
JNOSQL
Eclipse JNoSQL
Java
Community
Process
ECLIPSE
FOUNDATION
ORACLE
Developer
Champion
THE
APACHE
SOFTWARE FOUNDATION
BY SA
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NoSQL

Not Only SQL

01 Database

02 Doesn't use structure

03 Not Transaction

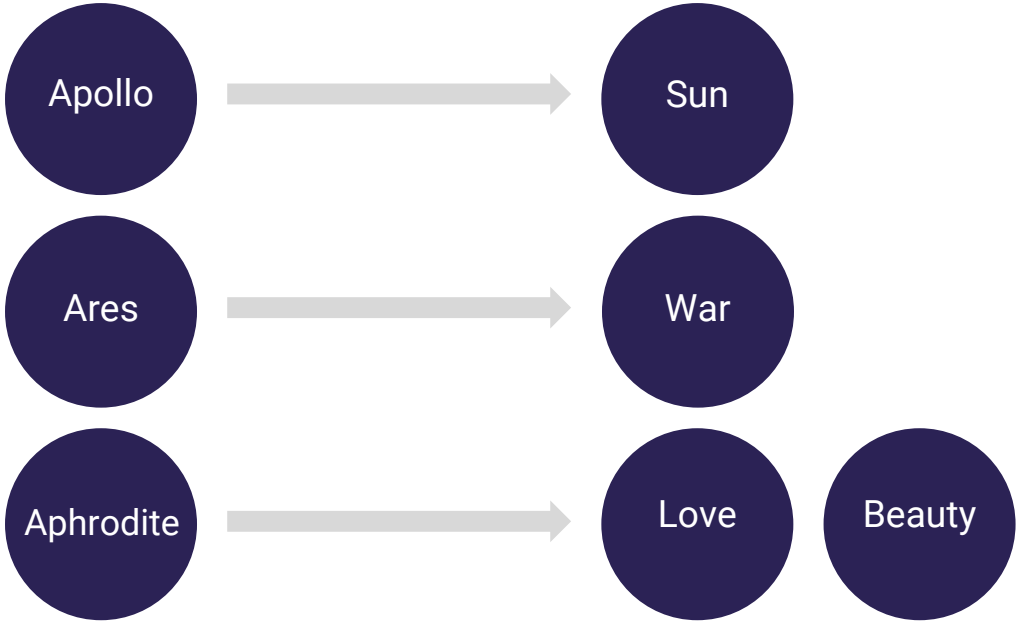
04 Base

05 Five different types

Key Value

NOT ONLY SQL

- AmazonDynamo
- AmazonS3
- Redis
- Hazelcast



Column Family

Not only SQL

HBase

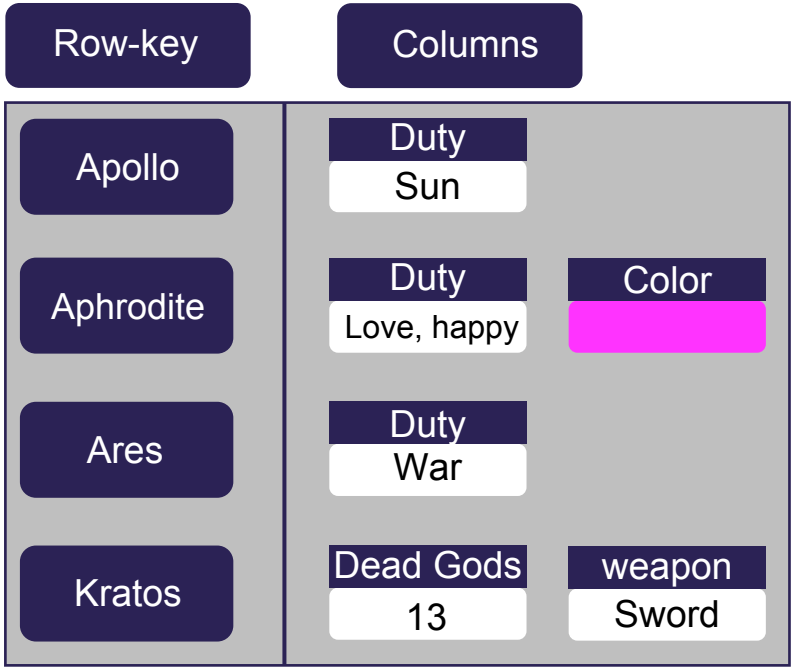
Cassandra

Scylla

Clouddata

SimpleDb

DynamoDB



Document

Not only SQL

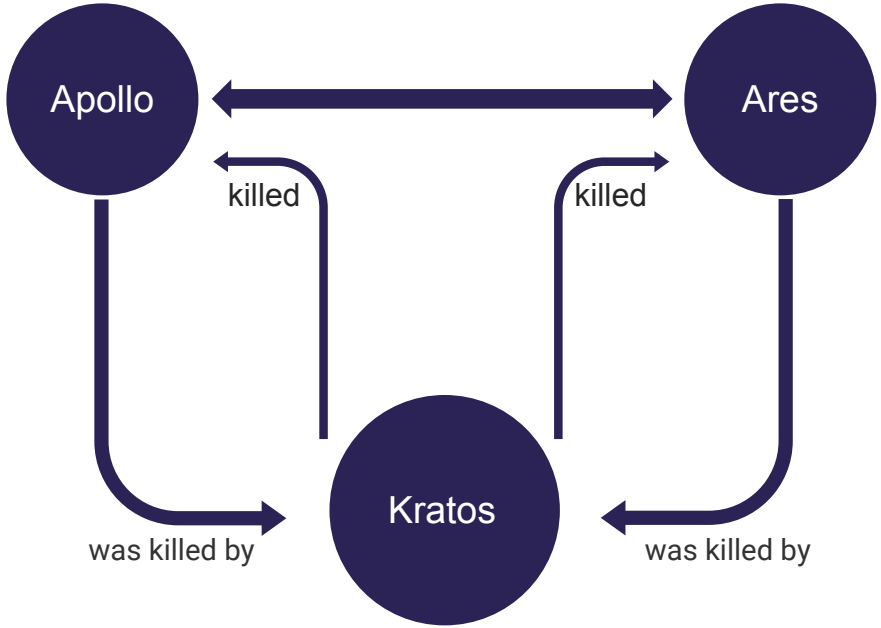
- ApacheCouchDB
- MongoDB
- Couchbase

```
{
  "name":"Diana",
  "duty":[
    "Hunt",
    "Moon",
    "Nature"
  ],
  "siblings":{
    "Apollo":"brother"
  }
}
```

