

Welcome!

# MongoDB

Big Business meets Startup - London, UK

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# 10gen, the company behind MongoDB

- 10gen began the MongoDB project
- Development, support, and services for MongoDB
- 100 employees
- Offices/employees in New York, Palo Alto, London and Dublin
- \$31M+ funding (last round, Sept 2011)
- Investors: Sequoia, Flybridge, Union Square

- Dwight Merriman – CEO; Founder, CTO DoubleClick
- Max Shireson – President; COO MarkLogic, 9 years at Oracle
- Eliot Horowitz – CTO; Co-founder of Shopwiki, DoubleClick
- Erik Frieberg – VP Marketing; HP Software, Borland, BEA
- Ben Sabrin – VP of Sales; VP of Sales at Jboss, over 9 years of Open Source experience

## Big Data

- explosion of data and our desire to make meaningful decisions from that data

## New Programming models

- the existing data model is an impediment to Programming agile development.

## New Hardware Architecture

- The Cloud is starting to become the dominant deployment architecture. Databases need to take advantage of horizontal scaling capacity

- Open source, high performance database
- Key Innovations
- Horizontally scalable
- Agile
- Easy to Deploy in the Cloud / Virtual Servers
- Version 2.0 released September '11
- 100,000+ downloads per month

# MongoDB Use Cases

 <p>Analytics</p>	 <p>Content Management</p>	 <p>E-Commerce</p>
 <p>Advertising</p>	 <p>Gaming</p>	 <p>Social Network</p>

## Agility

- Applications store complex data that is easier to model as documents
- Schemaless DB enables faster development cycle

