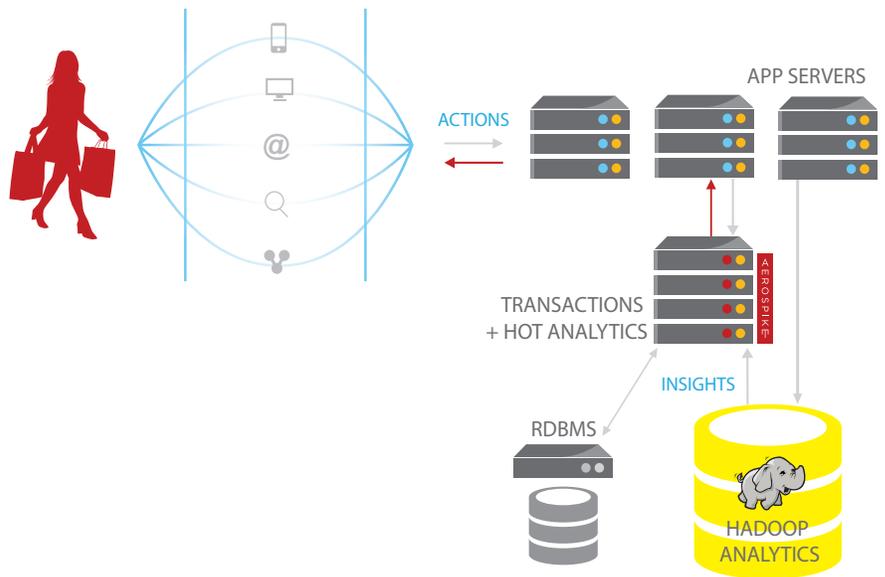


### DISTRIBUTED KEY-VALUE DATABASE DELIVERING SPEED AT SCALE

The **open source Aerospike database** is clustered, distributed and optimized for reliable, high performance and low-latency. As a **NoSQL database**, Aerospike out performs Cassandra, MongoDB, and Couchbase, and has been deployed since 2010 in demanding internet companies for front-edge application use such as **session management and user profile stores**.

Aerospike's **primary key focus** delivers scalable and robust no-single-point-of-failure clustering. **Rich APIs** include memcached's CAS interfaces, schemaless types, in-database operations like increment, synchronous secondary indexes, efficient very large lists and maps, and native APIs for languages like Node.js, Java, Perl, Ruby, PHP, Go, C, C#, Python, and more. By also supporting queries, real-time MapReduce, and in-database computation with user-defined functions, Aerospike provides rich database primitives.



Unlike other NoSQL databases, Aerospike also delivers strong consistency and reliability.

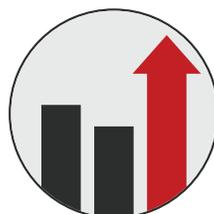
Aerospike's unique use of **Flash and SSD technology** brings Redis-like in-memory performance for persistent, large-scale datasets, while also supporting RAM datasets.

**Cloud integration** provides Aerospike performance and robustness in high scale environments like Amazon EC2, Google Compute, Internap, GoGrid, and others. By choosing Aerospike, you will gain the ability to create cross-cloud infrastructure, and migrate between cloud providers. Robust **geographic replication** allows easy business continuity planning.



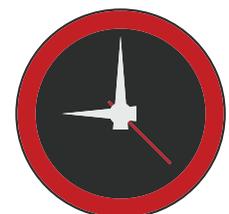
#### SPEED

99% under 1 millisecond  
Predictable low latency



#### SCALE

1M TPS / 100 TB  
on just a handful of servers



#### RELIABILITY

Strong consistency  
with no downtime

### 10X BETTER PERFORMANCE THAN OTHER NOSQL DATABASES

In an independent benchmark test of NoSQL databases conducted by Thumbtack Technology, Aerospike wiped out the competition, delivering 10 times the throughput. Aerospike's flash drive/SSD optimization delivered an unprecedented speed advantage over other databases.

#### Benchmark Results Summary

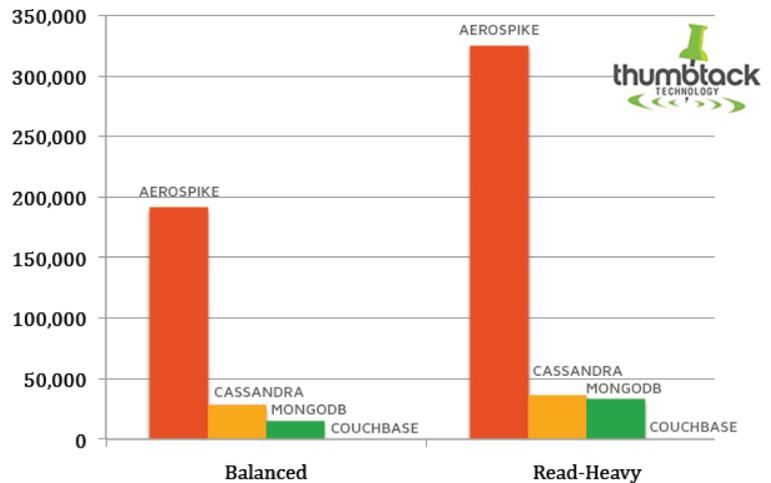
- Aerospike was the dominant performer showing durable, replicated behavior 5-10 times faster.
- Aerospike achieved nearly 200,000 transactions per second (TPS) in balanced read-write tests, and over 300,000 TPS in read-heavy tests.
- Across all four Thumbtack latency tests, Aerospike maintained sub-millisecond latency even while processing 180,000 to 400,000 operations per second.

#### 15x fewer servers than other In-Memory Databases

Run Aerospike in pure RAM with spinning disks for persistence or as a hybrid memory database with RAM and flash.

The chart on the right details server reductions experienced by an Aerospike customer - one of the world's largest video ad platforms. A traditional DRAM only system would have required 186 servers. With Aerospike, they were able to manage 10TB of data (replicated 2x), replicate the cluster in a second data center and run an additional test cluster with just 14 servers instead of 186.

Maximum Throughput - SSD - backend Data Set



Both Couchbase Server v. 1.8 and 2.0 failed the test

**10x FASTER**  
**10x FEWER**  
SERVERS REQUIRED

Actual Customer Analysis  
99% < 1ms  
500k TPS  
10TB Storage  
2x Replication

186 SERVERS

**ONLY 14 SERVERS**

	OTHER DATABASES	AEROSPIKE
	DRAM & HDD	SSD & DRAM
Storage per server	180 GB (on 196 GB server)	2.8 TB (4 x 700 GB)
TPS per server	500,000	500,000
Cost per server	\$8,000	\$11,000
Server costs	\$1,488,000	\$154,000
Power/Server	0.9 kW	1.1 kW
Power (2 years) \$0.12 per kWh ave. US	\$352,000	\$32,400
Maintenance(2 years) \$3600/server	\$670,000	\$50,400
<b>Total</b>	<b>\$2,510,000</b>	<b>\$236,800</b>



"We achieve speed at scale with 2.5 million impressions a second at peak, although we can go much higher, and we see north of 90 Billion impressions per day and this is a 24x7 business with 100% uptime with Aerospike."

- Geir Magnusson, CTO of AppNexus