Graph

Not only SQL

- Neo4j
- InfoGrid
- Sones
- HyperGraphDB



Multi-Model

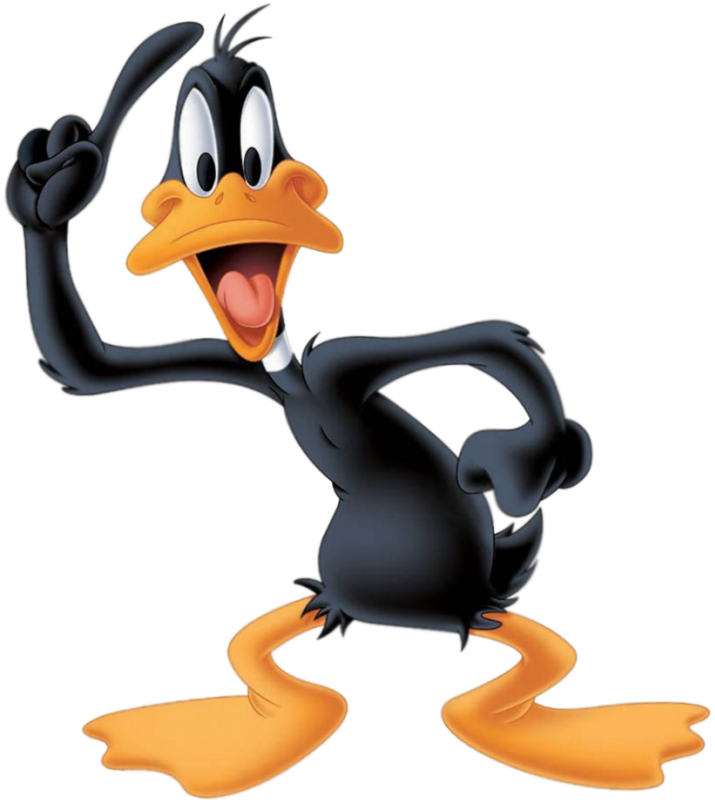
NOSQL

01 OrientDB (graph, document)

02 Couchbase (key value, document)

03 ArangoDB (document, graph, key-value)

04 Elasticsearch (document, graph)



BASE vs ACID

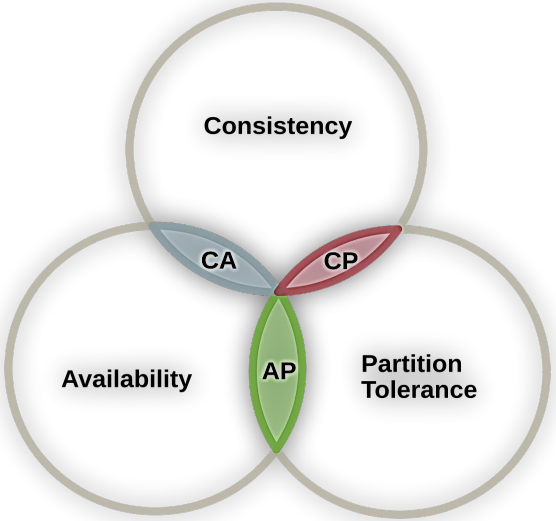
Not Only SQL

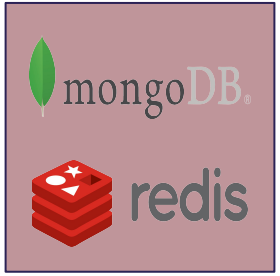
- Basically Available
- Soft state
- Eventual consistency

