

# Popular NoSQL Databases

- Key Value Store
  - Redis
- Columnar Store
  - Cassandra
  - HBase
- Document Store
  - MongoDB
  - CouchDB

# Simba MongoDB ODBC and JDBC Driver with SQL Connector

- MongoDB is **schema-less**, the **SQL Connector defines schemas on the fly** providing a low-touch SQL window to MongoDB data
- Quick access to MongoDB data through **automatic schema generation and normalization** of arrays as virtual tables
- Schema Editor allows for **denormalization**, such as array flattening
- Supports ANSI SQL-92
- Access MongoDB data via SQL from analytic applications, such as Microsoft Excel, Power BI, Qlikview, Tableau and more
- Supports multiple platforms, including Windows, Linux and Mac OS

# Query Translator

## Convert MySQL Queries to MongoDB Syntax

<http://www.querymongo.com/>

**Enter MySQL Query:**

```
1 SELECT person, SUM(score), AVG(score), MIN(score), MAX(score), COUNT(*)
2 FROM demo
3 WHERE score > 0 AND person IN('bob','jake')
4 GROUP BY person;
```

# MongoDB Syntax:

```
1 db.demo.group({
2   "key": {
3     "person": true
4   },
5   "initial": {
6     "sumscore": 0,
7     "sumforaverageaveragescore": 0,
8     "countforaverageaveragescore": 0,
9     "countstar": 0
10  },
11  "reduce": function(obj, prev) {
12    prev.sumscore = prev.sumscore + obj.score - 0;
13    prev.sumforaverageaveragescore += obj.score;
14    prev.countforaverageaveragescore++;
15    prev.minimumvaluescore = isNaN(prev.minimumvaluescore) ? obj.score : Math.min(prev.minimumvaluescore, obj.score)
16    prev.maximumvaluescore = isNaN(prev.maximumvaluescore) ? obj.score : Math.max(prev.maximumvaluescore, obj.score)
17    if (true != null) if (true instanceof Array) prev.countstar += true.length;
18    else prev.countstar++;
19  },
20  "finalize": function(prev) {
21    prev.averagescore = prev.sumforaverageaveragescore / prev.countforaverageaveragescore;
22    delete prev.sumforaverageaveragescore;
23    delete prev.countforaverageaveragescore;
24  },
25  "cond": {
26    "score": {
27      "$gt": 0
28    },
29    "person": {
30      "$in": ["bob", "jake"]
31    }
32  }
33 });
```