

Elastify your application: from SQL to NoSQL in less than one hour

Tugdual Grall
Technical advocate



Couchbase
@tgrall

David Pilato
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elasticsearch.
@dadoonet

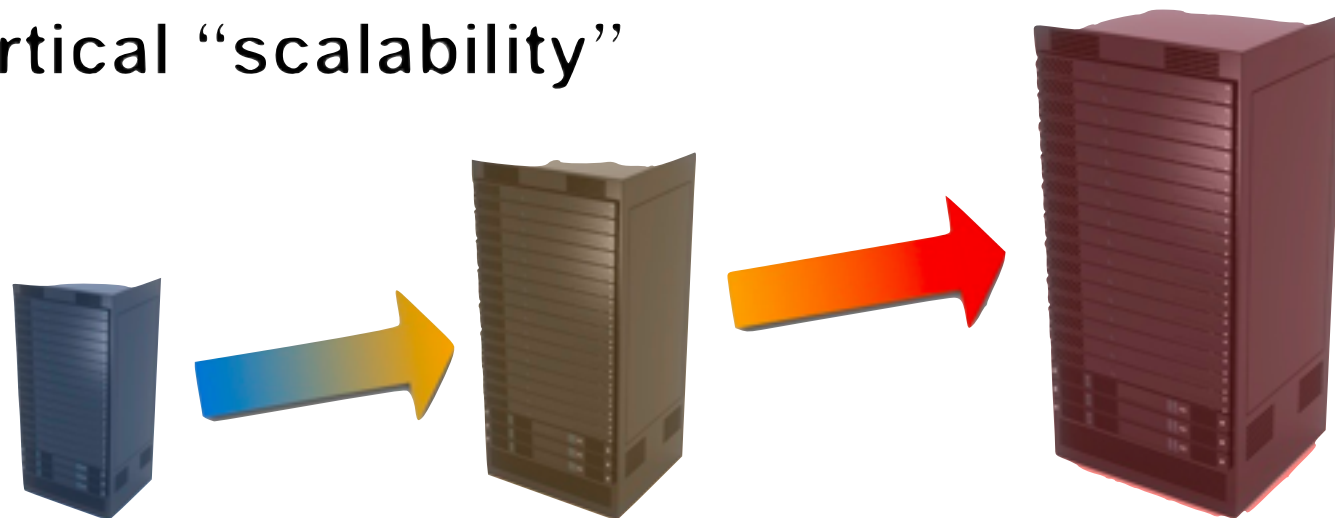
TM



Moving ? Why ?

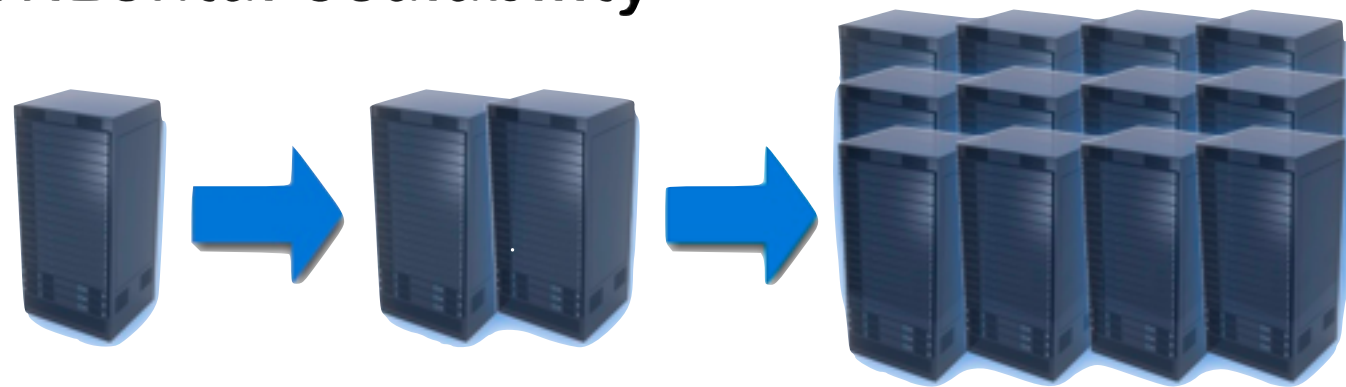
Moving ? Why ?

