elastic

David Pilato
Developer | Evangelist
@dadoonet

advanced search

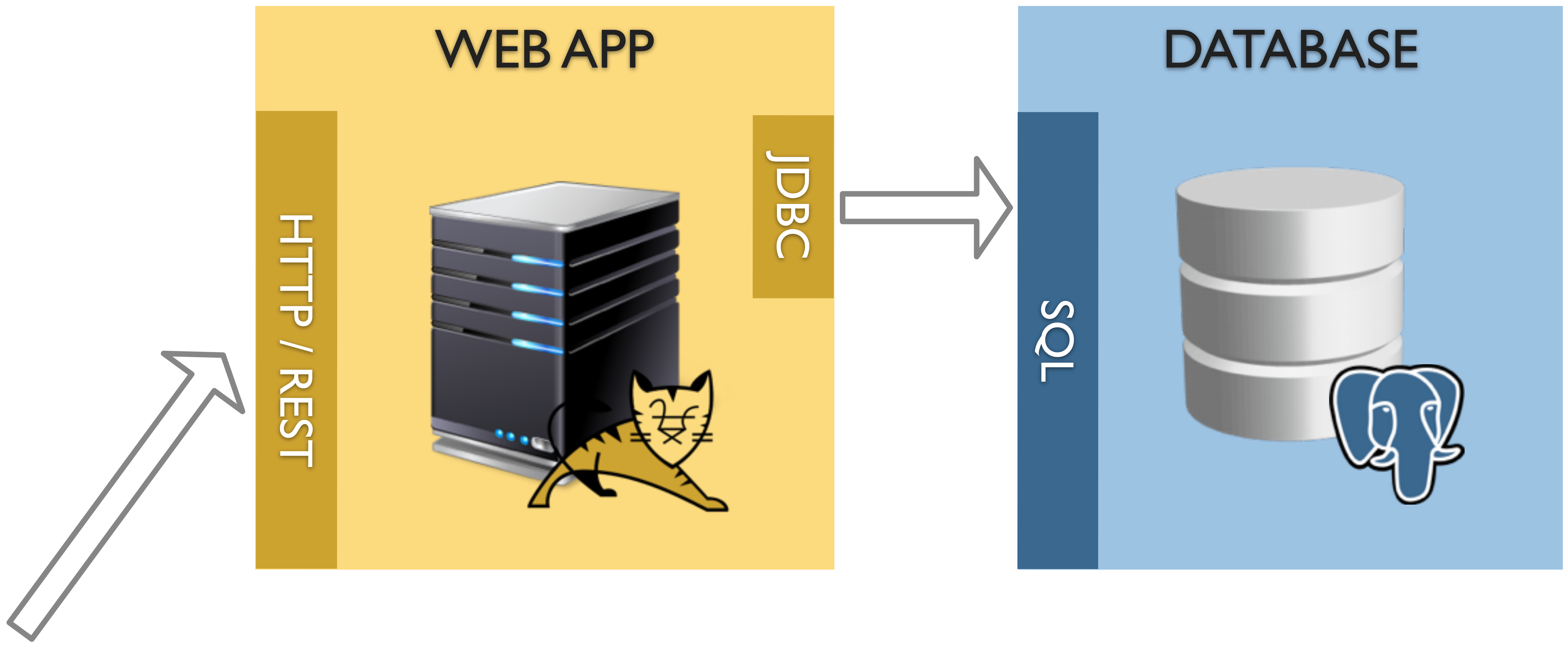
for your legacy app

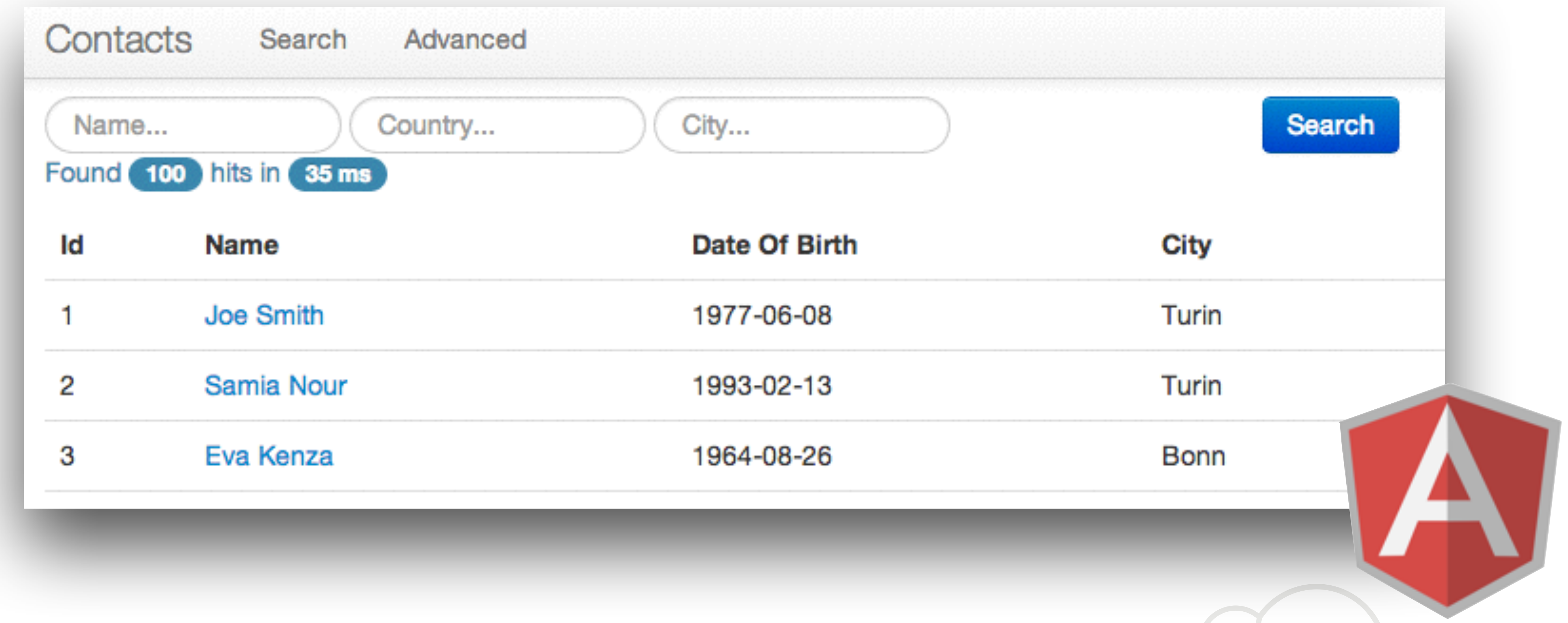
{codemotion}

our use case

elastic

