Azure Cosmos DB

Save vs MongoDB on IaaS

Cloud MongoDB TCO Challenges

MongoDB	Cosmos DB	
High DevOps and license fees	No DevOps or license fees **Up to 30% savings**	
Limited elasticity. Over- provisioning	Instant and limitless elasticity **Up to 25% savings**	
Not Cloud-optimized. Poor compute, network, and storage utilization.	Azure-optimized. High compute and network utilization. **Up to 40% savings**	
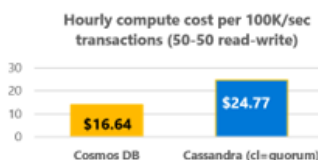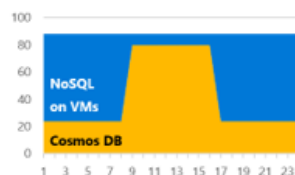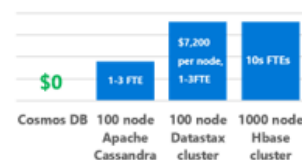
2TB workload, 20K TPS, 50-50 read-write split observed among our customers, off-peak to peak ratio is 40%, 1K objects. 4 shards, 3-way replication, L16 VMs used per Azure guidance,. MongoDB license assumed $4,800 / year per node. Azure monthly consumption prices were used. Workload is smaller than Cassandra due to observed reliability/performance challenges with MongoDB at high load. Findings based on Microsoft calculations.

TCO Savings with Azure Cosmos DB

$16,949/ mo

MongoDB licenses

Bandwidth

Virtual Machines and Storage

12 node (L16) MongoDB Enterprise cluster w support

$12,149/ mo

Bandwidth

Virtual Machines and Storage

18 node (L16) MongoDB cluster

5-6x Savings

$2,574/mo

Bandwidth

Storage

Throughput

Azure Cosmos DB (list prices)