

WheelFS

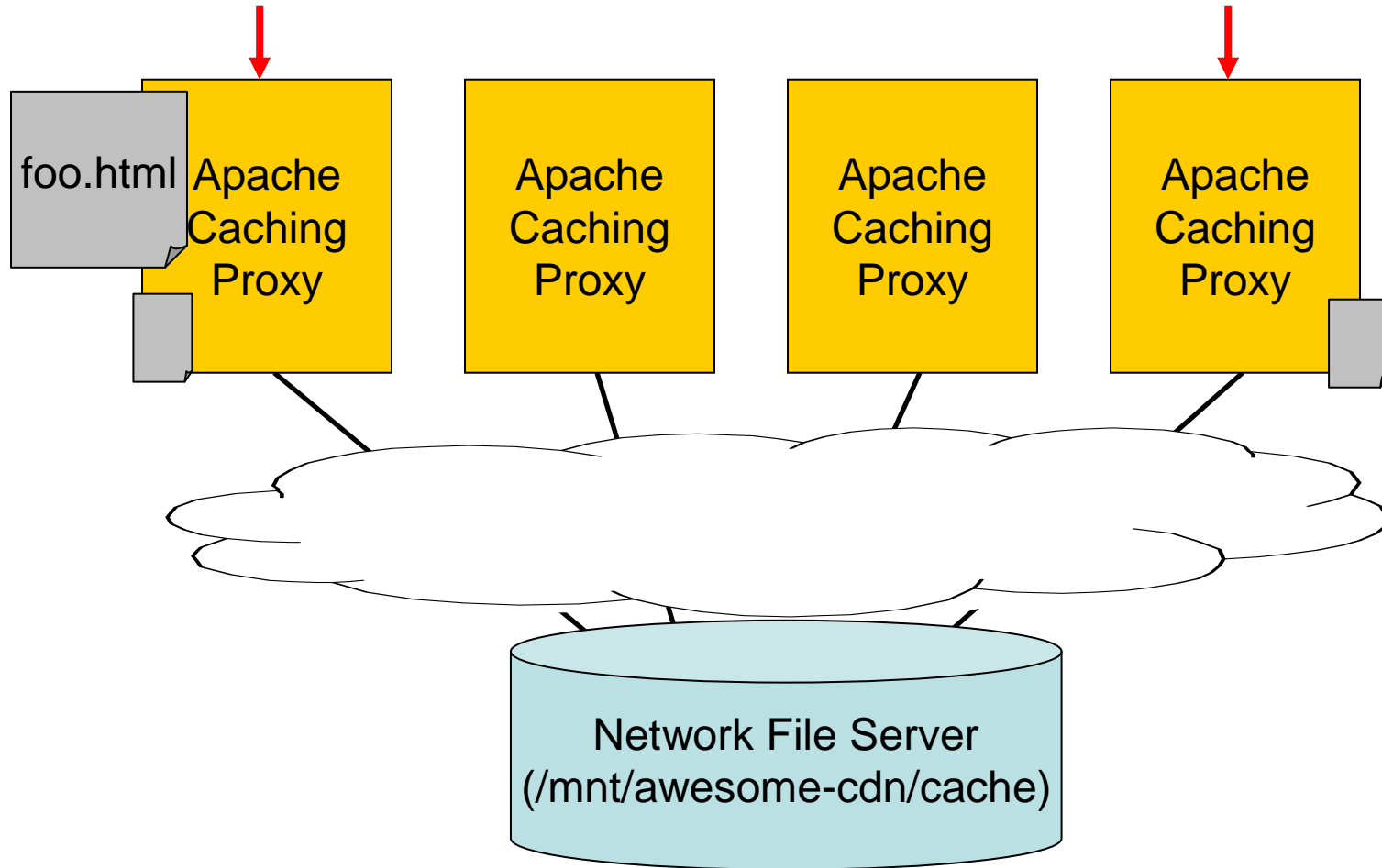
*Jeremy Stribling, Frans Kaashoek,
Jinyang Li, Robert Morris*

MIT CSAIL and New York University

I Want to Publish an SOSP Paper

- But I don't want to do a lot of work
- Idea: New cooperative Web cache!