Vertical “scalability”



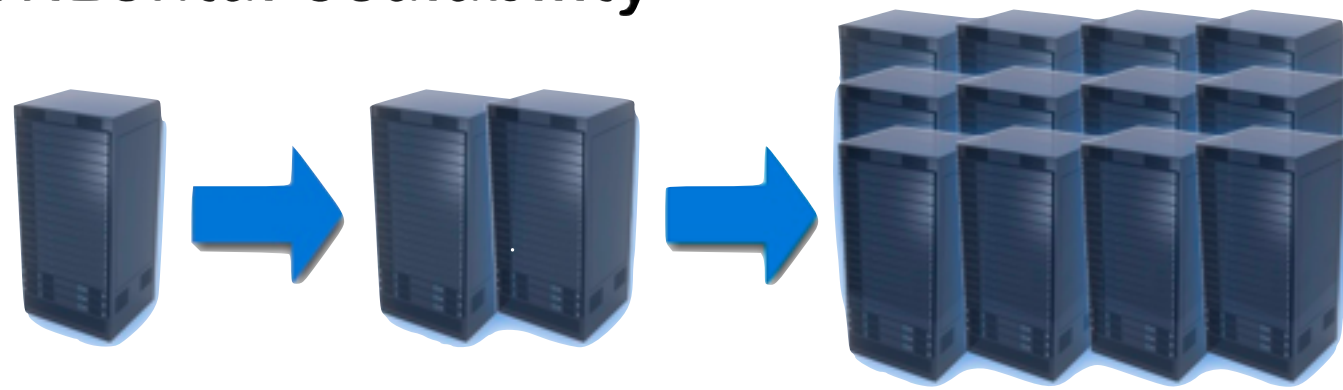
Moving ? Why ?

Horizontal scalability



Moving ? Why ?