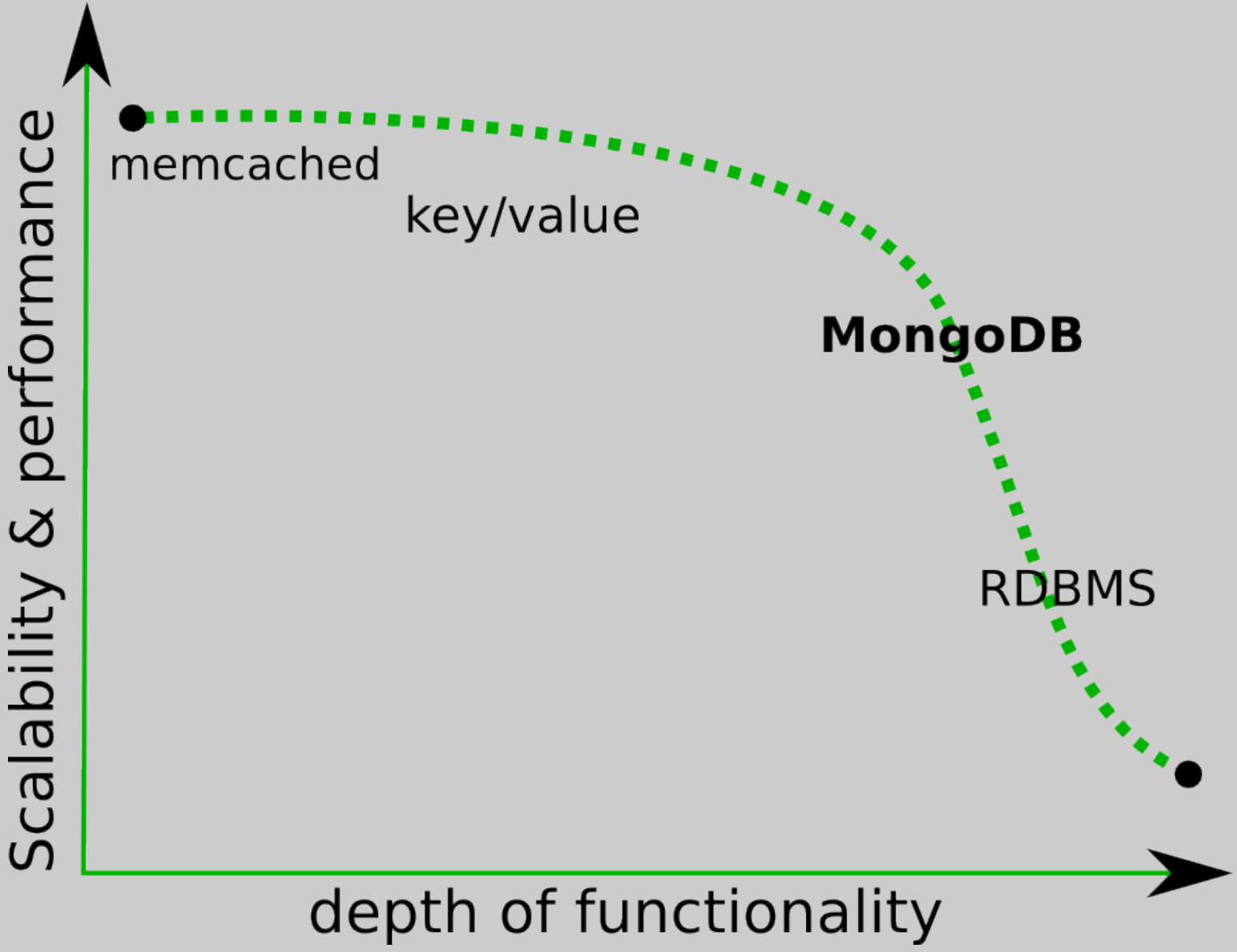
## Scale

- Relaxed transactional semantics enable easy scale out

## Cost

- Cost effectively operationalize abundant data (clickstreams, tweets, logs, ...)