- Atomicity
- Consistency
- Isolation
- Durability

CAP

Not only SQL





JPA & JDO problem for NoSQL

Not Only SQL

01 Saves Async

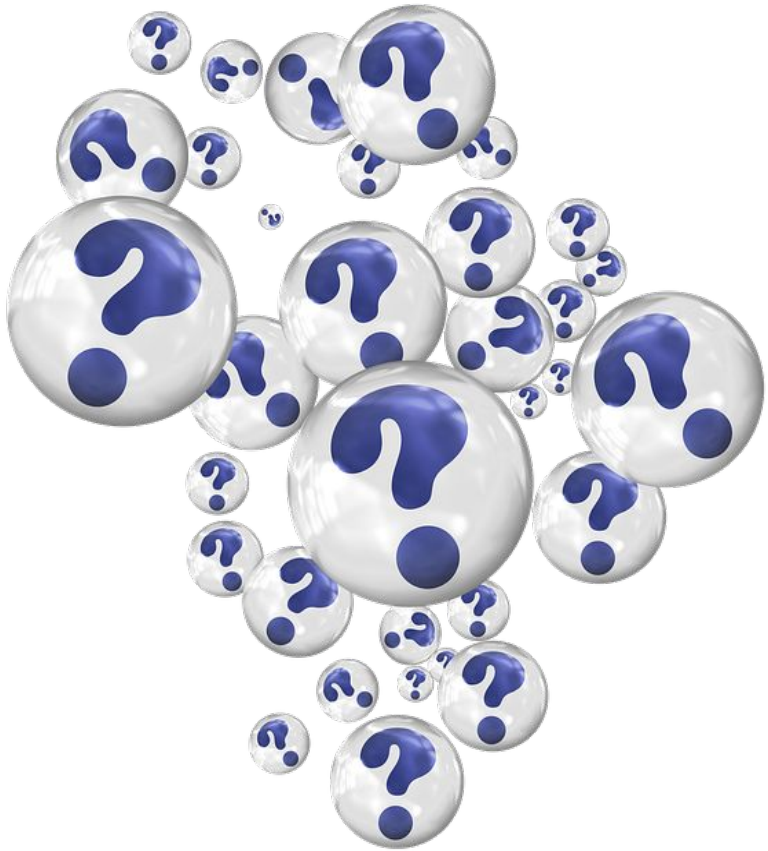
02 Async Callback

03 Time to Live (TTL)

04 Consistency Level

05 SQL based

06 Diversity in NoSQL



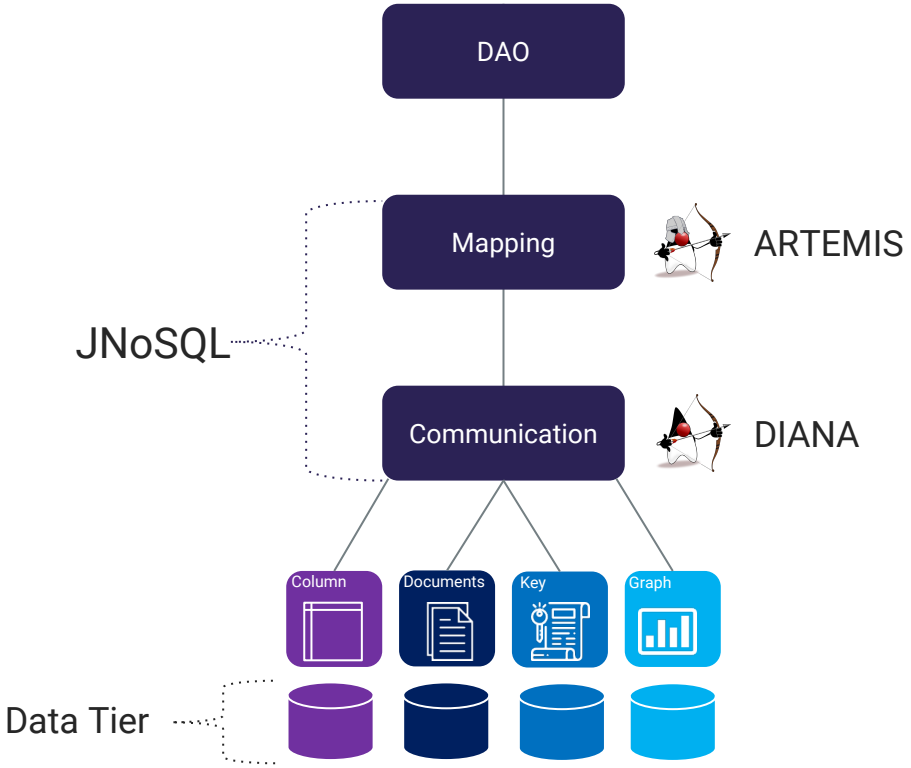
The Eclipse NoSQL Solution

01 Mapping API