Exploit a Network File System



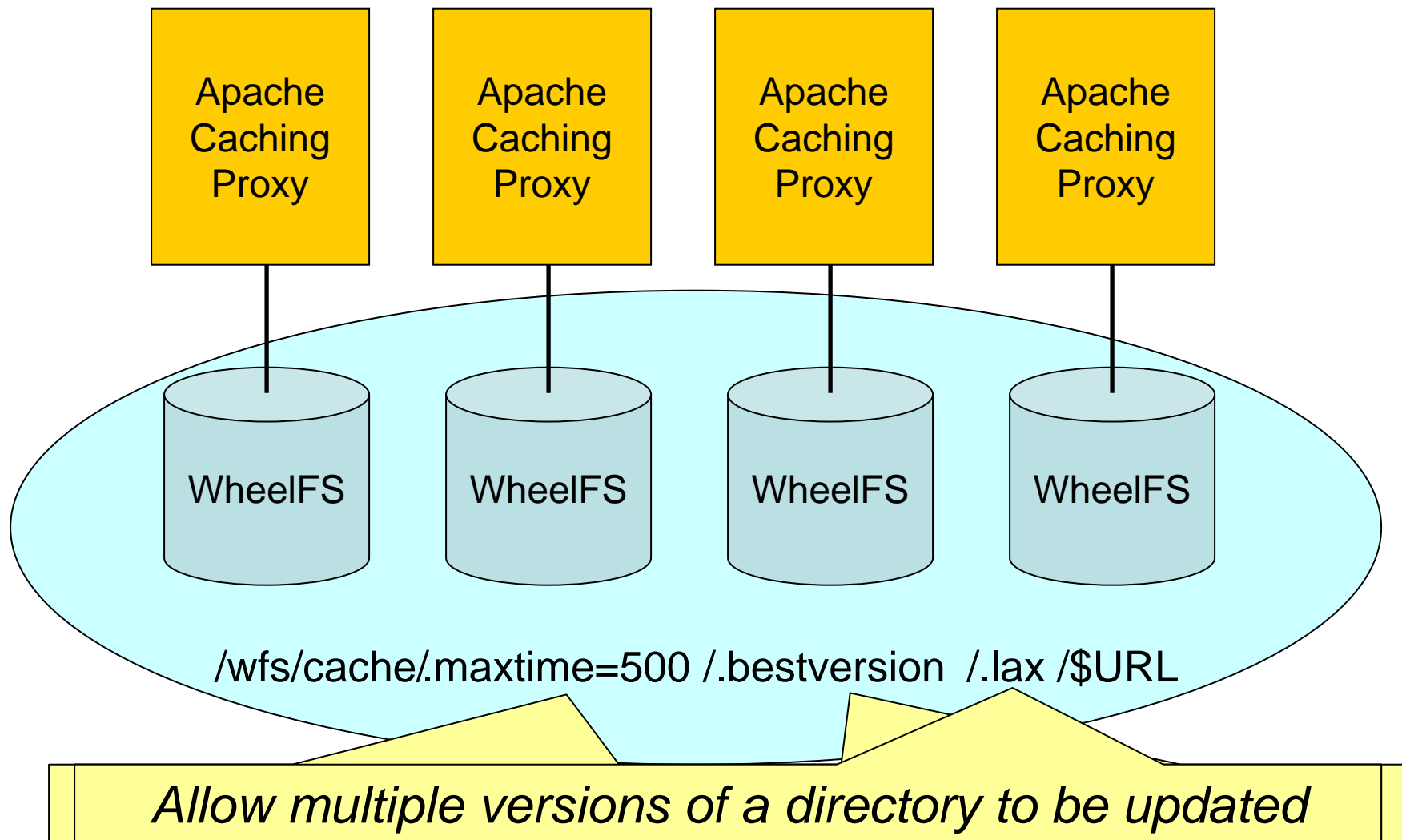
So What Are My Options?

- Give up dream and just not graduate
- Submit random paper [Rooter, WMSCI '05]
- Build an FS that would work for real apps
 - Apache can use old copies of data
 - And can always fall back to the origin
 - Why not tell the FS?

WheelFS: Storage for Wide-area Apps

- File system API
- *Semantic cues* give apps control of behavior under failures
- → Make Apache distributed with 1 line change

Cooperative Web Cache on WheelFS



I'm Running Out of Time, So:

- A compact but powerful set of cues
- Useful to other applications, including:
 - PlanetLab measurement studies
 - Parallel Grid computations
 - Distribute make
- See you at the next big conference!