NAME
fusefs - File system in USErspace

SYNOPSIS
To link into the kernel:

options FUSEFS

To load as a loadable kernel module:

kldload fusefs

DESCRIPTION
The **fusefs** driver implements a file system that is serviced by a userspace program.

There are many uses for **fusefs**. Userspace daemons can access libraries or programming languages that cannot run in kernel-mode, for example. **fusefs** is also useful for developing and debugging file systems, because a crash of the daemon will not take down the entire operating system. Finally, the **fusefs** API is portable. Many daemons can run on multiple operating systems with minimal modifications.

SYSCTL VARIABLES
The following sysctl(8) variables are available:

vfs.fusefs.kernelabi_major
> Major version of the FUSE kernel ABI supported by this driver.

vfs.fusefs.kernelabi_minor
> Minor version of the FUSE kernel ABI supported by this driver.

vfs.fusefs.data_cache_mode
> Controls how **fusefs** will cache file data for pre-7.23 file systems. A value of 0 will disable caching entirely. Every data access will be forwarded to the daemon. A value of 1 will select write-through caching. Reads will be cached in the VFS layer as usual. Writes will be immediately forwarded to the daemon, and also added to the cache. A value of 2 will select write-back caching. Reads and writes will both be cached, and writes will occasionally be flushed to the daemon by the page daemon. Write-back caching is usually unsafe, especially for FUSE file systems that require network access.
>
> FUSE file systems using protocol 7.23 or later specify their cache behavior on a per-mountpoint basis, ignoring this sysctl.

vfs.fusefs.stats.filehandle_count
        Current number of open FUSE file handles.

vfs.fusefs.stats.lookup_cache_hits
        Total number of lookup cache hits.

vfs.fusefs.stats.lookup_cache_misses
        Total number of lookup cache misses.

vfs.fusefs.stats.node_count
        Current number of allocated FUSE vnodes.

vfs.fusefs.stats.ticket_count
        Current number of allocated FUSE tickets, which is roughly equal to the number of FUSE
        operations currently being processed by daemons.

SEE ALSO
    mount_fusefs(8)

HISTORY
    The **fuse** driver was written as the part of the FreeBSD implementation of the FUSE userspace file
    system framework (see **https://github.com/libfuse/libfuse**) and first appeared in the *sysutils/fusefs-kmod*
    port, supporting FreeBSD 6.0. It was added to the base system in FreeBSD 10.0, and renamed to **fusefs**
    for FreeBSD 12.1.

AUTHORS
    The **fuse** driver was originally written by Csaba Henk as a Google Summer of Code project in 2005. It
    was further developed by Ilya Putsikau during Google Summer of Code 2011, and that version was
    integrated into the base system by Attilio Rao *<attilio@FreeBSD.org>*.

    This manual page was written by Alan Somers *<asomers@FreeBSD.org>*.