Horizontal scalability



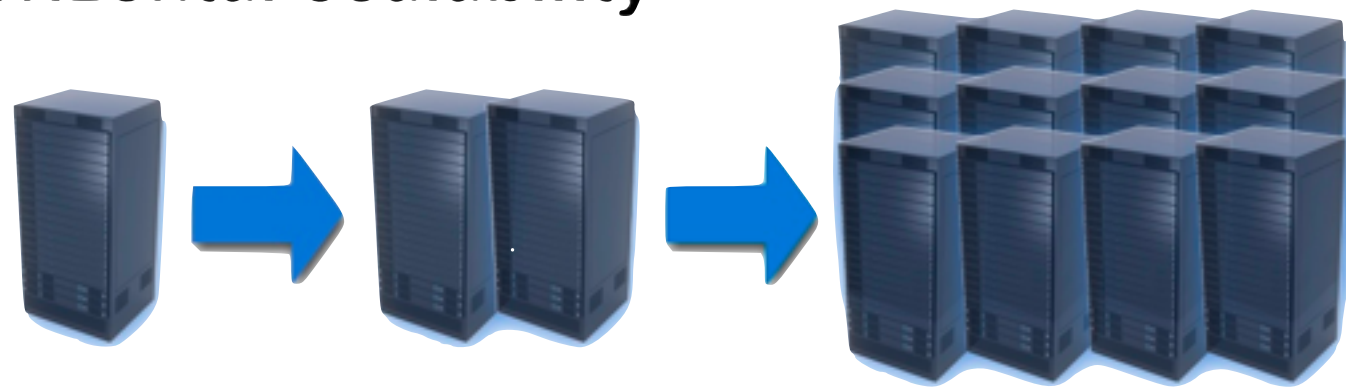
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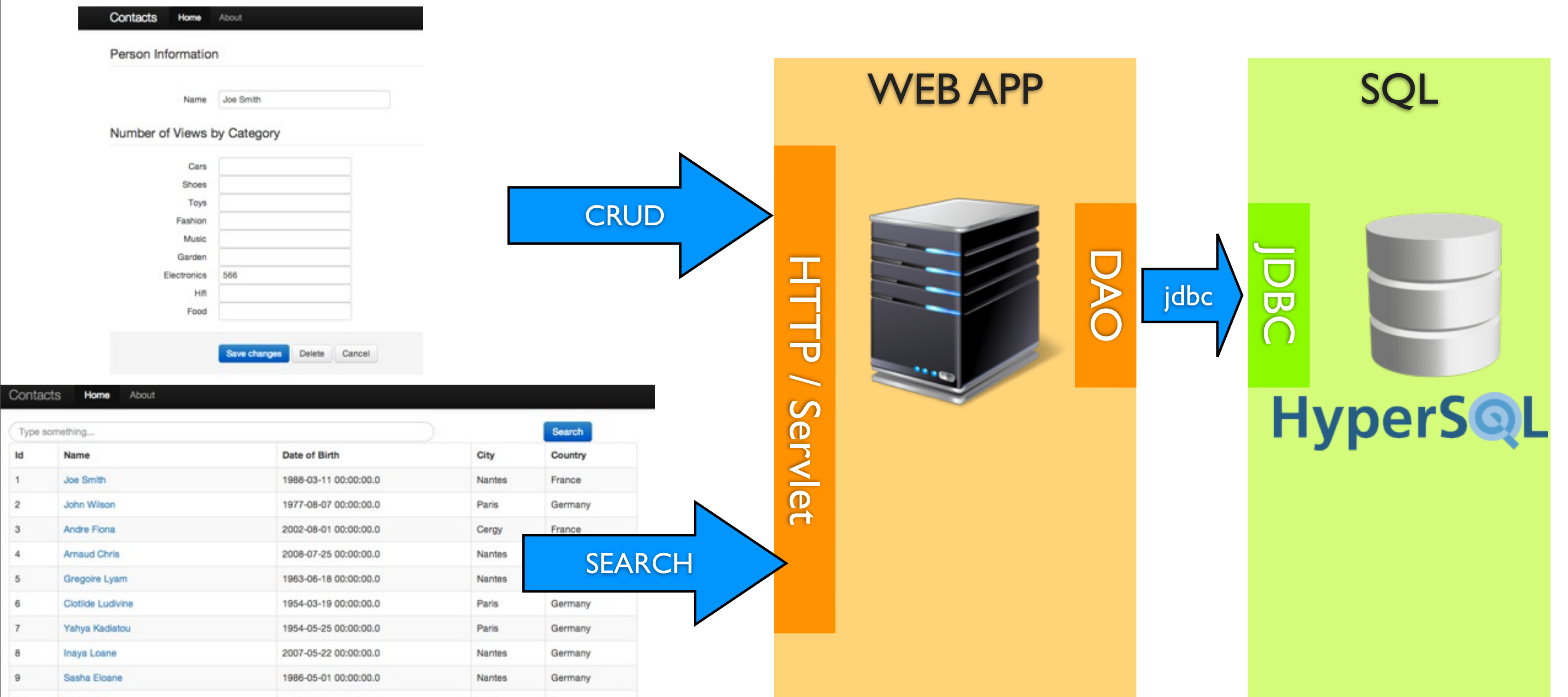
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Title]
[FirstName]
[MiddleName]
[LastName]
[Suffix] AS [Shift]
[Name] AS [Department]
[Name] AS [Shift]
[Groupname]
[Startdate]
[Enddate]
[HumanResources].[Employee] e
[ContactID]
[ContactID]
[EmployeeID]
[DepartmentID]
[DepartmentID]
[Shift] s
[ShiftID]

```


Moving ? Why ?

Horizontal scalability





From **SQL** ...