our legacy platform

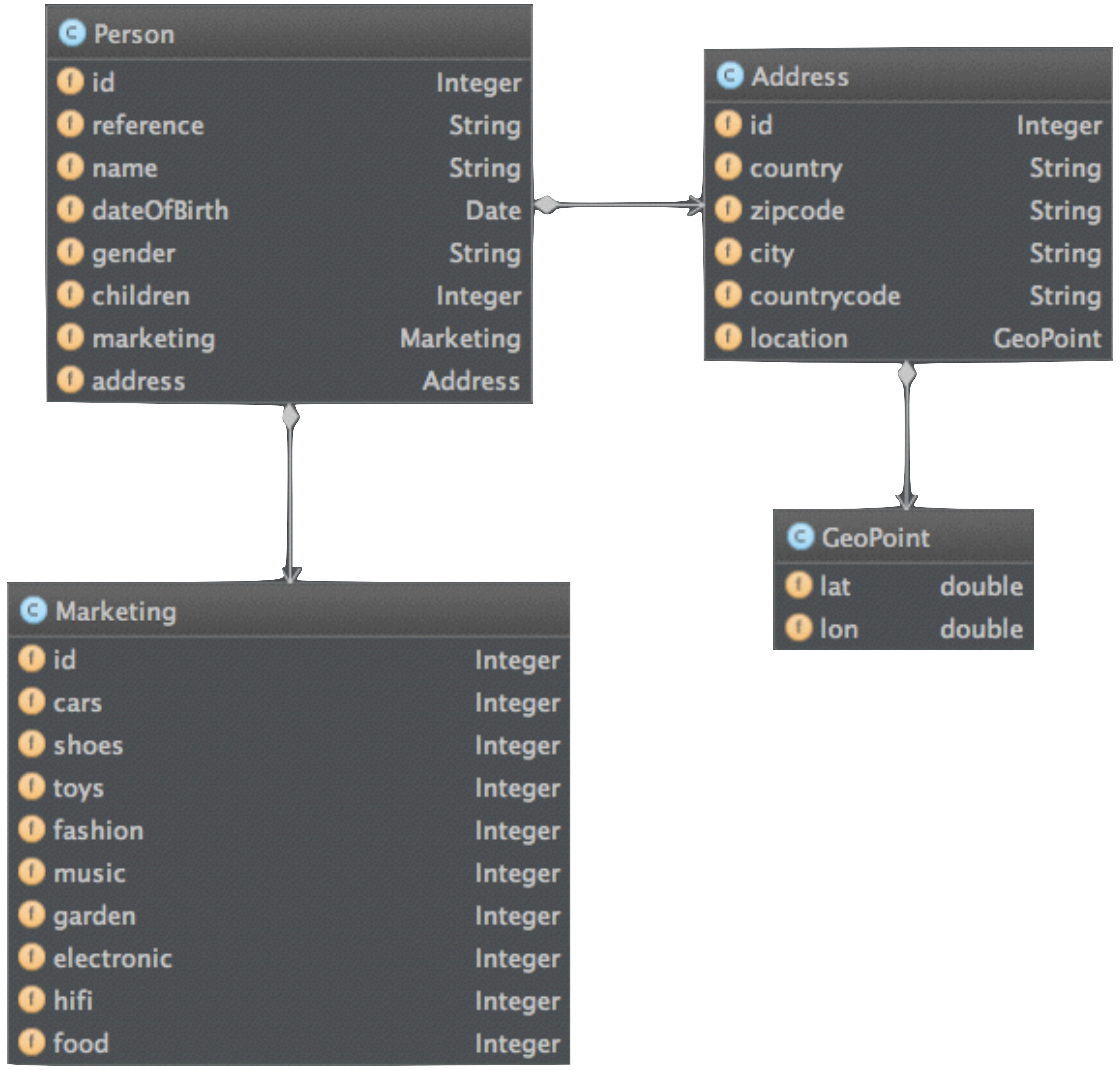




Found 100 hits in 35 ms

Id	Name	Date Of Birth	City
1	Joe Smith	1977-06-08	Turin
2	Samia Nour	1993-02-13	Turin
3	Eva Kenza	1964-08-26	Bonn

