

Paper: mClock: Handling Throughput Variability for Hypervisor IO Scheduling

This paper is about mClock, which is an IO scheduler that provides resource controls such as shares, reservations and limits at a per-VM level. In data center, server virtualization has elevated hypervisors to first class entities and IO scheduling in a hypervisor introduces many new challenges compared to managing other shared resources. With various supports of mClock, the QoS requirements for a VM are expressed as a minimum reservation, a maximum limit, and a proportional share.