

# PersiFS: A Continuously Versioned Network File System

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- ▶ A durable file system
- ▶ A continuously versioned file system

# Continuous Versioning

- ▶ Access to complete file system at any point in the past
- ▶ Like AFS's OldFiles, but for every point in time
- ▶ Like CVS, but automatic and continuous

# User interface

- ▶ Magic root directory
- ▶ `/persifs/current` – The latest, read/write version
- ▶ `/persifs/2004-05-25-12-00-00` – Read-only snapshot as of high noon, last towel day

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  - ▶ Chunk fusion!



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  - ▶ Chunk fusion!
- ▶ Inode log
  - ▶ Stores sequence of inode changes over time
  - ▶ Uses periodic inode map snapshots for efficient replay
  - ▶ Compact!