1. Ceph: A Scalable, High-Performance Distributed File System

This paper propose a distributed file system, called Ceph. Ceph could provide good performance, reliability, and scalability by maximizing the separation between data and metadata management. Ceph also provides a dynamic distributed metadata cluster to manage metadata efficiently. Ceph could handle 250,000 metadata operations per second. I think this scheme is very good to distributed system. But I want to propose the solution for a overall system delay occurred by one replica's delay.

2. Barrier-Enabled IO Stack for Flash Storage

This paper proposes Barrier-Enabled I/O Stack which need not wait the completion of previous command to guarantee ordering request when flush operation is called. Since Barrier-Enabled I/O Stack allow asynchronous flush, Barrier-Enabled I/O Stack is efficient especially on the fsync-intensive workloads. I think this scheme is very useful in the modern data center that use SSD. However, I think, If I/O request is failed, the following command could be harmful. So, I want to propose some strategy that can guarantees ordering when I/O request is failed.