```
{
  "id":10,
  "name":"Ranya Fanny",
  "dateOfBirth":"1970-06-28",
  "meta":{
    "hifi":895,
    "food":531
  },
  "address":{
    "country":"England",
    "zipcode":"86767",
    "city":"Liverpool",
    "countrycode":"GB"
  }
}
```

CRUD

SEARCH

HTTP / REST

WEB APP



DAO

jdbc

JDBC

SQL



HyperSQL

From **SQL** ...


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CRUD

SEARCH

HTTP / REST

WEB APP



Couchbase Client

json

Memcache Protocol

NoSQL



... to **NoSQL**

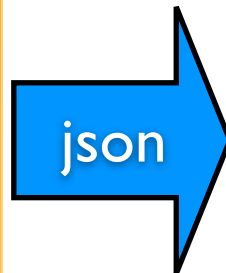
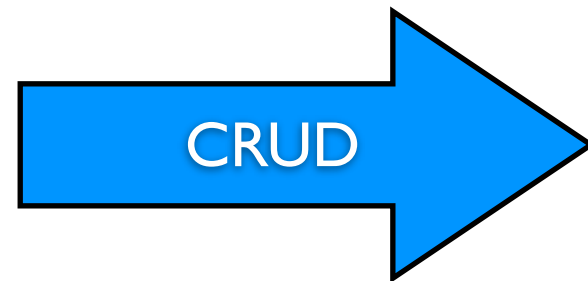
Contacts Home About

Person Information

Name

Number of Views by Category

Cars	
Shoes	
Toys	
Fashion	
Music	
Garden	
Electronics	566
Hifi	
Food	



Contacts Home About

Type something...

Id	Name	Date of Birth	City	Country
1	Joe Smith	1988-03-11 00:00:00.0	Nantes	France
2	John Wilson	1977-08-07 00:00:00.0	Paris	Germany
3	Andre Fiona	2002-08-01 00:00:00.0	Cergy	
4	Arnaud Chris	2008-07-25 00:00:00.0	Nantes	
5	Gregoire Lyam	1963-06-18 00:00:00.0	Nantes	
6	Clotilde Ludvine	1954-03-19 00:00:00.0	Paris	Germany
7	Yahya Kadiatou	1954-05-25 00:00:00.0	Paris	Germany
8	Inaya Loane	2007-05-22 00:00:00.0	Nantes	Germany
9	Sasha Eloane	1986-05-01 00:00:00.0	Nantes	Germany
10	Marie Duban	2004-08-01 00:00:00.0	Paris	Germany

