

**NAME**

**fdformat** - format floppy disks

**SYNOPSIS**

**fdformat** [-F *fill*] [-f *fmt*] [-s *fmtstr*] [-nqvy] *device*

**DESCRIPTION**

The **fdformat** utility formats a floppy disk at *device*, where *device* may either be given as a full path name of a device node for a floppy disk drive (e.g., */dev/fd0*), or using an abbreviated name that will be looked up under */dev* (e.g., "fd0").

The options are as follows:

- F *fill*      Use *fill* as the fill byte for newly formatted sectors. The *fill* argument must be a number in the range 0 through 255 using common C language notation. The default value is "0xf6".
- f *fmt*        Specify the density settings for a *fmt* kilobyte format, as described in `fdcontrol(8)`.
- s *fmtstr*     Specify the density settings using explicit parameters, as described in `fdcontrol(8)`.
- n            Do not verify floppy after formatting.
- q            Suppress any normal output from the command, and do not ask the user for a confirmation whether to format the floppy disk at *device*.
- v            Do not format, verify only.
- y            Do not ask for confirmation whether to format the floppy disk but still report formatting status.

For non-autoselecting subdevices, neither **-f *fmt*** nor **-s *fmtstr*** may be specified, since the preconfigured media density settings from the kernel driver will always be used. However, if *device* is a device with automatic media density selection (see `fdc(4)`), both methods can be used to override the density settings for the newly formatted medium (without permanently changing the density settings of *device*).

If the **-q** flag has not been specified, the user is asked for a confirmation of the intended formatting process. In order to continue, an answer of 'y' must be given.

Note that **fdformat** does only perform low-level formatting. In order to create a file system on the medium, see the commands `newfs(8)` for a UFS file system, or `newfs_msdos(8)` for an MS-DOS (FAT)

file system.

## EXIT STATUS

An exit status of 0 is returned upon successful operation. Exit status 1 is returned on any errors during floppy formatting, and an exit status of 2 reflects invalid arguments given to the program (along with an appropriate information written to diagnostic output).

## EXAMPLES

To format a new double-sided, high-density (HD) 1.44 MB disk inserted in the first floppy disk drive, issue:

```
/usr/sbin/fdformat -f 1440 /dev/fd0
```

After low-level formatting the disk with **fdformat**, create a disk label so that the system can determine the size and geometry of the disk. The supported geometry values are listed in */etc/disktab*, and we will use *fd1440* for this example. To write the disk label, use `bsdlabel(8)`:

```
/sbin/bsdlabel -B -w /dev/fd0 fd1440
```

The floppy is now ready to be high-level formatted with a file system. To format the floppy disk with FAT, issue:

```
/sbin/newfs_msdos /dev/fd0
```

## DIAGNOSTICS

Unless **-q** has been specified, a single letter is printed to standard output to inform the user about the progress of work. First, an 'F' is printed when the track is being formatted, then a 'V' while it is being verified, and if an error has been detected, it will finally change to 'E'. Detailed status information (cylinder, head and sector number, and the exact cause of the error) will be printed for up to 10 errors after the entire formatting process has completed.

## SEE ALSO

`fdc(4)`, `bsdlabel(8)`, `fdcontrol(8)`, `newfs(8)`, `newfs_msdos(8)`

## HISTORY

The **fdformat** utility has been developed for 386BSD-0.1 and upgraded to the new `fdc(4)` floppy disk driver. It later became part of the FreeBSD 1.1 system. Starting with FreeBSD 5.0, it uses the unified density specifications as described in `fdcontrol(8)`.

## AUTHORS

The program has been contributed by Jörg Wunsch, Dresden, with changes by Serge Vakulenko and Andrey A. Chernov, Moscow.