

- Mission critical global apps
 - IOT/telemetrics (high performance streaming) using Azure Machine Learning/HD Insight/PowerBI/Functions
 - Retail marketing to catalog event data
 - Deliver in-game personalized content
 - Web & mobile apps to deliver personalized/social experiences
 - Cosmos DB SDK with iOS & android (Xamarin)



- No-SQL multi-modal DBMS
- Partitioned documents with fields & keys
 - Child documents (file directory)
 - JSON (prefixed field name)
- 1 document ≤ 2 MB
- APIs
 - New DBs = SQL
 - Existing DBs
 - Table
 - MongoDB (document DBMS)
 - Cassandra (column family DBMS)
 - Gremlin API (graph DB)
- Documents organized in containers
 - partition key to group related documents & increase performance
- Similar to Azure Table Storage
 - Cosmos does not sort document by identifiers
 - Require separate index (doc ID + value) to search on index and value
- Scalable
- Partitions ≤ 10 GB
- Single region replication
 - Transparent with 99.99% HA
 - Geo-redundant at cost
 - Multi-master replication for conguency
 - strong/bound staleness/session/consistent prefix/eventual
 - 10 ms or less latency time
- Compliance standards
 - row level authorization



Compiled by Dr T Oberholster
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