ArangoDB vs. mongoDB

What you can do with ArangoDB that you can not do with MongoDB

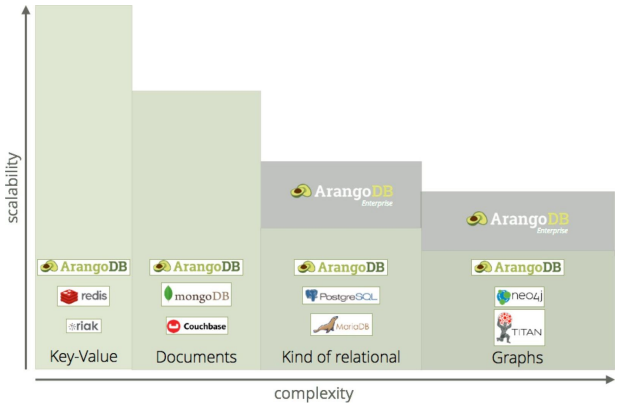
- Multi-model: Create arbitrary ad-hoc queries on data that is stored in different data-models
  E.g. filtering all parts from an aircraft that are connected or developing a web shop with recommendation engine harnessing the advantages of polyglot persistence without the cost
- Real Joins: Use multi collection joins and even scale join operations over different instances
- One easy to learn declarative query language for all data models: FOR x IN ArangoDB use AQL
- ACID Transactions spanning multiple documents and collections, or to run aggregations. Complete Isolation in the cluster available
- Extensibility: Use existing or run your own data-centric microservices in a dedicated JavaScript framework within ArangoDB

  With ArangoDB's Foxx framework users can build e.g. a production ready session service within 10 minutes
- Easily use the best data access pattern for your problem domain by just rewriting a query to benefit from graph or join operations

Scalability and ArangoDB

ArangoDB is cluster ready for document, key/value and even for graph-models. Leverage Satellite Collections and SmartGraphs for high end performance at scale.

ArangoDB is perfectly suitable for high-availability, high-performance or any other use case a document store might be challenged with.



Founders and Core Team

Both founders combined have more than 30 years of experience building high performance databases specifically designed for challenging use cases.

In projects for e.g. German Postal Service, DHL, Commerzbank and the New York Stock Exchange Frank and Claudius connected the dots to build a native multi-model database which can compete with pure document, key/value and graph databases.

"ArangoDB with RocksDB support and granular access control, it blows away other proposed DBs in my environment."

(Tanvir Mansuri, Lead Developer Thomson Reuters)

ArangoDB Inc.
548 Market St #61436,
San Francisco, CA, 94104-5401
United States

Contact: Jan Stücke
Email: jan.stuecke@arangodb.com
Mobile: +49 (0) 221-2722999-60

ArangoDB vs. mongoDB®

High-Level Overview: MongoDB vs. ArangoDB

Feature	MongoDB	ArangoDB
Initial Release	2009	2012
Data-Model	Document	Multi-model (documents, graphs, key-value)
Data format	JSON/BSON	JSON/Velocypack
Written in	C++	C++
License	AGPLv3 / Commercial	Apache 2 / Commercial
Data Storage	MMAPv1/ WIREDTIGER	MMFiles / RocksDB
Schema free	Yes schema validation	Yes schema validation via Foxx
Replication	Master/Slave	Master/Slave
Sharding	Yes	Yes
Transactions	BASE (ACID announced for 4.0)	ACID[1]
Multi-Collection Transactions	No	Yes
Extensibility	No (only V8 for map/reduce jobs)	Microservices framework Foxx based on Google V8[2]
Declarative Query Language	No	AQL One sql-like query language for all data-models
Joins	Aggregation Framework	Yes
Cluster ready	Yes	Yes
Encryption at rest	Yes	Yes
Authentication	Yes	Yes
Role-based access control	Yes	Yes Attribute level via Foxx Framework[3]
Auditing	Yes	No

1. In single server setups, ArangoDB supports full ACID transactions for multi-document & multi-collection transactions. In a cluster setup, ArangoDB only supports multi-document & multi-collection transactions for non-sharded collections. Single document transactions are supported for sharded collections.
2. Easily create a REST API for data centric use cases and add any missing functionality
3. ArangoDB supports all basic security requirements. By using ArangoDB's Foxx microservice framework users can achieve very high security standards fitting individual needs