our legacy domain / database

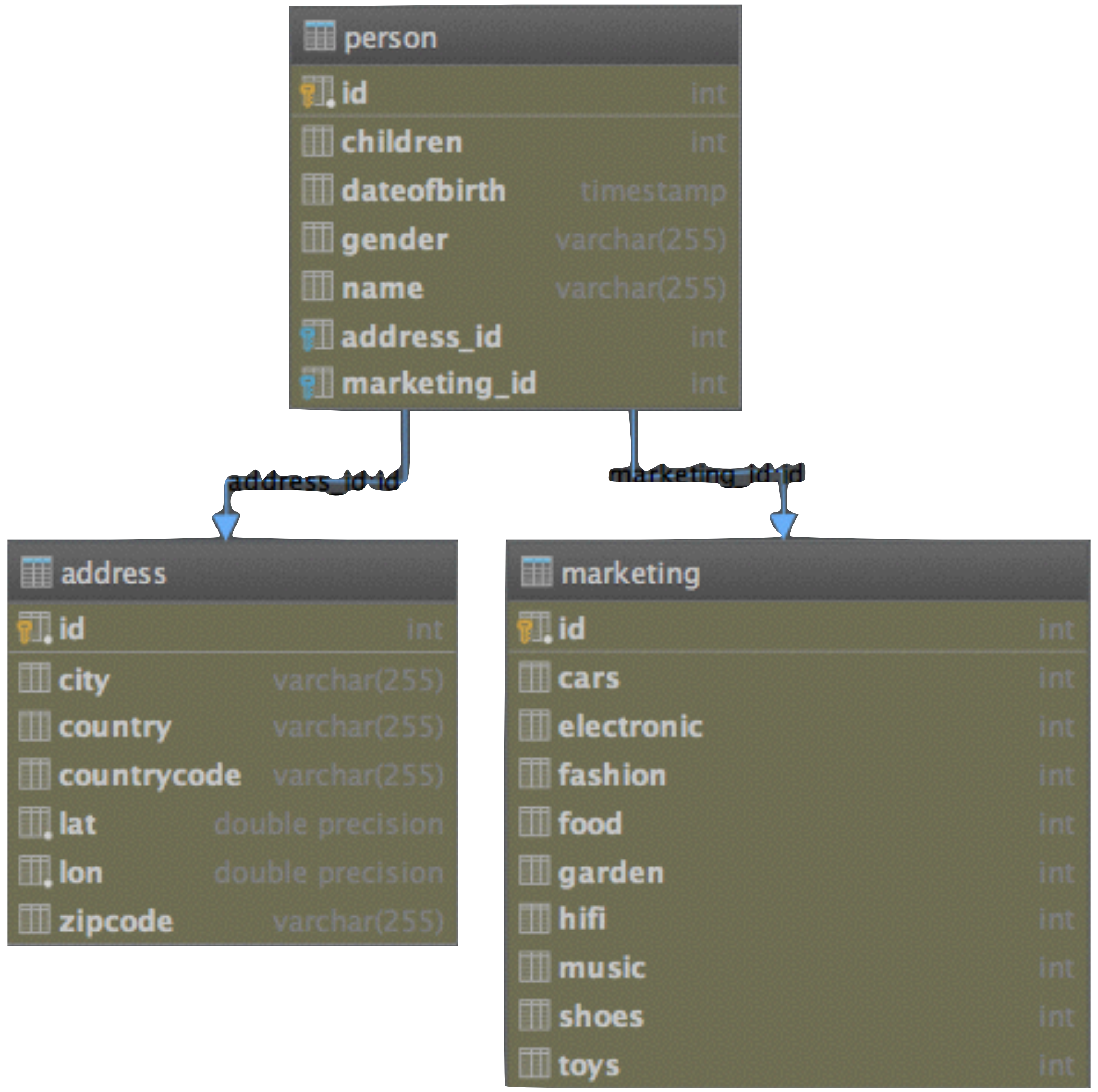


Person	
id	Integer
reference	String
name	String
dateOfBirth	Date
gender	String
children	Integer
marketing	Marketing
address	Address

Address	
id	Integer
country	String
zipcode	String
city	String
countrycode	String
location	GeoPoint

GeoPoint	
lat	double
lon	double

Marketing	
id	Integer
cars	Integer
shoes	Integer
toys	Integer
fashion	Integer
music	Integer
garden	Integer
electronic	Integer
hifi	Integer
food	Integer



person	
id	int
children	int
dateofbirth	timestamp
gender	varchar(255)
name	varchar(255)
address_id	int
marketing_id	int

address	
id	int
city	varchar(255)
country	varchar(255)
countrycode	varchar(255)
lat	double precision
lon	double precision
zipcode	varchar(255)

marketing	
id	int
cars	int
electronic	int
fashion	int
food	int
garden	int
hifi	int
music	int
shoes	int
toys	int

