A tag based filesystem
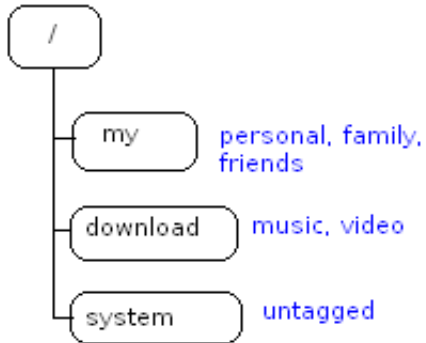
Catalina Macalet, Eugen Hristev, Mihai Dinu, Sorin Dumitru
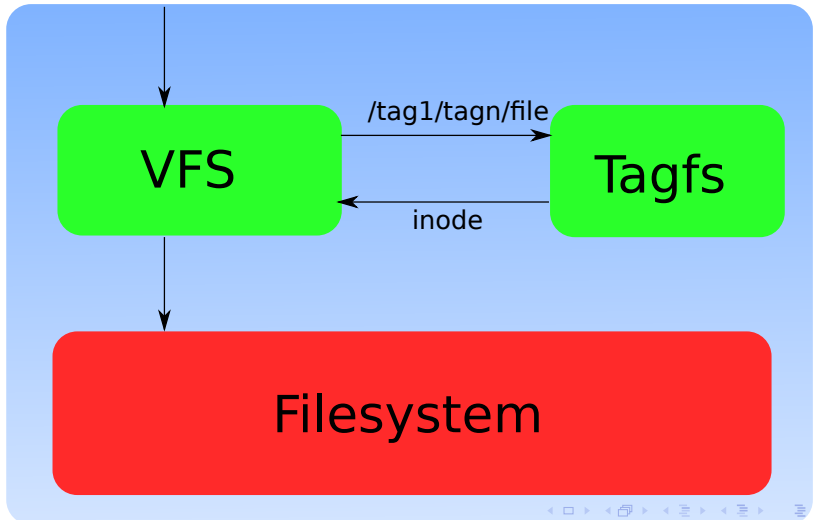
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Nov 11, 2010

Introduction
Architecture
Related work
Current status
Employed Technologies
Short term planning
Keywords

User space app for
browsing

Kernel module
or
VFS modification

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- 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

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- 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