

ZlomekFS (ZFS) is a distributed file system, which allows working with files even if a computer is disconnected from the network. The changes performed while the network is not available are automatically synchronized after connecting the computer to the network. The original ZlomekFS implementation was using its own file system driver for the Linux operating system. This work replaces the driver with use of the FUSE interface, which was added to Linux only after the original ZlomekFS implementation was finished. To implement ZlomekFS using FUSE, the necessary kernel cache management operations have been added to the FUSE interface. These FUSE interface extensions were implemented for the Linux and FreeBSD operating systems.