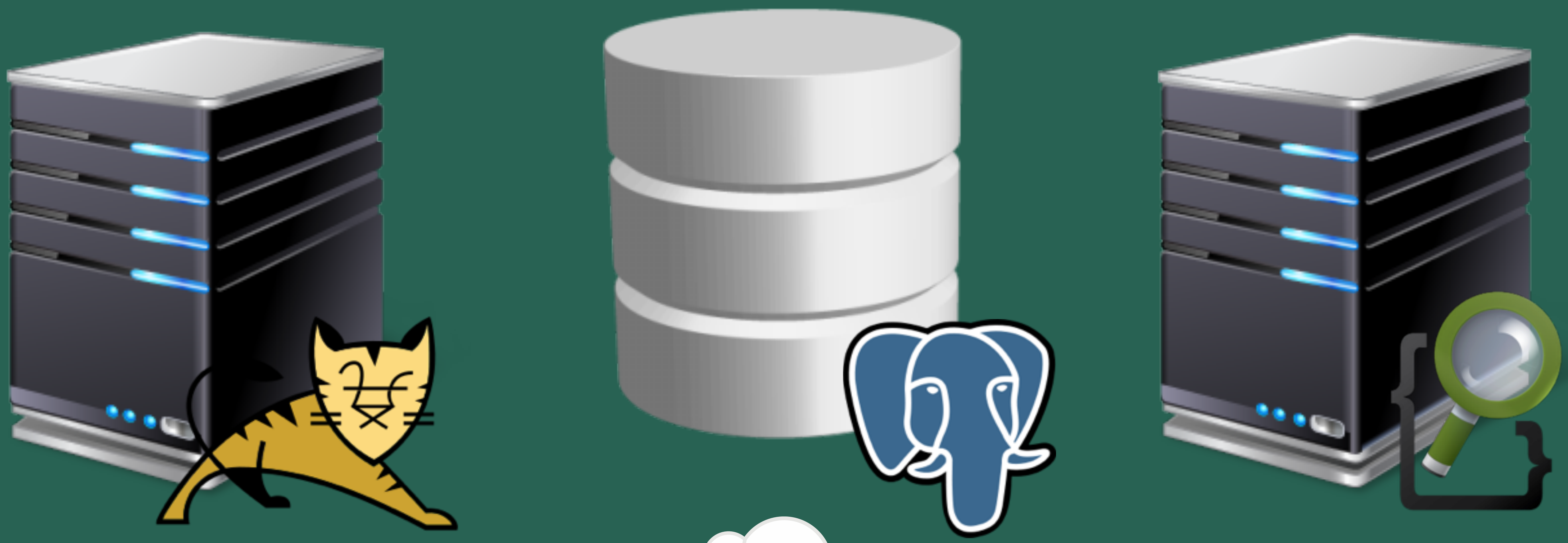
demo time

our legacy app

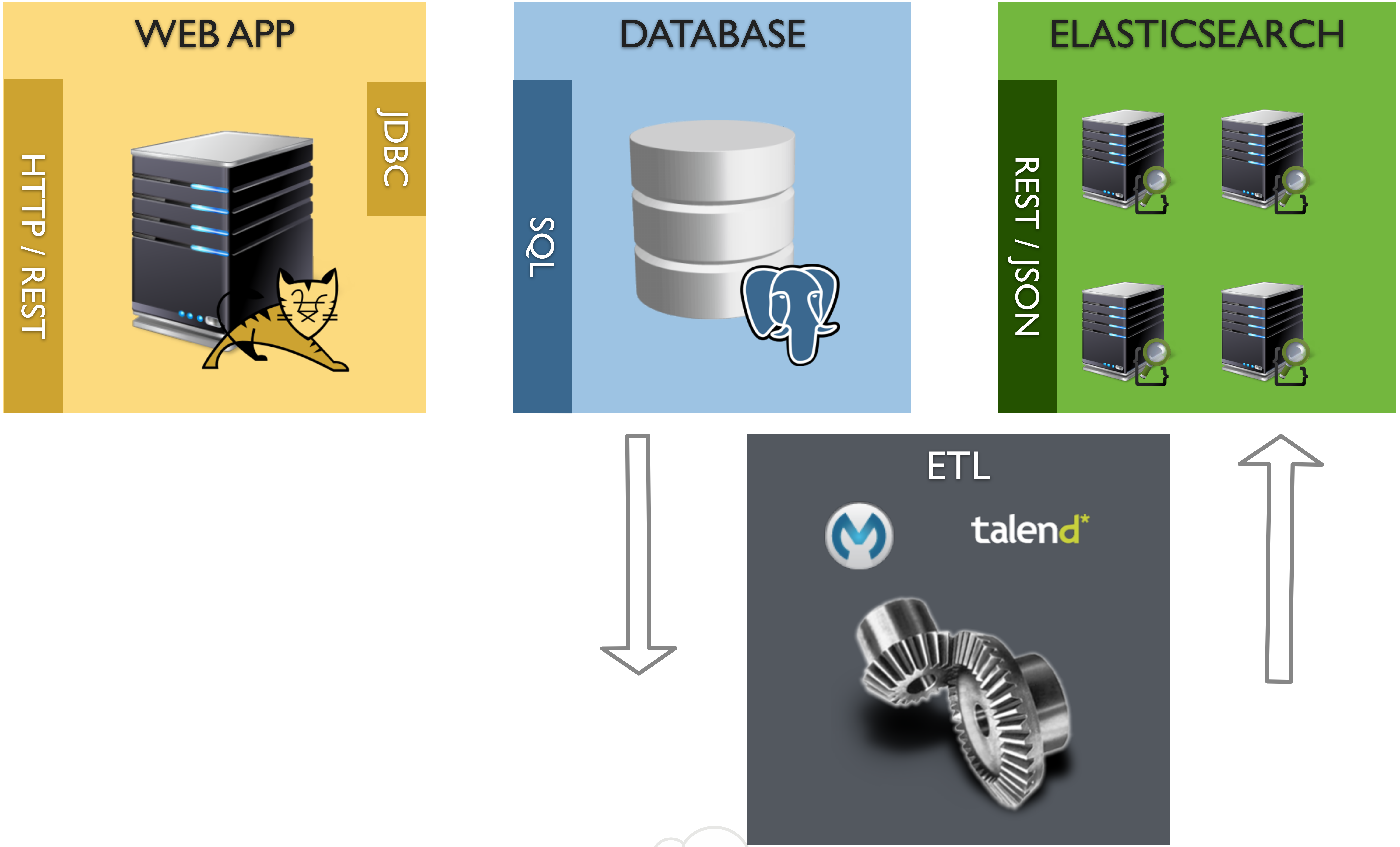
```
$ git clone https://github.com/dadoonet/legacy-search.git
$ git checkout 00-legacy
$ mvn clean install jetty:run
```

