What’s missing in User Storage?

Modern User Needs:
- Backup
- Versioning
- Access from Different Devices
- Multi-user Sharing

Existing solutions:
- Fragmented
- Disk space growth faster than WAN
- Do not take advantage of:
  - Mobile devices (phones/laptops)
  - Physical connection of these devices
  - Fast LAN bandwidths

Ori Provides:
- Replication (used as Backup)
  - Access everywhere
  - Repair silent disk corruption
  - Recovery from disk failures
- Versioning
  - Durable
  - Accessible locally
  - Automatic snapshots
- Multiple access mechanisms
  - Temporary mount points
  - Grafting (File Sharing)

Architecture

Support different access methods:

- ori (command line)
- orisync daemon
- orifs (FUSE driver)

Design Features
- Grafting: History preserving file copy
- Content Addressable Object Store
  - File checksumming
  - Automatic repair from replicas
  - Deduplication
- FUSE Implementation

Performance

Instant Access (on-demand): User’s won’t wait for all their data to transfer, giving an NFS-like experience