... to **NoSQL**

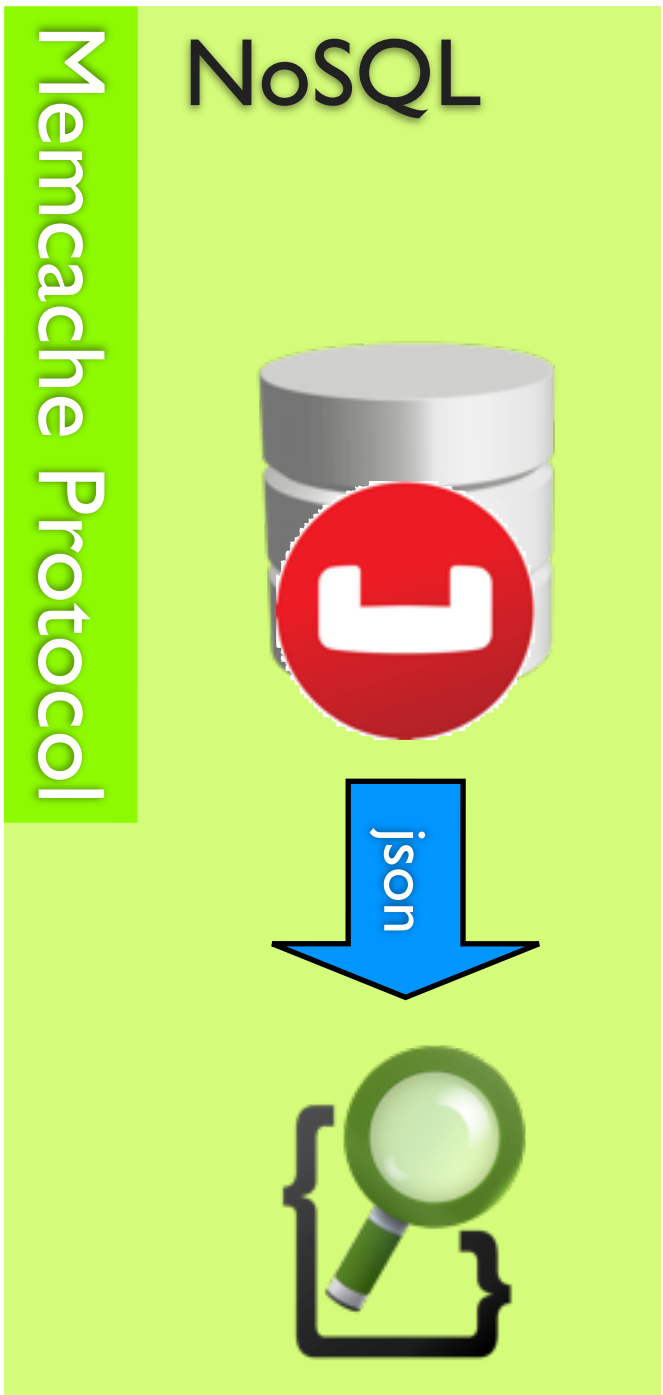
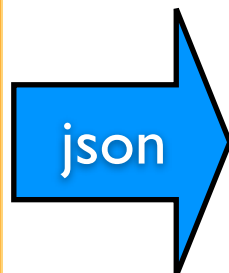
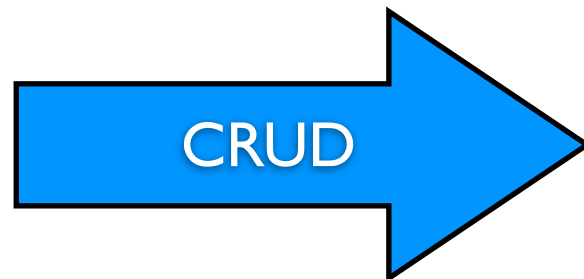
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... to **NoSQL**

[Contacts](#) [Home](#) [About](#)

Person Information

Name

Joe Smith

Number of Views by Category

Cars

Shoes

Toys

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Music

Garden

Electronics

Hifi

Food

566

Save changes

Delete

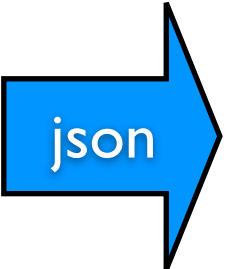
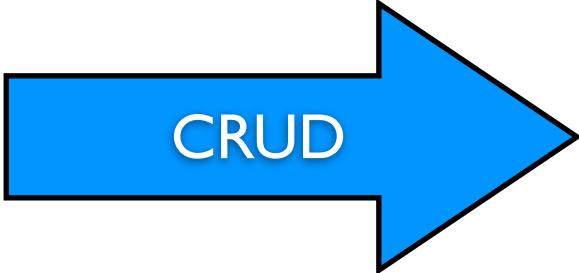
Cancel

[Contacts](#) [Home](#) [About](#)

Type something...

Search

Id	Name	Date of Birth	City	Country
1	Joe Smith	1988-03-11 00:00:00.0	Nantes	France
2	John Wilson	1977-08-07 00:00:00.0	Paris	Germany
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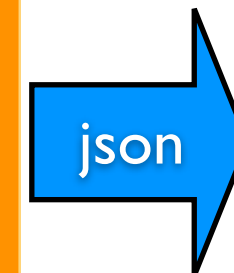
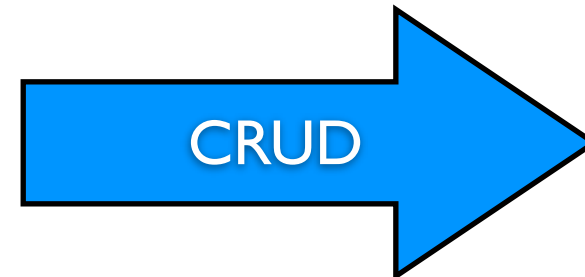
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... to **NoSQL**

Demo

```
$ git clone https://github.com/dadoonet/sql2nosql.git
$ mvn clean install
$ cd demo-webapp
$ mvn jetty:run
```





ELASTIFY YOUR APP: FROM SQL TO NOSQL!

In less than one hour

That's all Folks!
Any Question?

Tugdual Grall
Couchbase



David Pilato
elasticsearch.



#DV13sql2nosql

@tgrall / @dadoonet