





































































Name	Cassandra  X	CouchDB  X	MongoDB  X
Description	Wide-column store based on ideas of BigTable and DynamoDB 	A native JSON - document store inspired by Lotus Notes, scalable from globally distributed server-clusters down to mobile phones.	One of the most popular document stores available both as a fully managed cloud service and for deployment on self-managed infrastructure
Primary database model	Wide column store	Document store	Document store
Secondary database models	Vector DBMS 	Spatial DBMS 	Spatial DBMS Search engine  Time Series DBMS  Vector DBMS 
DB-Engines Ranking  Trend Chart 	Score 103.86 Rank #12 Overall #1 Wide column stores	Score 10.26 Rank #45 Overall #7 Document stores	Score 423.96 Rank #5 Overall #1 Document stores
Website	cassandra.apache.org	couchdb.apache.org	www.mongodb.com
Technical documentation	cassandra.apache.org/doc/latest	docs.couchdb.org/en/stable	www.mongodb.com/docs/manual
Developer	Apache Software Foundation 	Apache Software Foundation 	MongoDB, Inc
Initial release	2008	2005	2009
Current release	4.1.3, July 2023	3.3.3, December 2023	6.0.7, June 2023
License 	Open Source 	Open Source 	Open Source 
Cloud-based only 	no	no	no 
DBaaS offerings (sponsored links) 	Astra DB : Multi-cloud DBaaS built on Apache Cassandra.		MongoDB Atlas : Global multi-cloud database with unmatched data distribution and mobility across AWS, Azure, and Google Cloud, built-in automation for resource and workload optimization, and so much more.
Implementation language	Java	Erlang	C++
Server operating systems	BSD Linux OS X Windows	Android BSD Linux OS X Solaris Windows	Linux OS X Solaris Windows
Data scheme	schema-free	schema-free	schema-free 
Typing 	yes	no	yes 
XML support 	no	no	
Secondary indexes	restricted 	yes 	yes
SQL 	SQL-like SELECT, DML and DDL statements (CQL)	no	Read-only SQL queries via the MongoDB Atlas SQL Interface
APIs and other access methods	Proprietary protocol  Thrift	RESTful HTTP/JSON API	GraphQL HTTP REST Prisma proprietary protocol using JSON
Supported programming languages	C# C++ Clojure Erlang Go Haskell Java JavaScript  Perl PHP Python Ruby Scala	C C# ColdFusion Erlang Haskell Java JavaScript Lisp Lua Objective-C OCaml Perl PHP	Actionscript  C C# C++ Clojure  ColdFusion  D  Dart  Delphi  Erlang Go Groovy  Haskell

		PL/SQL Python Ruby Smalltalk	Java JavaScript Kotlin Lisp  Lua  MatLab  Perl PHP PowerShell  Prolog  Python R  Ruby Rust Scala Smalltalk  Swift
Server-side scripts 	no	View functions in JavaScript	JavaScript
Triggers	yes	yes	yes 
Partitioning methods 	Sharding 	Sharding 	Sharding 
Replication methods 	selectable replication factor 	Multi-source replication Source-replica replication	Multi-Source deployments with MongoDB Atlas Global Clusters Source-replica replication
MapReduce 	yes	yes	yes
Consistency concepts 	Eventual Consistency Immediate Consistency 	Eventual Consistency	Eventual Consistency  Immediate Consistency 
Foreign keys 	no	no	no 
Transaction concepts 	no 	no 	Multi-document ACID Transactions with snapshot isolation
Concurrency 	yes	yes 	yes
Durability 	yes	yes	yes 
In-memory capabilities 	no	no	yes 
User concepts 	Access rights for users can be defined per object	Access rights for users can be defined per database	Access rights for users and roles