connecting with our app

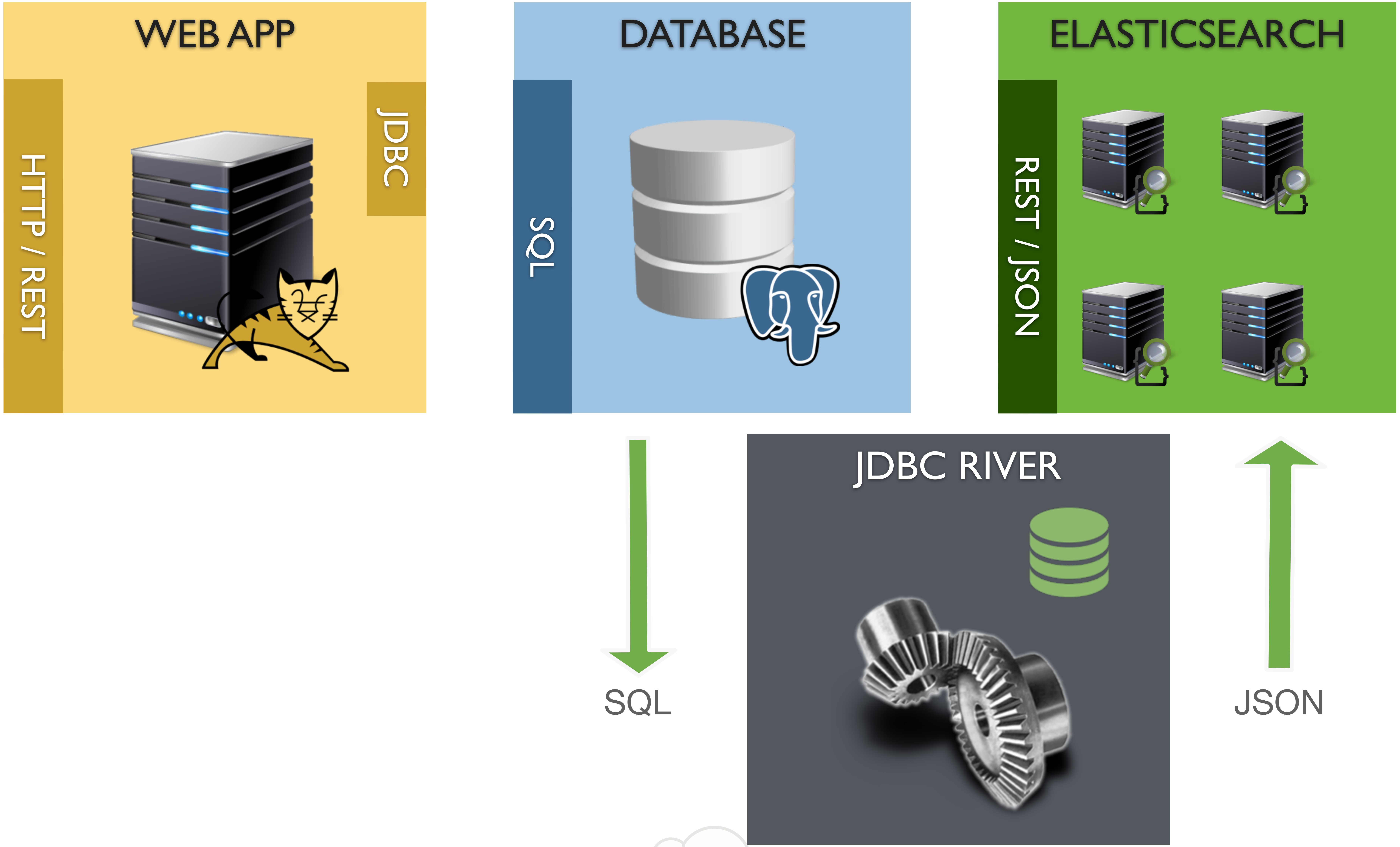
architecture



using a ETL


WEB APP
HTTP / REST
JDBC
DATABASE
SQL
ELASTICSEARCH
REST / JSON
ETL
talend

JDBC river



WEB APP

HTTP / REST

JDBC

DATABASE

SQL

ELASTICSEARCH

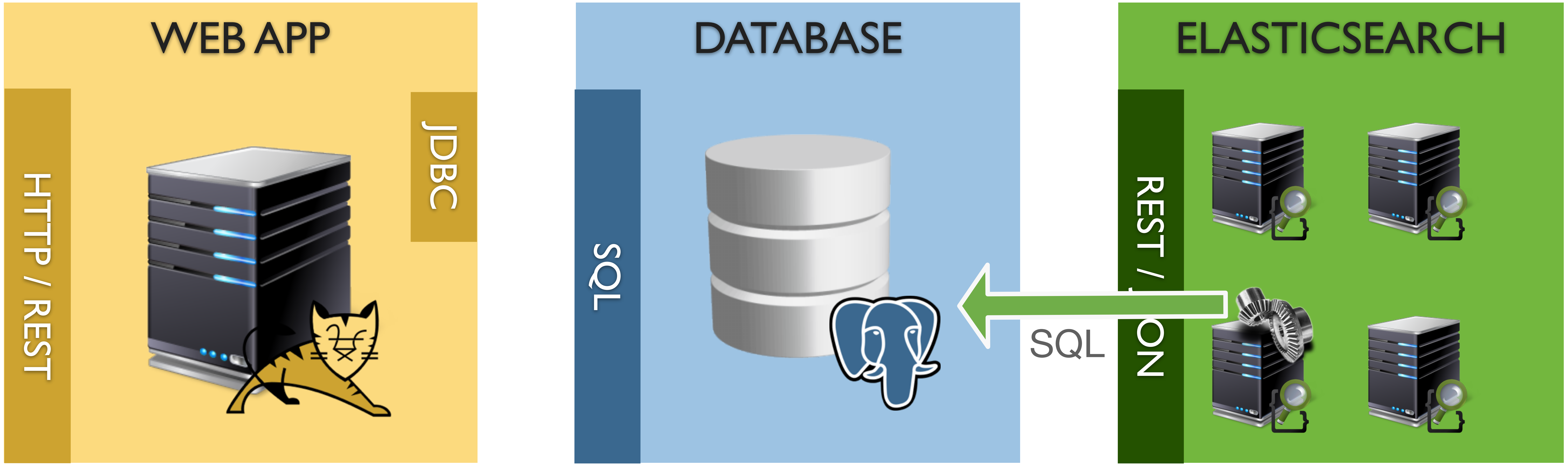
REST / JSON

JDBC RIVER

SQL

JSON

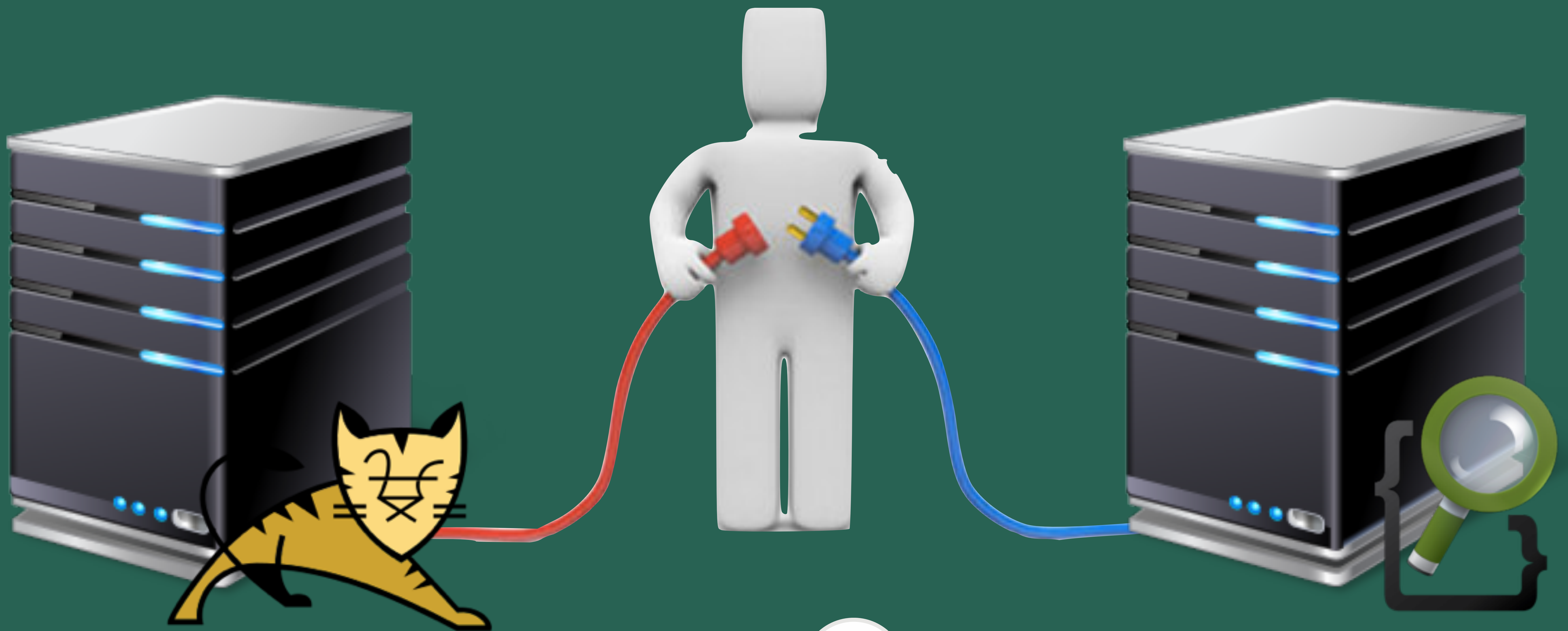
