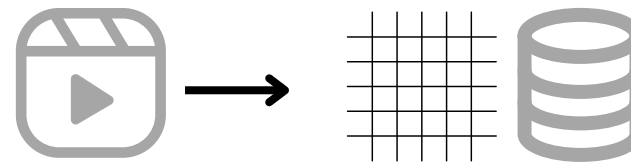


MONGO DB

Explained In-short

GridFS to insert Audio/Video files to DB



- Storage Engine : Wired Tiger (wt)
- Crash Resiliency : Journal Log
- Compress Methods : Snappy/glip/none
- Storage Format : BSON with wt ext

INDEXES

- Primary Index : On _id
- Unique
- Composite (2 or more fields)
- Multi Key (On Array Fields)
- Time to Live
- Partial Filter / Sparse
- Wild Card
- Text
- GeoSpatial .. many more

AGGREGATION FRAMEWORK

Complex queries

ENTERPRISE FEATURES

- Auditing
- AD/LDAP
- Encryption at Rest
- In-Memory Storage Engine
- Queryable Encryption

GUIS

- Mongo Compass (Free)
- Studio 3T (commercial)

MANAGEMENT TOOLS/APPS

- MongoDB Atlas (Cloud)
- Ops Manager (OnPrem)

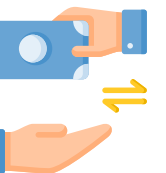
GENERAL LOG

mognod.log

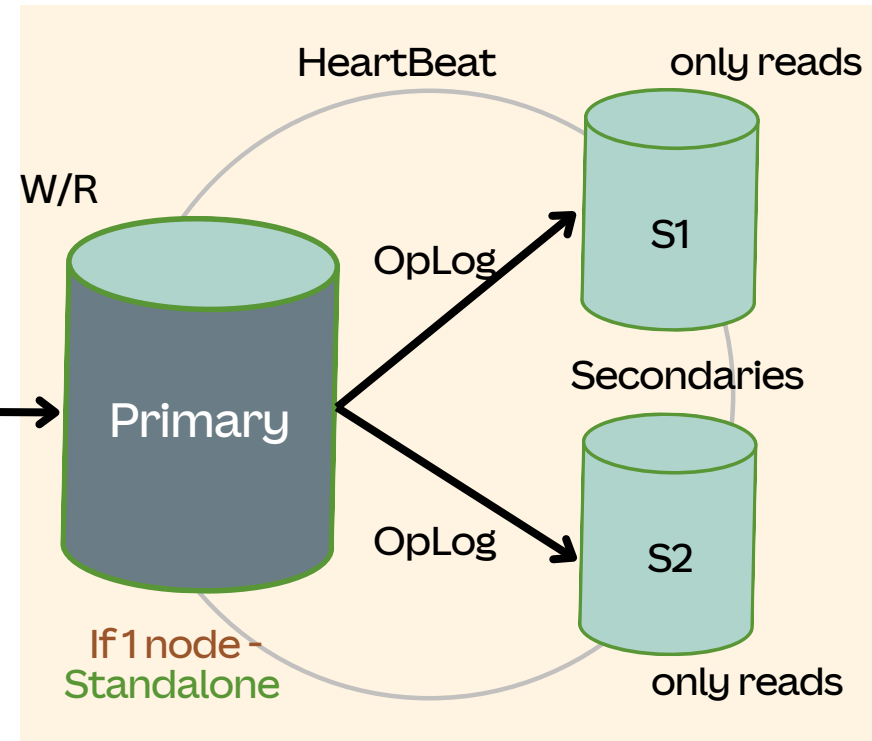
CONFIGURATION

/etc/mognod.conf (YAML File)

