This master thesis deals with the implementation of a connector between FUSE file system drivers and HelenOS native VFS interface. The thesis first describes the way of finding the best solution and the potential possibilities. The low level layer solution is described as the best. Then the concern is focused on the real implementation of the connector. The implementation was successful, so the thesis describes in detail the parts of the fully functional solution in real-life HelenOS system. The solution enables almost no need of changes to be made in both FUSE and Helenos VFS. The connector implementation is demonstrated on a real-life FUSE file system Exfat ported to HelenOS.