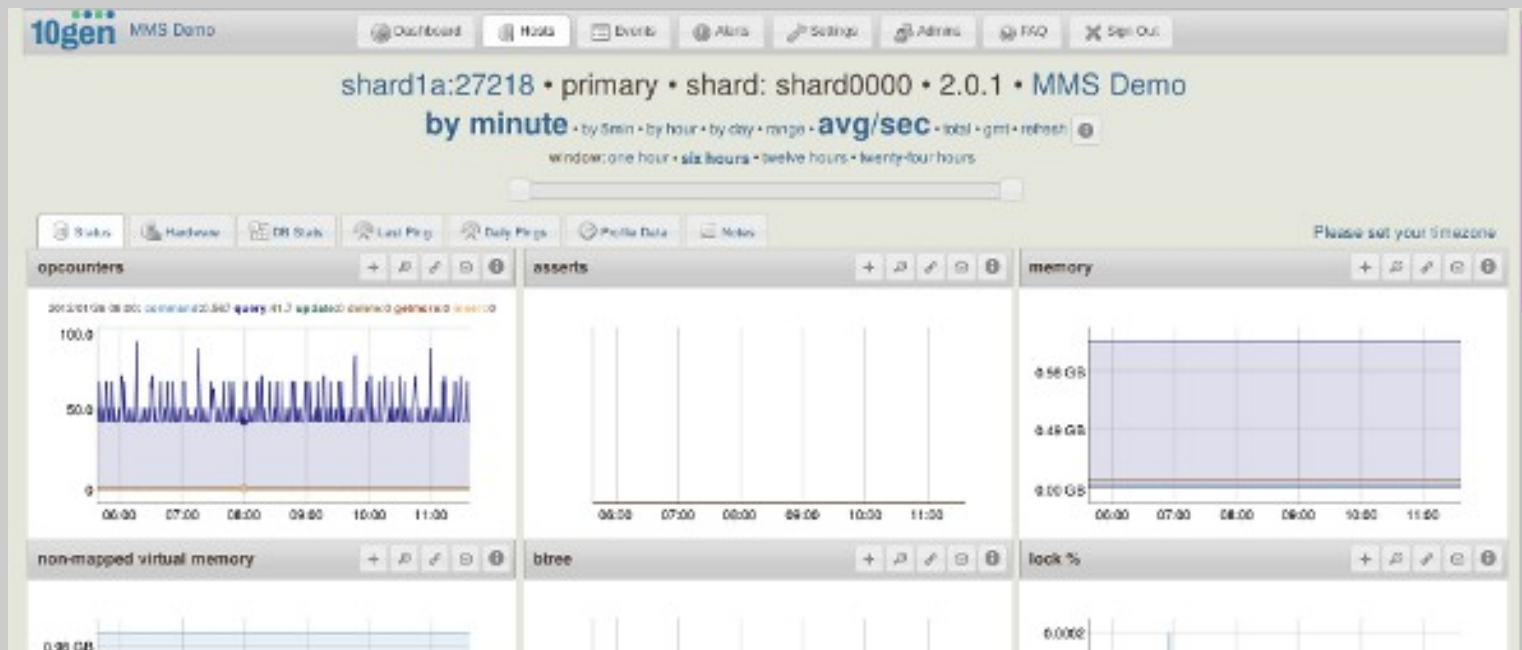
# Database landscape





# MMS: MongoDB Monitoring Service

- SaaS solution providing instrumentation and visibility into MongoDB systems
- Included in the 10gen commercial subscriptions.
- Deployed to most customers
- Free version released
- 3,500+ customers signed up and using service



# Terminology

- Document: the data (row)
- Collection: contains documents (table, view)
- Index
- Embedded Document (~join)

- Are schemaless
- Can have embedded documents

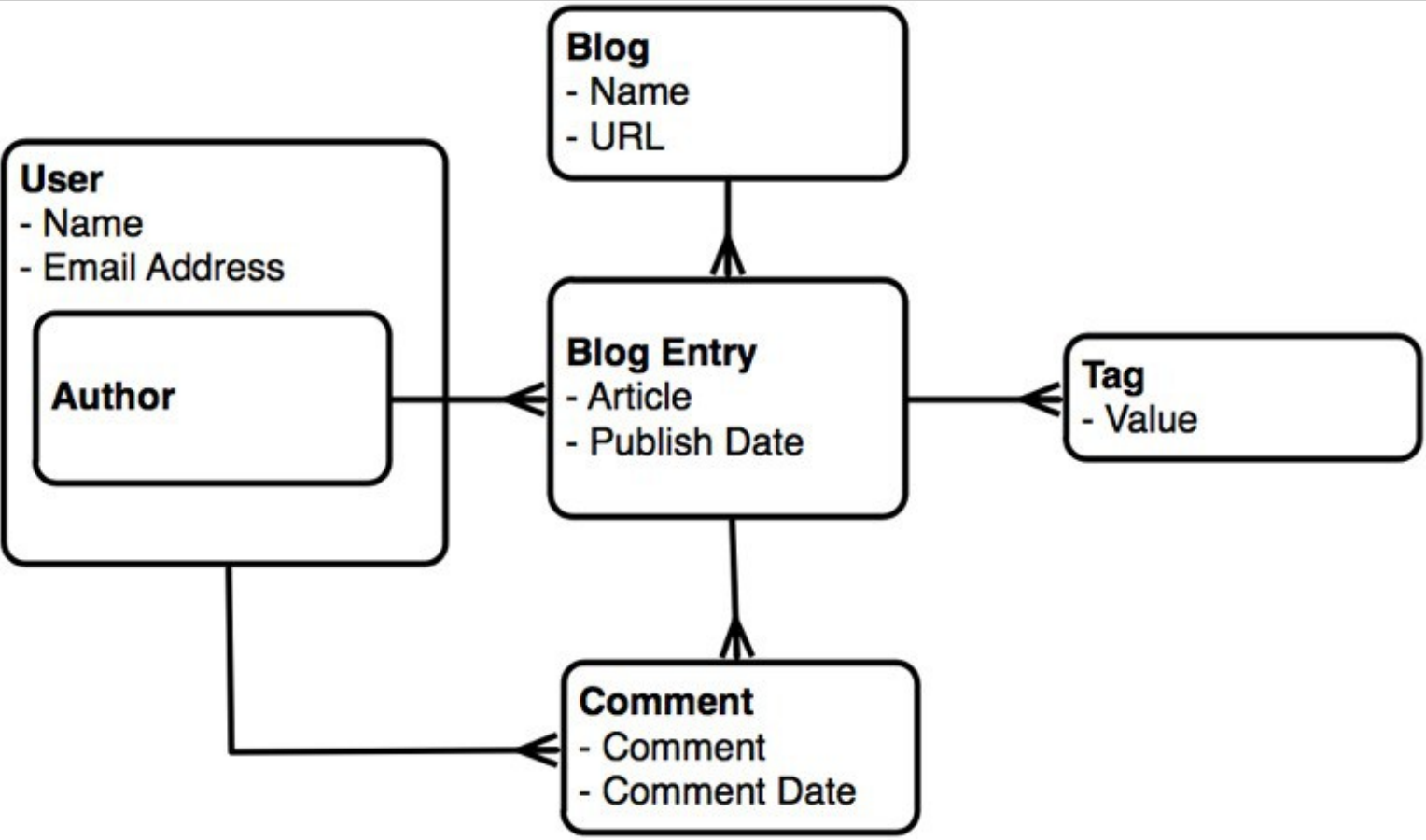
## Simple document:

```
{
  "_id" : ObjectId("4cb4ab6d7addf98506010001"),
  "twitter" : "derickr",
  "name" : "Derick Rethans"
}
```