JDBC river


WEB APP
HTTP / REST
JDBC
DATABASE
SQL
SQL
ELASTICSEARCH
REST / JSON

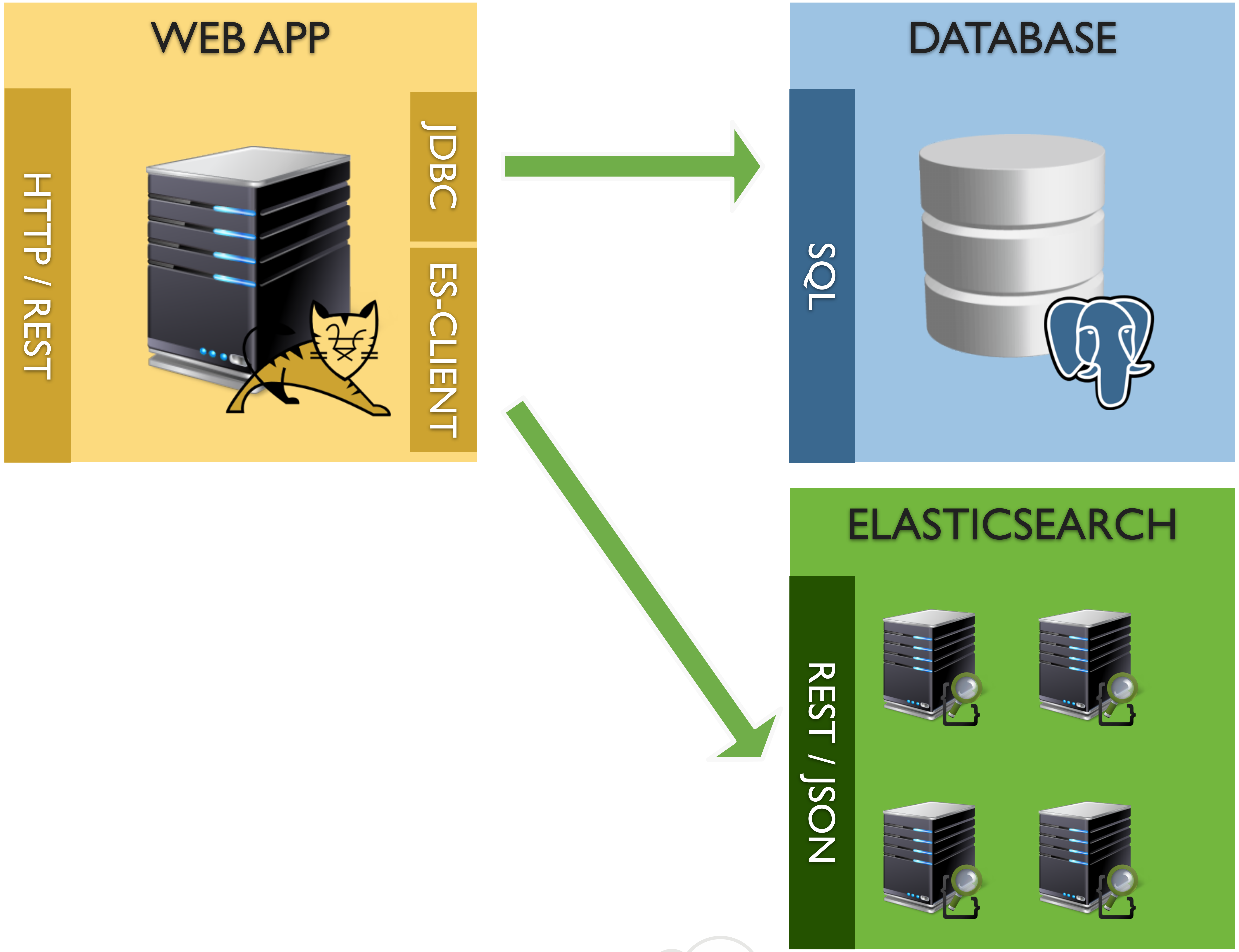
ROAD
ENDS IN
WATER

Do It Yourself

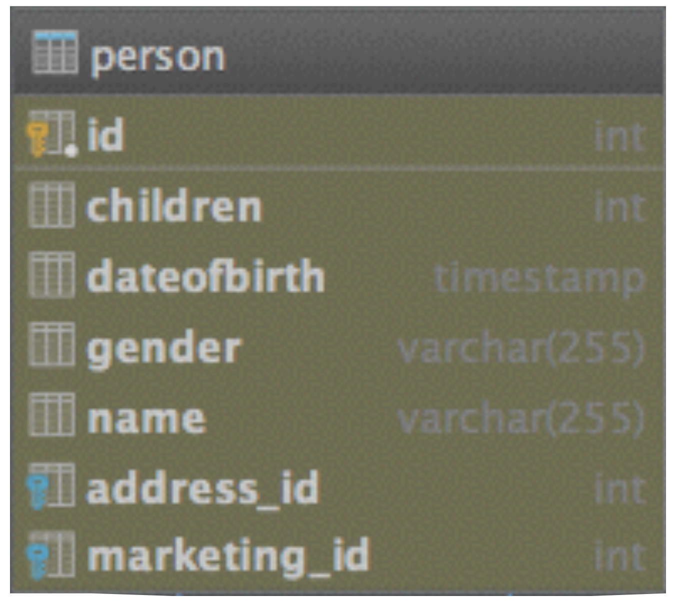
direct connection



direct connection

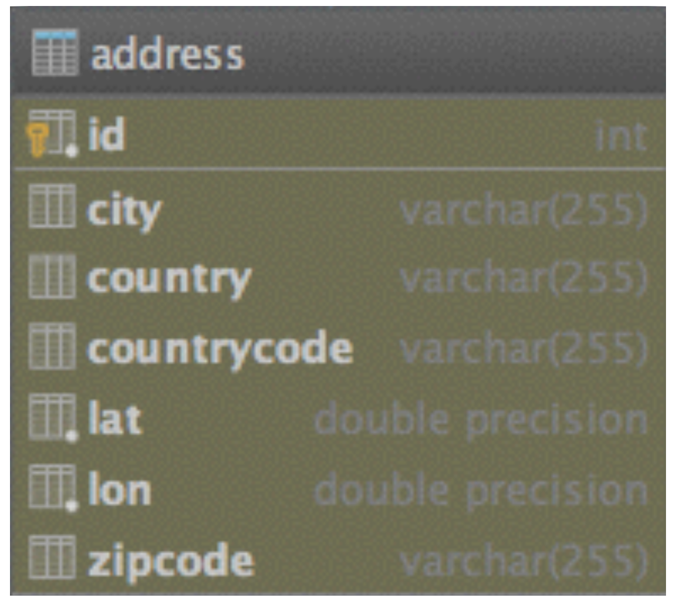


JSON document design



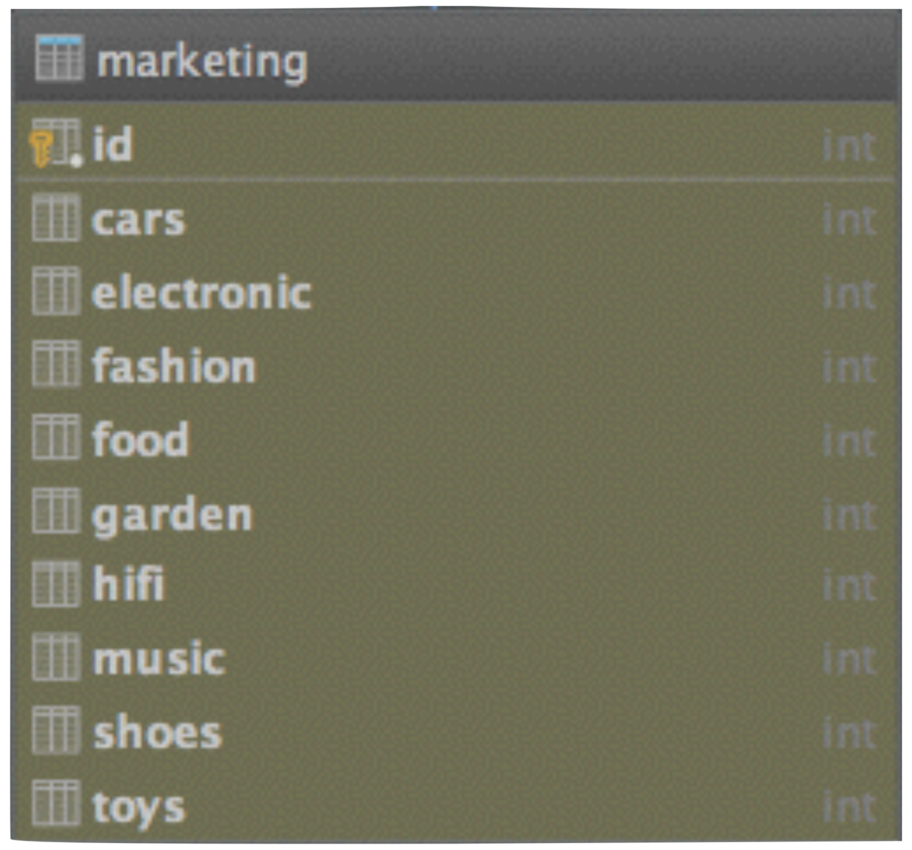
person	
id	int