02 Communication API

03 No lock-in

04 Divide and Conquer



Communication Issue


```
BaseDocument baseDocument = new BaseDocument();
baseDocument.addAttribute(name, value);
```

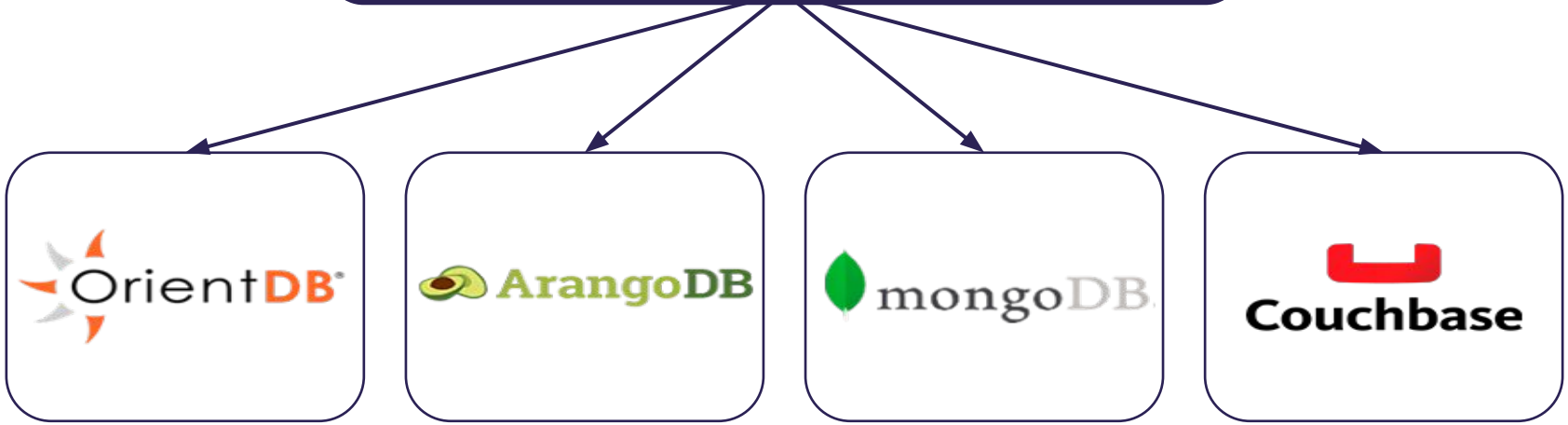

```
Document document = new Document();
document.append(name, value);
```


```
JsonObject jsonObject = JsonObject.create();
jsonObject.put(name, value);
```