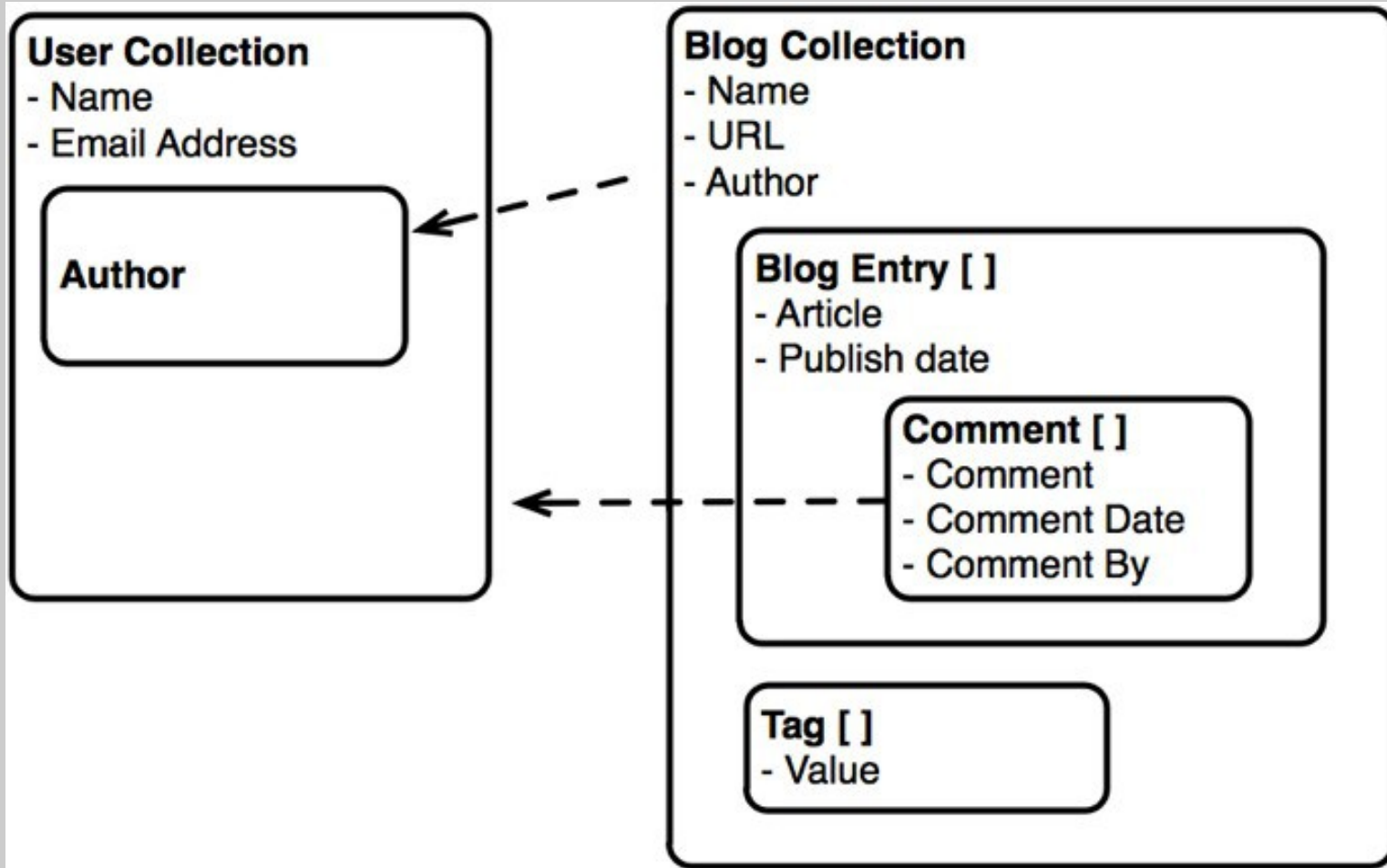
## Document with embedded documents:

```
{
  "_id" : "derickr",
  "name" : "Derick Rethans",
  "bookmarks" : [
    { "title" : "MongoDB",
      "url" : "http://mongodb.org",
    },
    { "title" : "10gen",
      "url" : "http://10gen.com",
    }
  ]
}
```

