

Save vs Cassandra on-premises

On-prem Cassandra TCO Challenges

Cassandra Cosmos DB High DevOps No DevOps or and license fees license fees Apache Datastax Up to 30% savings No elasticity. Instant and Provision for the limitless elasticity peak. Up to 40% savings 1 3 5 7 9 11 13 15 17 19 21 23 Hourly compute cost per 100K/sec transactions (50-50 read-write) High datacenter Economy of scale, and hardware lower cost \$16.64 maintenance Cassandra (cl=quorum) Up to 40% savings costs

6TB workload, 80K TPS, 50-50 read-write split observed among our customers, off-peak to peak ratio is 40%, 1K objects. 4 proc, 4 cores/proc server nodes. Hardware, datacenter costs estimated using Azure TCO calculator for 5 years pro-rated monthly. DSE license assumed \$7,200 / year per node (assumes 8 cores). Azure 3Y reserved price was used for Cosmos DB. Findings based on Microsoft calculations.

TCO Savings with Azure Cosmos DB

