































## Editorial information provided by DB-Engines

| Name                              | MongoDB <b>X</b>   | Prometheus <b>X</b>  | Redis <b>X</b>  |
|-----------------------------------|--|--|---|
| Description                       | One of the most popular document stores available both as a fully managed cloud service and for deployment on self-managed infrastructure                      | Open-source TimeSeries DBMS and monitoring system  | In-memory data structure store, used as database, cache and message broker  |
| Primary database model            | <a href="#">Document store</a>   | <a href="#">Time Series DBMS</a>   | <a href="#">Key-value store</a>   |
| Secondary database models         | <a href="#">Search engine</a>  |  | <a href="#">Document store</a><br><a href="#">Graph DBMS</a><br><a href="#">Search engine</a><br><a href="#">Time Series DBMS</a> |
| DB-Engines Ranking<br>            | Score 437.08<br>Rank #5 <a href="#">Overall</a><br>#1 <a href="#">Document stores</a>  | Score 4.59<br>Rank #72 <a href="#">Overall</a><br>#3 <a href="#">Time Series DBMS</a>          | Score 145.64<br>Rank #8 <a href="#">Overall</a><br>#1 <a href="#">Key-value stores</a>  |
| Website                           | <a href="http://www.mongodb.com">www.mongodb.com</a>   | <a href="http://prometheus.io">prometheus.io</a>   | <a href="http://redis.io">redis.io</a>  |
| Technical documentation           | <a href="https://docs.mongodb.com/manual">docs.mongodb.com/manual</a>  | <a href="http://prometheus.io/docs">prometheus.io/docs</a>                                     | <a href="http://redis.io/documentation">redis.io/documentation</a>  |
| Developer                         | MongoDB, Inc   |  | Salvatore Sanfilippo  |
| Initial release                   | 2009   | 2015   | 2009  |
| Current release                   | 4.2.8, June 2020   |  | 6.0.5, June 2020  |
| License                           | Open Source  | Open Source  | Open Source   |
| Cloud-based only                  | no   | no   | no  |
| DBaaS offerings (sponsored links) | <a href="#">MongoDB Atlas</a> : Deploy a fully managed cloud database on-demand and ready for use in minutes. Available on AWS, Azure, and GCP.                |  |   |
| Implementation language           | C++  | Go   | C   |
| Server operating systems          | Linux<br>OS X<br>Solaris<br>Windows  | Linux<br>Windows   | BSD<br>Linux<br>OS X<br>Windows   |
| Data scheme                       | schema-free  | yes  | schema-free   |
| Typing                            | yes  | Numeric data only  | partial   |
| XML support                       |  | no   | no  |
| Secondary indexes                 | yes  | no   | yes   |
| SQL                               | Read-only SQL queries via the MongoDB Connector for BI   | no   | no  |
| APIs and other access methods     | proprietary protocol using JSON  | RESTful HTTP/JSON API  | proprietary protocol  |
| Supported programming languages   | <a href="#">Actionscript</a><br>C<br>C#<br>C++<br><a href="#">Clojure</a><br><a href="#">ColdFusion</a><br>D<br><a href="#">Dart</a><br><a href="#">Delphi</a> | .Net<br>C++<br>Go<br>Haskell<br>Java<br><a href="#">JavaScript (Node.js)</a><br>Python<br>Ruby | C<br>C#<br>C++<br><a href="#">Clojure</a><br>Crystal<br>D<br>Dart<br>Elixir<br>Erlang   |

|  |  |   |   |
|--|--|---|---|
|  | Erlang<br>Go<br>Groovy <br>Haskell<br>Java<br>JavaScript<br>Lisp <br>Lua <br>MatLab <br>Perl<br>PHP<br>PowerShell <br>Prolog <br>Python<br>R <br>Ruby<br>Scala<br>Smalltalk  |   | Fancy<br>Go<br>Haskell<br>Haxe<br>Java<br>JavaScript (Node.js)<br>Lisp<br>Lua<br>MatLab<br>Objective-C<br>OCaml<br>Pascal<br>Perl<br>PHP<br>Prolog<br>Pure Data<br>Python<br>R<br>Rebol<br>Ruby<br>Rust<br>Scala<br>Scheme<br>Smalltalk<br>Swift<br>Tcl<br>Visual Basic |
| Server-side scripts      | JavaScript   | no  | Lua   |
| Triggers   | yes   | no  | no  |
| Partitioning methods    | Sharding    | Sharding  | Sharding  |
| Replication methods     | Master-slave replication   | yes  | Master-slave replication <br>Multi-master replication   |
| MapReduce               | yes  | no  | no  |
| Consistency concepts    | Eventual Consistency<br>Immediate Consistency   | none  | Eventual Consistency<br>Strong eventual consistency with CRDTs  |
| Foreign keys            | no    | no  | no  |
| Transaction concepts    | Multi-document ACID<br>Transactions with snapshot isolation  | no  | Optimistic locking, atomic execution of commands blocks and scripts   |
| Concurrency             | yes  | yes   | yes    |
| Durability              | yes   | yes   | yes    |
| In-memory capabilities  | yes   | no  | yes   |
| User concepts           | Access rights for users and roles  | no  | Simple password-based access control   |