

# MongoDB Introduction







MongoDB is an open-source NoSQL document database that provides high performance, high availability and automatic scaling.

# Why use MongoDB?



### Flexibility

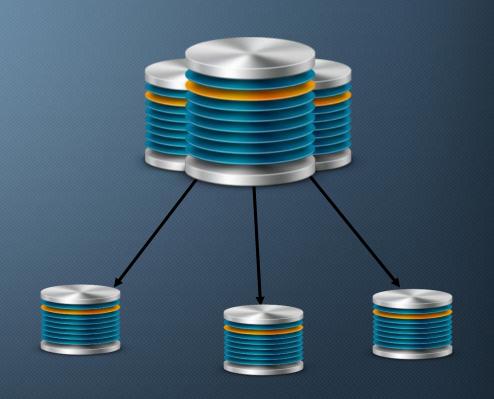
□ Data in MongoDB has a flexible schema. Collections do not enforce document structure. This flexibility gives you data modeling choices to match your application and its performance requirements.





### Scalability

As the size of the data increases, a single machine may not be sufficient to store the data nor provide an acceptable read and write throughput. Sharding solves the problem with horizontal scaling.



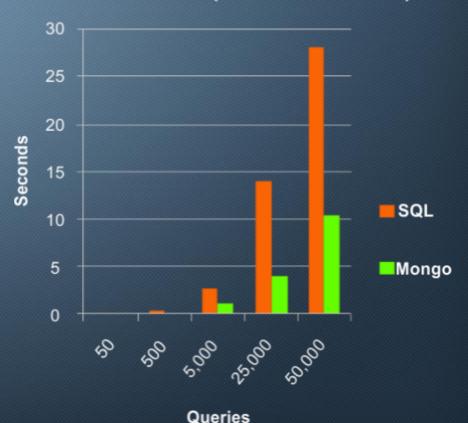
# Why use MongoDB?



#### Performance

MongoDB is 2 to 10 times faster than MySQL and 50 times faster than CouchDB.

#### Basic Queries (Smaller is better)



# "MongoDB" a NoSQL Database



☐ MongoDB is an open-source document database and the leading NoSQL database.

☐ MongoDB avoids the traditional table based relational database structure in favor of JSON-like documents with dynamic schemas, making the integration of data in certain types of applications easier and faster.

## Reasons to use NoSQL



- ☐ Simpler data model (no joins) ☐ R
  - ☐ If scalability is a concern.
- ☐ Distributed storage
- ☐ Real time analysis
- Needs to be implemented on a very low budget and "scaled out"

- Rapid development
- Provides flexibility
- ☐ Streaming/Volume
- ☐ Redundancy/ Reliability