MongoDB vs OrientDB

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Overview

MongoDB

Born in 2009, it is one of the best known and document databases used in the world of its main features are:

- C++ implementation language
- Database model *Document Store*
- NO-SQL and Non-relational database
- ACID transaction less
- Ad hoc query language
- Aggregation
- Unique Index

OrientDB

Born in 2010, it is a hybrid between a database of documents to a database graphs.
Its main features are:

- Java implementation language
- Database model *Document Store - Graph DBMS*
- NO-SQL Database
- Query language similar to SQL
- ACID transaction
- Multithread indexing
- Trigger

When use MongoDB

Why use MongoDB?

1. Large amounts of data
2. No transactions needs
3. No relations need
4. Agile development method
5. Scalability
6. Performance

When use OrientDB

Why use OrientDB?

1. Large amounts of data
2. Transactions needs
3. Telations need
4. Agile development method
5. Scalability
6. Performance (JOIN included)
7. Query language
8. Object class mapping

MongoDB VS OrientDB

Relazioni

- OrientDB: Relation whit *pointer* between JSON
- MongoDB: *Index* write on file

Query Language

- OrientDB: simil-SQL language
- MongoDB: new dedicated language

Memory Management

- OrientDB: PLOCAL technique
- MongoDB: LOCAL technique

Indexing

- OrientDB: three algorithms (SB-tree, Hash index ,Lucene)
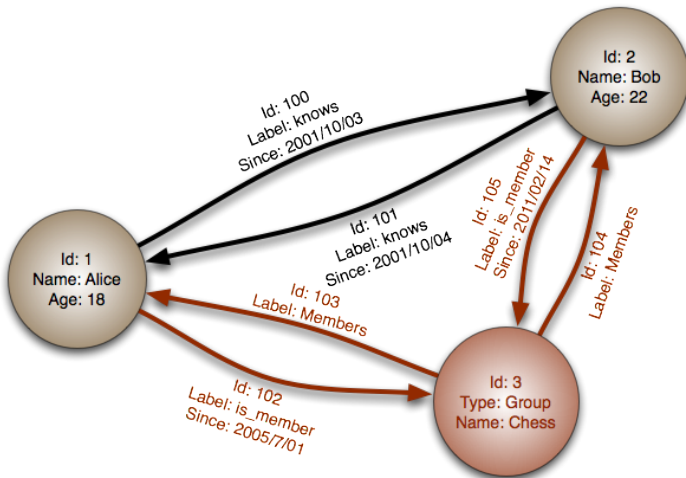- MongoDB: one algorithm (B-tree)

Figure : OrientDB vertex example

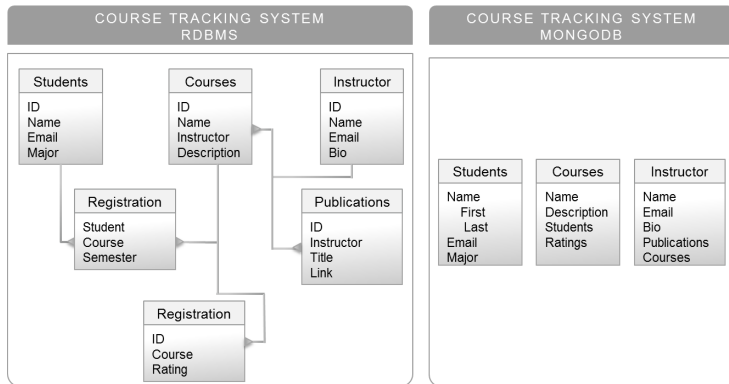Figure : SQL to MongoDB schema

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