

Cassandra vs MongoDB vs HBase



DIFFERENCE BETWEEN POPULAR
NOSQL DATABASES

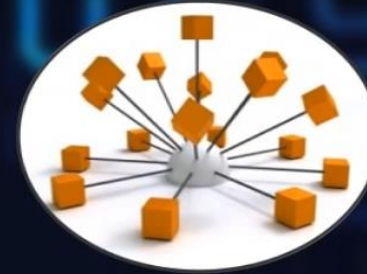
NoSQL Database

NoSQL, which stand for “Not only SQL”, is an alternative to traditional relational **databases** in which data is placed in tables & data schema is carefully designed before the **database** is built



Need for NoSQL Database

Capable of running on a larger number of nodes



Non-locking Concurrency Mechanism

Scalable Replication & Distribution



Schema-less data model



Key-Value Store



Column Based Store



Document Based Store



Graph Based Store



- 1 **Description**
- 2 Data Model
- 3 Implementation Language
- 4 Query Language
- 5 Performance
- 6 Security
- 7 Replication Methods
- 8 Competitive Advantages
- 9 Application Areas
- 10 Market Metrics



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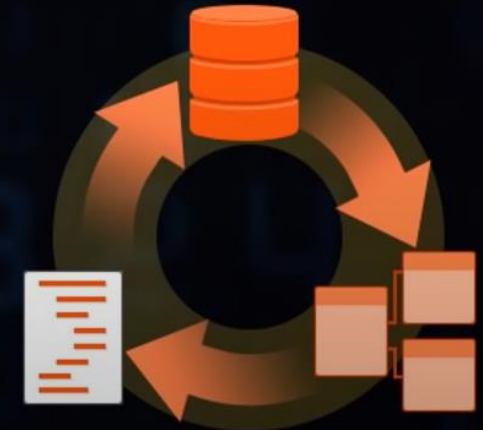
Key Spaces



Flexible Schema



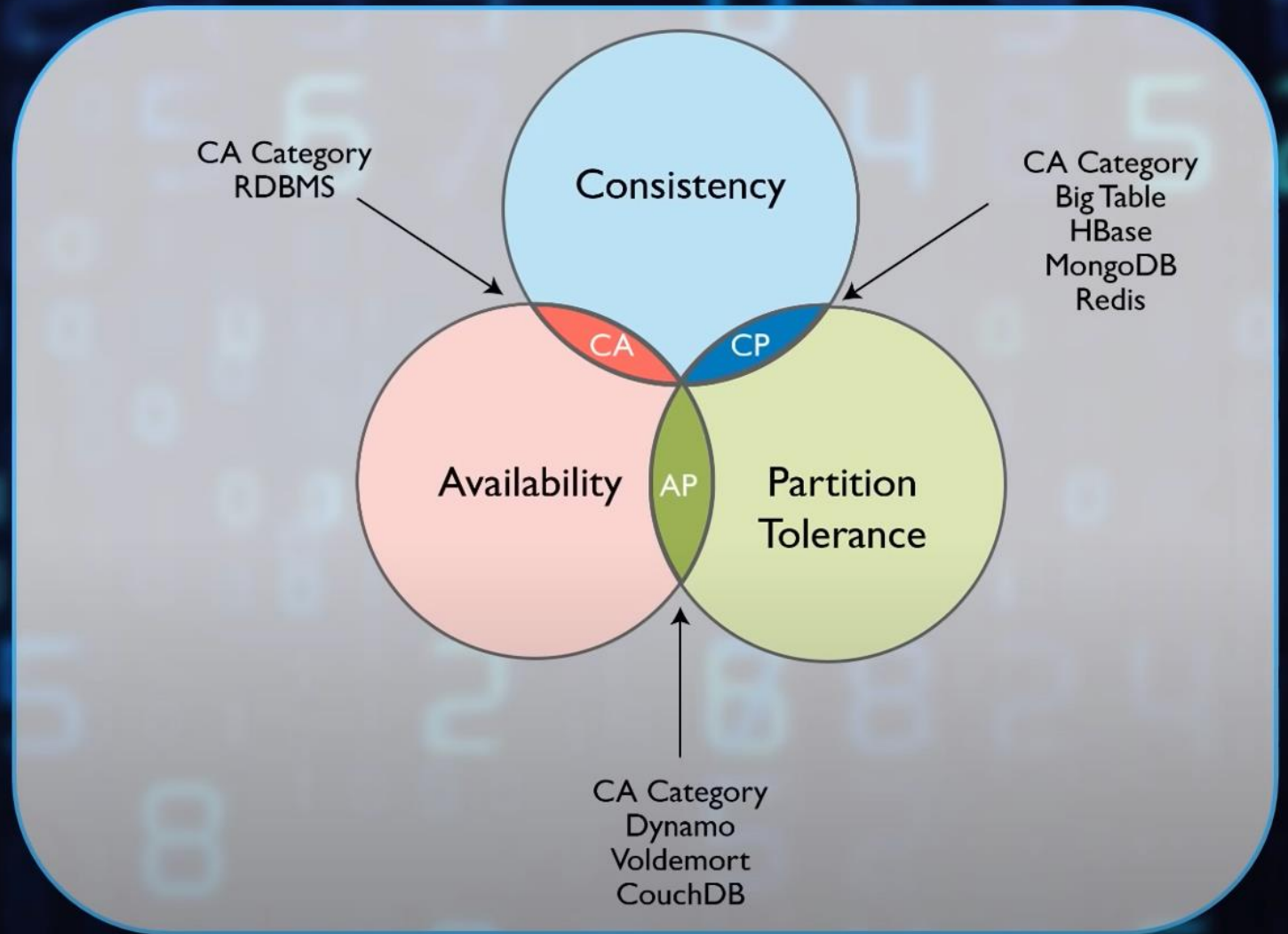
Column Oriented Database



$C \rightarrow$ Consistency

$A \rightarrow$ Availability

$P \rightarrow$ Partition
Tolerance



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Comparatively better



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- ***TLS/SSL Encryption***
- ***Client Authentication***
- ***Authorization***



- ***Encryption***
- ***Authentication***
- ***Authorization***
- ***Governance***
- ***Auditing***



- ***Thrift server role***
- ***Authentication***
- ***Authorization***

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**Selective Replication
Factor**



**Master Slave
Replication**



**Selective Replication
Factor**

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*40% of Fortune 100
companies*



40 million downloads



*7% of the companies in the
world*