high- or extended-density type.

–m Write a 1.2-megabyte (3.5 inch) medium-density format on a high-density diskette (use only with the –**t nec** option). This is the same as using –**M**. (This feature is not available on all systems.)

FILES

/vol/dev/diskette0 Directory providing block device access for the media in floppy drive 0.

/vol/dev/rdiskette0 Directory providing character device access for the media in floppy drive 0.

/vol/dev/aliases/floppy0 Symbolic link to the character device for the media in floppy drive 0.

/dev/rdiskette Directory providing character device access for the media in the primary floppy drive, usually drive 0.

/vol/dev/dsk/c*N***t***N***d***N***s***N* Directory providing block device access for the PCMCIA memory card.

/vol/dev/rdsk/c*N***t***N***d***N***s***N* Directory providing character device access for the PCMCIA memory card.

/vol/dev/aliases/pcmem*S* Symbolic link to the character device for the PCMCIA memory card in socket *S* where *S* represents a PCMCIA socket number.

/dev/rdsk/c*N***t***N***d***N***s***N* Directory providing character device access for the PCMCIA memory card.

/dev/dsk/c*N***t***N***d***N***s***N* Directory providing block device access for the PCMCIA memory card.

Note: See *devname* section above for a description of the values for *N*.

SEE ALSO

cpio(1), **eject**(1), **tar**(1), **volcancel**(1), **volcheck**(1), **volmissing**(1), **mount**(1M), **newfs**(1M), **rmmount**(1M), **vold**(1M), **rmmount.conf**(4), **vold.conf**(4), **pcfs**(7FS), **volfs**(7FS)

x86 Only

fd(7D)

NOTES

A diskette or PCMCIA memory card containing a ufs file system created on a SPARC (big endian) system (by using **fdformat** and **newfs**(1M)) is not identical to a diskette or PCMCIA memory card containing a ufs file system created on an x86 (little endian) system. Do not interchange ufs diskettes or memory cards between these platforms; use **cpio**(1) or **tar**(1) to transfer files on diskettes or memory cards between them.

A diskette or PCMCIA memory card formatted using the **–t dos** option (or **–d**) for MS-DOS will not have the necessary system files, and is therefore not bootable. Trying to boot from it on a PC will result in the following message:

> **Non-System disk or disk error**
> **Replace and strike any key when ready**

BUGS

Currently, bad sector mapping is not supported on floppy diskettes or PCMCIA memory cards. Therefore, a diskette or memory cards is unusable if **fdformat** finds an error (bad sector).