Graduate Operating Systems

Fall 2017

Paper “Ceph”

- What are the goals of Ceph?
- Object Storage Devices
- Metadata Servers
- Why does OSD suffer from scalability problems?
- POSIX
- Consistency & coherence
- Design feature 1: Decoupled data & metadata
- Design feature 2: Dyn. distr. metadata mgt.
- Design feature 3: Reliable autonomic distr. object storage
Paper “Ceph”

- Capabilities
- Passive/active “live messages”

Paper “Google FS”

- What are the goals of Google FS?
- How does it compare to Ceph?
- Throughput vs. latency
- Master-slave/client-server architecture
- Why does Google FS avoid file caching?
- What are the pros/cons of large chunk sizes?