Database Management Systems

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| --- | --- |
| DBMS name | MySQL |
| Owner | Oracle Corporation |
| Supported Models | Relational DB |
| Who is using it (min 3) | GitHub, Facebook, Uber |
| Availability tools and how it works | Group replication: replicates data to all members of a cluster, providing fault tolerance, automated failover, and elasticity  Router: ensures client requests are load balanced and routed to the correct servers |
| Data partitioning and how it works | Yes, it enables you to distribute portions of individual tables across a file system according to rules which you can set |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud, Hybrid |
| Data manipulation language | SQL |
| Data Storage System | Oracle Cloud |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | Microsoft Azure |
| Owner | Microsoft |
| Supported Models | Relational DB |
| Who is using it (min 3) | HP, Adobe, Seattle Seahawks, Polycom |
| Availability tools and how it works | ScaleArc: DB load balancing  Azure backup: online data backup as a service  Azure storage replication: data in Microsoft Azure storage is always replicated to ensure durability and high availability |
| Data partitioning and how it works | Yes, it enables you to physically divide data into separate data stores. |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud, Hybrid |
| Data manipulation language | SQL |
| Data Storage System | Microsoft SQL Server |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | PostgreSQL |
| Owner | PostgreSQL |
| Supported Models | Relational DB |
| Who is using it (min 3) | American Chemical Society, US State Department, Cisco |
| Availability tools and how it works | Replication  Failover: If the primary server fails, the standby server begins failover procedures |
| Data partitioning and how it works | Yes, supports basic table partitioning |
| On-Premise, on-cloud or hybrid | On-Premise |
| Data manipulation language | SQL |
| Data Storage System | PostgreSQL |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | IBM Db2 |
| Owner | IBM |
| Supported Models | Relational DB |
| Who is using it (min 3) | Sicoob, China Minsheng Banking Corp, YAZAKI |
| Availability tools and how it works | High Availability Disaster Recovery: uses db logs to replicate the primary db to the standby db  Client reroute |
| Data partitioning and how it works | Yes, supports partitioning |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud |
| Data manipulation language | SQL |
| Data Storage System | Db2 Server |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | Cassandra |
| Owner | Apache Software Foundation |
| Supported Models | Non-relational db |
| Who is using it (min 3) | CERN, eBay, Hulu, Netflix |
| Availability tools and how it works | Replication  Data load balancing |
| Data partitioning and how it works | Yes, supports partitioning |
| On-Premise, on-cloud or hybrid | On-Cloud |
| Data manipulation language | CQL |
| Data Storage System | Apache Cassandra |
| Other Interesting Features | It is a decentralized DB, meaning that every node in the cluster has the same role |

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| --- | --- |
| DBMS name | MongoDB |
| Owner | MongoDB Inc. |
| Supported Models | Non-relational db |
| Who is using it (min 3) | Bosch, Expedia, Forbes |
| Availability tools and how it works | Replication  Data load balancing |
| Data partitioning and how it works | Yes, supports partitioning |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud |
| Data manipulation language | Javascript |
| Data Storage System | GridFS |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | Firebase |
| Owner | Google |
| Supported Models | Non-relational db |
| Who is using it (min 3) | The New York Times, Shazam, The Economist |
| Availability tools and how it works | Data load balancing |
| Data partitioning and how it works | No |
| On-Premise, on-cloud or hybrid | On-Cloud |
| Data manipulation language | Javascript |
| Data Storage System | Google Cloud |
| Other Interesting Features |  |

|  |  |
| --- | --- |
| DBMS name | Amazon Aurora |
| Owner | Amazon |
| Supported Models | Relational DB |
| Who is using it (min 3) | Coursera, Unilever, Ticketmaster |
| Availability tools and how it works | Routing to determine where the traffic gets directed  Load balancing |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud, Hybrid |
| Data manipulation language | SQL, Javascript |
| Data Storage System | Amazon Cloud |
| Other Interesting Features |  |

|  |  |
| --- | --- |
| DBMS name | Amazon DynamoDB |
| Owner | Amazon |
| Supported Models | Non-relational DB |
| Who is using it (min 3) | Airbnb, Amazon, Samsung |
| Availability tools and how it works | Routing to determine where the traffic gets directed  Load balancing |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | On-Premise, On-Cloud, Hybrid |
| Data manipulation language | Javascript |
| Data Storage System | Amazon Cloud |
| Other Interesting Features |  |

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| --- | --- |
| DBMS name | Google Cloud |
| Owner | Google |
| Supported Models | Relational DB |
| Who is using it (min 3) | Veritas, CloudBerry, Cloudian |
| Availability tools and how it works | Routing to determine where the traffic gets directed  Load balancing  Multi-region setups for optimal availability |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | On-Cloud |
| Data manipulation language | SQL |
| Data Storage System | Google Cloud |
| Other Interesting Features |  |

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| --- | --- |
| BDMS name | Apache Hadoop |
| Owner | Apache |
| Supported Models | No SQL |
| Who is using it (min 3) | Alibaba, AOL, CloudSpace, Dropfire, eBay, Facebook |
| Availability tools and how it works | Divides data in nodes, divided through different racks |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | Hybrid |
| Data manipulation language | Hive |
| Data Storage System | Csv, TSV, Sequence files,Parquet |
| Other Interesting Features |  |

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| --- | --- |
| BDMS name | SQL Server |
| Owner | Microsoft |
| Supported Models | SQL |
| Who is using it (min 3) | NASDAQ, Yahoo, Dell |
| Availability tools and how it works | SQL server uses Windows Server Failover Clustering  Distributed through nodes |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | On-permise |
| Data manipulation language | Transact-SQL |
| Data Storage System | XML |
| Other Interesting Features | Compatibility with Azure |

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| --- | --- |
| BDMS name | Firebird |
| Owner | Firebird foundation |
| Supported Models | SQL, PSQL(Procedural) |
| Who is using it (min 3) | U.S Navy, British Rail, KIMData |
| Availability tools and how it works | Firebird failover Cluster |
| Data partitioning and how it works | By column, clause, row. |
| On-Premise, on-cloud or hybrid | On-Premise |
| Data manipulation language | Subset of SQL |
| Data Storage System | Csv, json |
| Other Interesting Features |  |

|  |  |
| --- | --- |
| BDMS name | Oracle Database 12c |
| Owner | Oracle |
| Supported Models | SQL |
| Who is using it (min 3) | Linkedin, Toshiba,Philips |
| Availability tools and how it works | Oracle Active Data Guard gives read-only permissions to the physical data  Data extraction and backup  Load balancing |
| Data partitioning and how it works | Oracle tiene sus poropias formas de hacer data partitioning: Range, list, auto-list, composite, multi-column, Interval virtual, Interval, range. |
| On-Premise, on-cloud or hybrid | Hybrid |
| Data manipulation language | SQL |
| Data Storage System | NAS,SAN,Tape |
| Other Interesting Features | Cloud, Paas. |

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| BDMS name | SQLite |
| Owner | D.Richard Hipp |
| Supported Models | SQL |
| Who is using it (min 3) | Mozilla firefox, Skype,XBMC |
| Availability tools and how it works |  |
| Data partitioning and how it works | Yes |
| On-Premise, on-cloud or hybrid | On-Premise |
| Data manipulation language | SQL |
| Data Storage System | Json, CSV |
| Other Interesting Features |  |