# Blog in a RDBMS



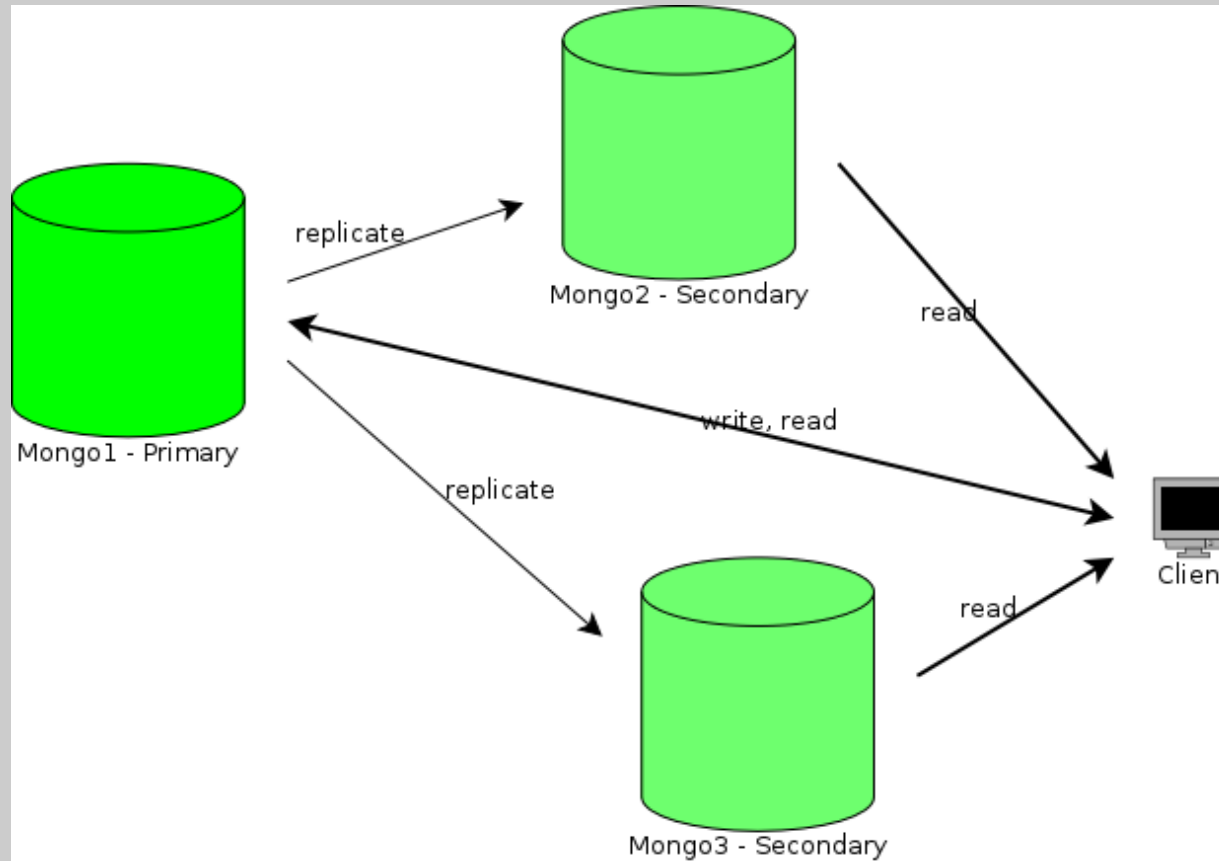
# Blog in MongoDB



## Other Features

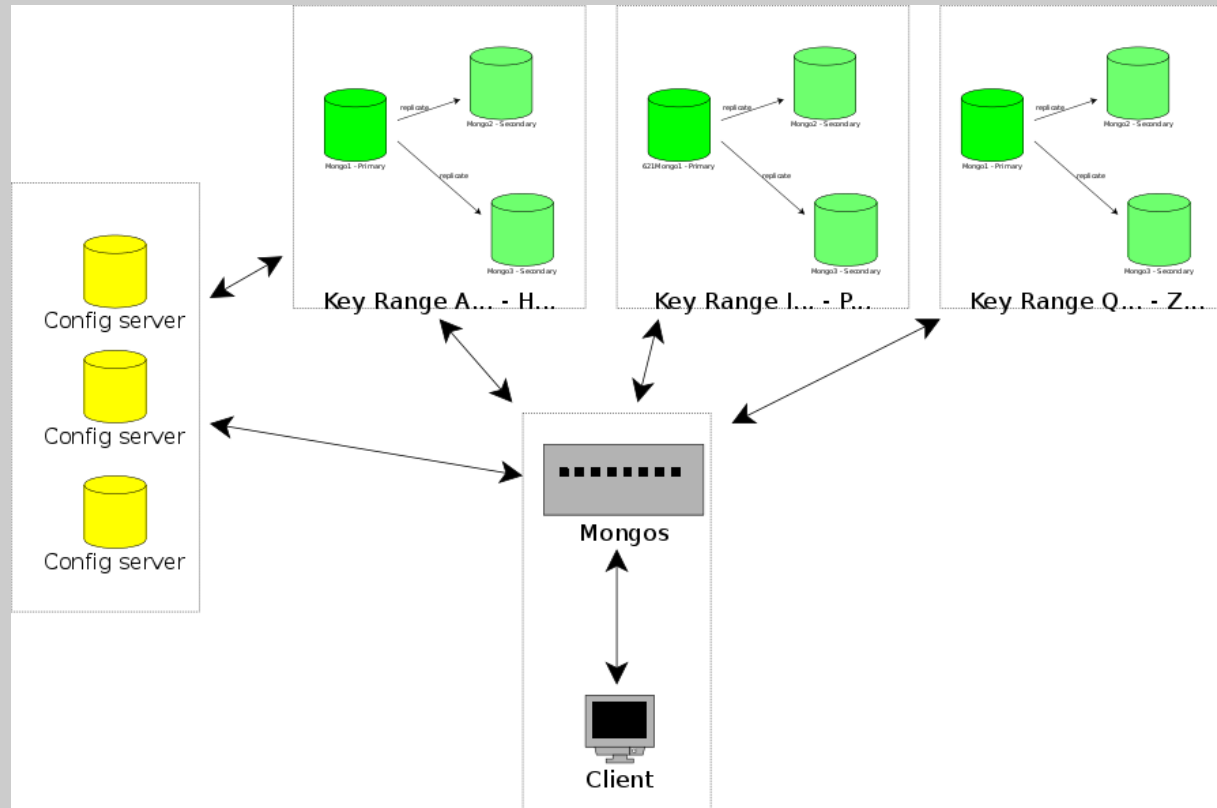
- Secondary and compound indexes
- 2D/Geospatial indexes
- GridFS
- Map/reduce
- Aggregation framework

# Replication



- Failover/Availability
- Scaling reads
- Primaries, secondaries and arbiters
- Odd number to prevent split brain

# Sharding



- Scaling writes and reads
- Config servers, router (mongos) and replica sets



# Who uses MongoDB?



- More than 400 customers
- Noteworthy new references (all speaking publicly)  
Disney, MTV, Ebay/X.com Ericsson, Viacom, and Telefonica
- Many fortune 100 companies are now paying customers

- MongoDB Days: 1.100 at MongoSV in December 23 MongoDB Days in 2011 reaching over 9.000 people
- MongoDB User Groups: 238 cities with Mongo User Groups (MUGs) 200+ events in 2011
- European events in London, Munich and Paris
- Asian events in Tokyo and Beijing

## MongoDB UK

- Annual one day conference dedicated to the open source database MongoDB.
- June 20th, 2012 at the Mermaid Conference & Events Centre
- Early Bird (\$50) ends May 23rd
- Expecting 600+ people

## Mongo UGs

- MongoDB London (May 29th): monthly
- MongoDB Thames Valley: monthly
- Office Hours (May 2nd): bi-weekly near Old Street

Thanks!

Questions?

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