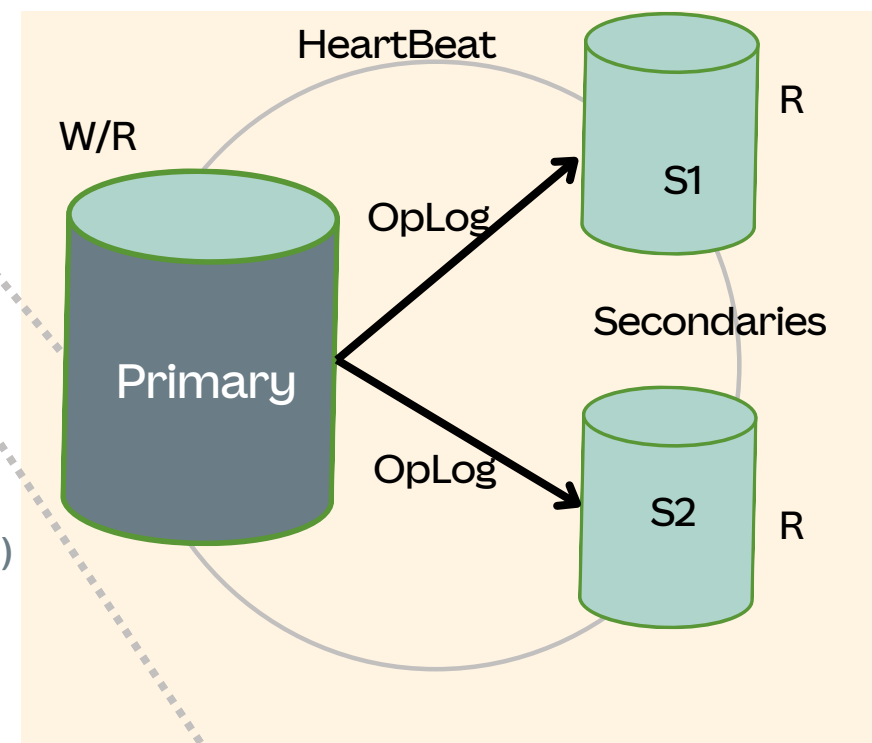
ACID TRANSACTIONS



If 2/+ nodes - It's Replication (High Availability)



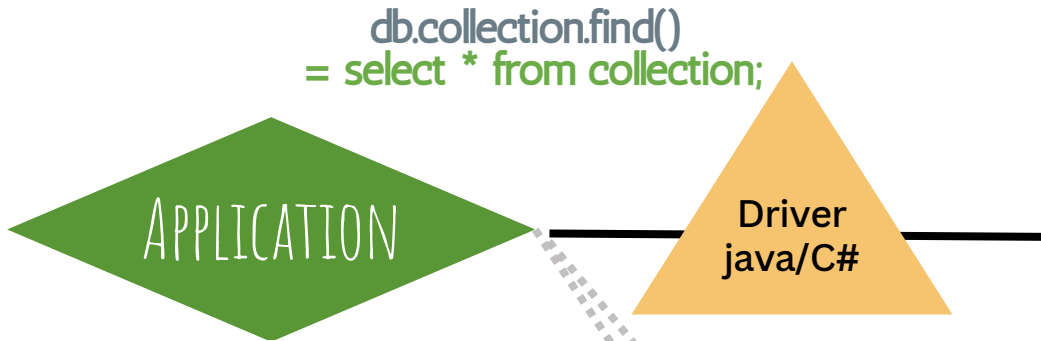
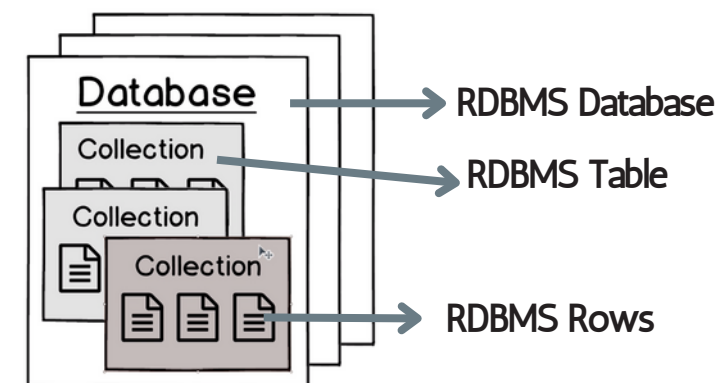
Shard1



Shard2

Sharding (Horizontal Scalability)

- 3 TYPES
- RANGE
 - HASH
 - DC-AWARE



```
db.collection.find()
= select * from collection;
```

```
db.collection.insertMany([ {JSON1}, {JSON2}, ... ])
```

```
Example JSON : {
  _id : 7654,
  name : Sahiti,
  address : { roadNo: 123, landMark: 'TWC',
  favourites : ['chess', 'music'],
  gpa : 4.5
}
```

- Sharding (Similar to Partitioning) with Shard Key
- mongos (Query Router)
- config servers (PSS) (meta data)
- Balancer (data/chunk migrations between shards)

Shard N