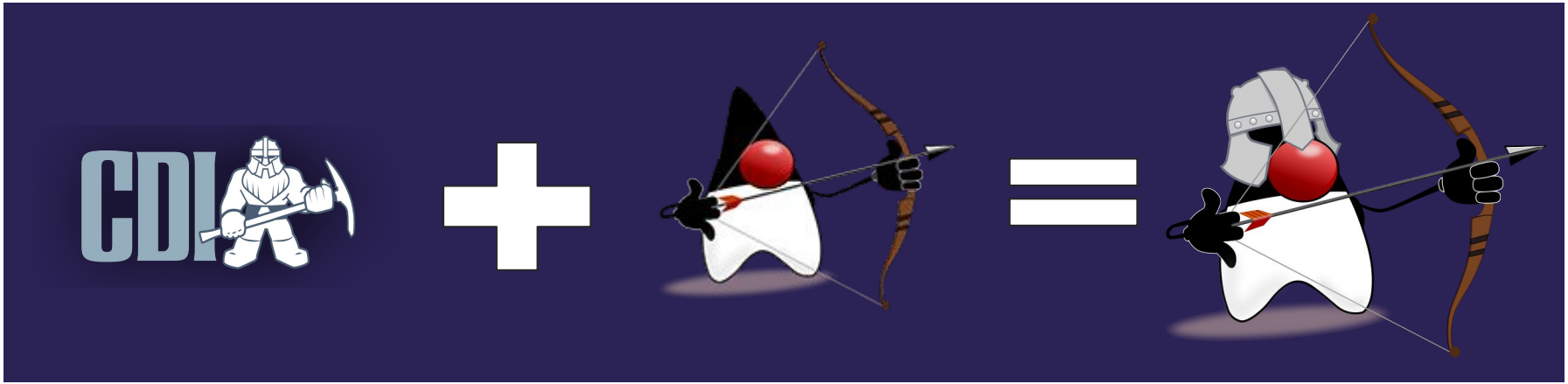

```
ODocument document = new ODocument("collection");
document.field(name, value);
```

Eclipse JNoSQL

```
DocumentEntity entity = DocumentEntity.of("collection");
entity.add(name, value);
```



Artemis



01 CDI Based

02 Diana Based

03 Annotation Based

04 Events to insert, delete, update

05 Supports to Bean Validation

06 Configurable and Extensible

07 Query Method

Support to

Java

JSON

XML

YAML

NoSQL Providers

cassandra

SCYLLA.

elastic

ArangoDB

OrientDB

riak

ORACLE NOSQL DATABASE

Couchbase

mongoDB.

neo4j

redis

APACHE HBASE

hazelcast

basho

Azure Cosmos DB

blazegraph™

CouchDB relax

GRAKN.AI

IBM Graph™

JanusGraph

KeyLines NETWORK INSIGHT

LINKURIOUS VISUALIZE GRAPH DATA EASILY

RAVENDB

Stardog

TITAN

Tom Sawyer SOFTWARE

Infinispan

Road Map

Draft and code proposal

Community Feedback

Involve NoSQL Vendors

Involve Solution Vendors

Eclipse Project

Development

JUGs/Communities

SOUJava
sociedade de usuários java

UAIJUG

DUBJUG

Javace

DFJUG

ojava

JavaBahia

LJC
London Java Community

GUJavaSC
Grupo de Usuários Java de Santa Catarina

JUG VALE
Grupo de Usuários Java do Vale

Redfoot JUG

RSJUG.org

Sertão JUG
Java User Group - Feira de Santana-BA

Java Noroeste

ALJUG

esJUG

Latin America

- Paraguay, Asunción
- Chile, Santiago de Chile
- Brasil, São Paulo
- Uruguay, Montevideo
- Argentina, Buenos Aires
- Perú, Lima
- Ecuador, Quito
- Colombia, Barranquilla
- Costa Rica, San José
- Panamá, Ciudad de Panamá
- México, Ciudad de México
- Guatemala, Ciudad de Guatemala

Oracle Code SF

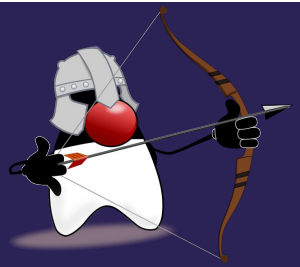
- **HOL5998** Eclipse JNoSQL: One API to Many NoSQL Databases - BYOL
- **DEV6043** Let’s Make Graph Databases Fun Again with Java
- **DEV6109** Jakarta EE Meets NoSQL in the Cloud Age

Specification Process

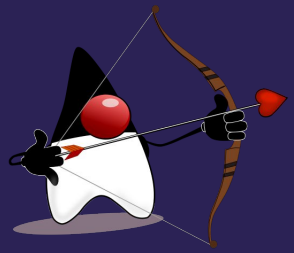
- Java EE belongs to Eclipse Foundation
- Code First
- Move Jakarta EE forwards with new specifications
- Hopefully a new namespace until Oracle One

References

Communication API
Support to Async operations
APIs



Mapping API
Bean Validation
Events
Repository
Template



Query by text
Prepared Statement

https://projects.eclipse.org/projects/technology.jnosql
https://github.com/eclipse?q=Jnosql
https://dev.eclipse.org/mailman/listinfo/jnosql-dev
https://wiki.eclipse.org/JNoSQL

Java Community Process

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