

# A tag based filesystem

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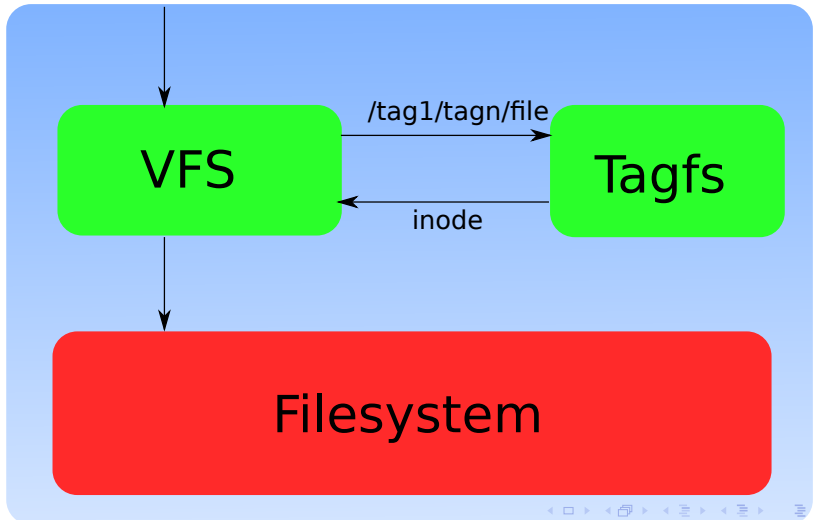
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User space app for  
browsing

Kernel module  
or  
VFS modification



- TagFS: Bringing Semantic Metadata to the Filesystem
  - <http://www.eswc2006.org/poster-papers/FP31-Schenk.pdf>
- Nepomuk
  - <http://nepomuk.semanticdesktop.org/xwiki/bin/view/Main1/Deliverables>
- Keywords: metadata, database

- Studied related work
- Stated expected behaviour
  - Add, remove tags
  - Find files based on tags
- Identified pros and cons for the two possible solutions

- Linux 2.6.35
- GCC 4.4.5:
- FUSE Filesystem in USErspace
  - implement fully functional filesystem in a userspace program
  - piece of code that communicates with the kernel as a filesystem would
  - runs on Linux kernels 2.4.X and 2.6.X
  - libfuse - <http://fuse.sourceforge.net/>
- C programming language

- Determine if VFS implementation is feasible
- Data organization
- Search methods
- Start coding



# Thank you!

- Filesystem
- Tags
- Inode

- FUSE
- VFS