Supercharged JDBC Driver Using KOSAR
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Software services using relational database management systems (RDBMSs) misbehave by slowing down when the system load increases beyond a certain load. The figure at the bottom shows the throughput of a leading industrial strength RDBMS as a function of the system load generated with one and two client computers. With both, the throughput increases at the beginning with a higher system load. However, beyond a certain amount of system load, the RDBMS throughput plummets due to the overhead of locking, logging, latches and synchronization primitives. The rate of drop is exaggerated with an increasing number of JDBC clients because they generate a higher load quicker. One may cap the system load for trivial workload consisting of one or two queries to prevent the plummet. However, for evolving workloads that consists of 3 or more queries and updates, it is difficult (if not impossible) to predict the cap. A cautious cap may prevent the RDBMS from reaching its full potential while a grand one may provide a diminished throughput.

The solution is to supercharge your RDBMS using KOSAR. KOSAR is a plugin that one may deploy with both existing and future deployments. It immediately boosts the performance of the software solution many folds and does not misbehave as a function of the system load. The stealth edge of KOSAR is its ability to double the system throughput with two clients, triple the throughput with three clients, so on and so forth until the network becomes fully utilized.

KOSAR guarantees the consistency of existing applications, requires no re-write of the application software or a re-design of the database. It works with both native JDBC drivers of RDBMSs and Object Relational Mapping (ORM) frameworks such as Hibernate and Spring.