

## Document Databases





#### What are Document Databases?



- Data is stored in the form of documents where file format is JSON/BSON or Binary JSON.
- It follows some kind of structure.





## Use cases where document databases are used



#### 1. In case of semi-structured data

Let's take the case of social media where we have posts, comments and associated likes and replies etc. Here, the structure is dynamic and changing.

Structured	Semi-structured
Data	Data



### Use cases where document databases are used



#### 2. In case of flexible schema requirement

Let's take the example of an ecommerce site where Products can be household or electronics. For household products, the identifying attributes can be 5 and for electronics it may be 7 based on the specifications. Hence, schema is not fixed. Here document databases help.





## Use cases where document databases are used



#### 3. Provides the best of both the worlds

It gives structure/schema to some extent and also provides scalability and flexibility. Hence, is a good mix of both the approaches.





## Challenges of a Document Database



#### 1. Consistency

Since it is based on the concept of distributed system, achieving high consistency like RDBMS is a challenge.



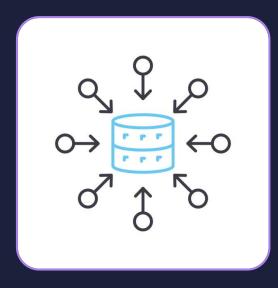


## Challenges of a Document Database



#### 2. Aggregation

The queries for performing aggregation (as per requirement) in the schema/database is complex.





## Challenges of a Document Database



#### 3. Transaction support

It is not as simple as in RDBMS and is rather complex. It has improved in latest releases bit still needs to be worked upon.

\*Most widely used Document Database is MongoDB



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