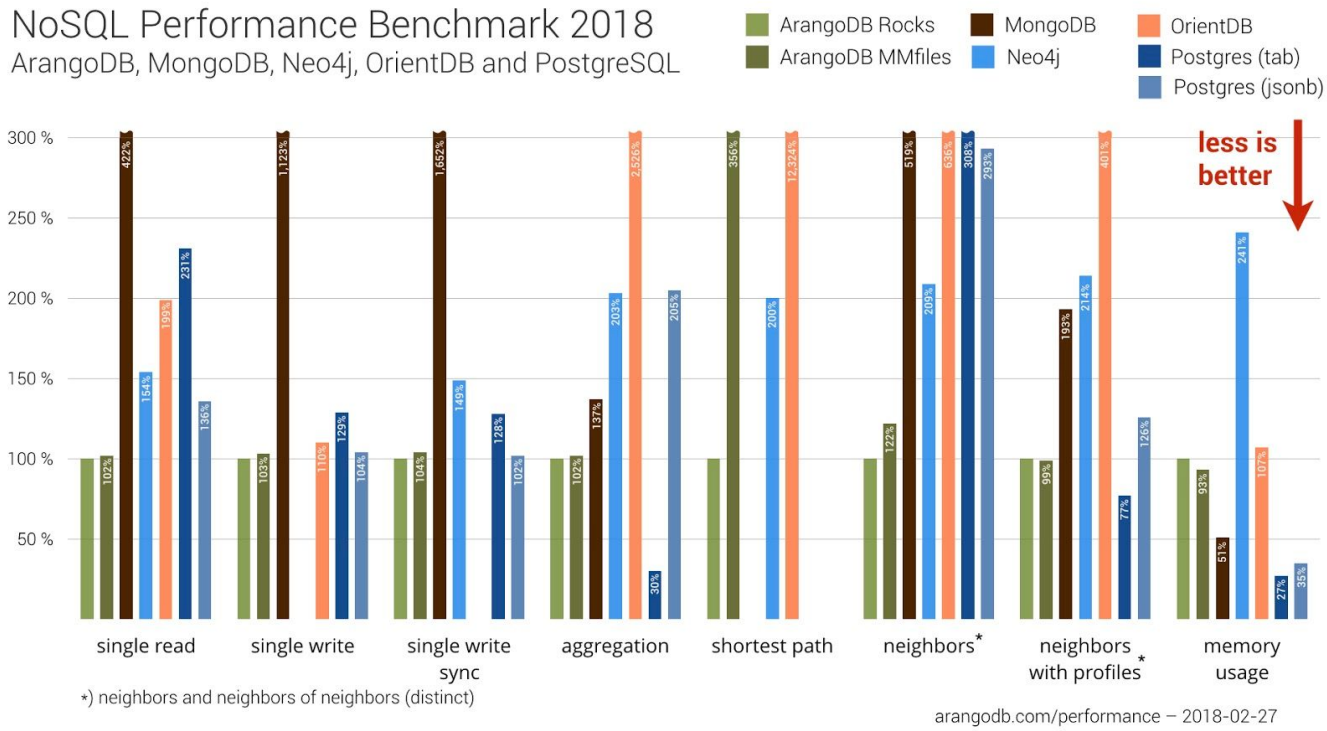
ArangoDB Inc.
548 Market St #61436,
San Francisco, CA, 94104-5401
United States

Contact: Jan Stücke
Email: jan.stuecke@arangodb.com
Mobile: +49 (0) 221-2722999-60

Performance Benchmark of ArangoDB

The latest performance benchmark (2018) shows that ArangoDB's native multi-model approach can compete with leading single model vendors on their home turf. The benchmark test is completely open-source and investigated the performance of most common database operations. The benchmark test included performing single read/write, single write sync, aggregation, shortest path, neighbors, neighbors with profiles and memory usage.

Overall Results: Performance Benchmark (February 2018)



For further information please find the detailed article of the benchmark here:

All interested parties can find the open-source performance test on Claudius Weinberger's GitHub profile: https://github.com/weinberger/nosql-tests

ArangoDB Inc.
548 Market St #61436,
San Francisco, CA, 94104-5401
United States

Contact: Jan Stücke
Email: jan.stuecke@arangodb.com
Mobile: +49 (0) 221-2722999-60