

02 – Staring into the Abyss:

An Evaluation of Concurrency Control with One Thousand Cores

1. Overview of Idea

Multicore processor technique is growing exponentially. But, widely used concurrency control schemes cannot scale because of different bottleneck. From now on, hardware designer and software designer should co-work to build scalable DBMS.

2. Main Finding

Famous concurrency control schemes are not scalable on multicore system.

3. Systems used and its Specifications

In-Memory DBMS and pluggable lock API are used, some of algorithms are modified to fit the multicore system.

4. Workloads evaluated

Read-only/write-intended, long/short, single-partition/multi-partitions workloads are used to see throughput of those CC algorithms.