children	int
dateofbirth	timestamp
gender	varchar(255)
name	varchar(255)
address_id	int
marketing_id	int

```
PUT /person/person/1
{
   "name":"Joe Pink",
   "dateOfBirth":"1971-12-26",
   "address_id":"2",
   "marketing_id":"3"
}
```



address	
id	int
city	varchar(255)
country	varchar(255)
countrycode	varchar(255)
lat	double precision
lon	double precision
zipcode	varchar(255)

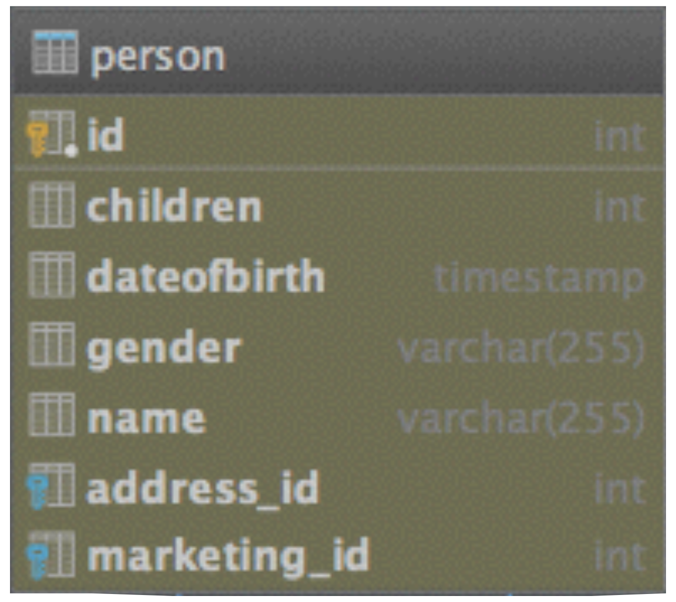
```
PUT /person/address/2
{
   "city":"Paris",
   "country":"France"
}
```



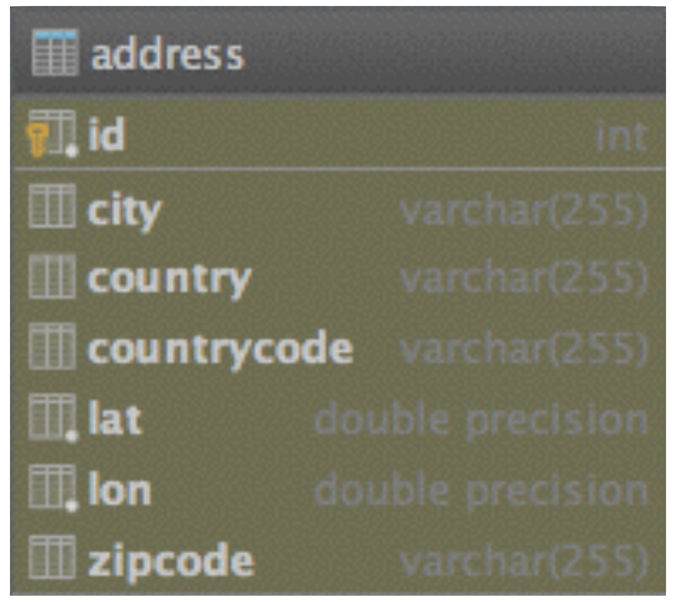
marketing	
id	int
cars	int
electronic	int
fashion	int
food	int
garden	int
hifi	int
music	int
shoes	int
toys	int

```
PUT /person/marketing/3
{
   "cars":1000,
   "food":1500
}
```

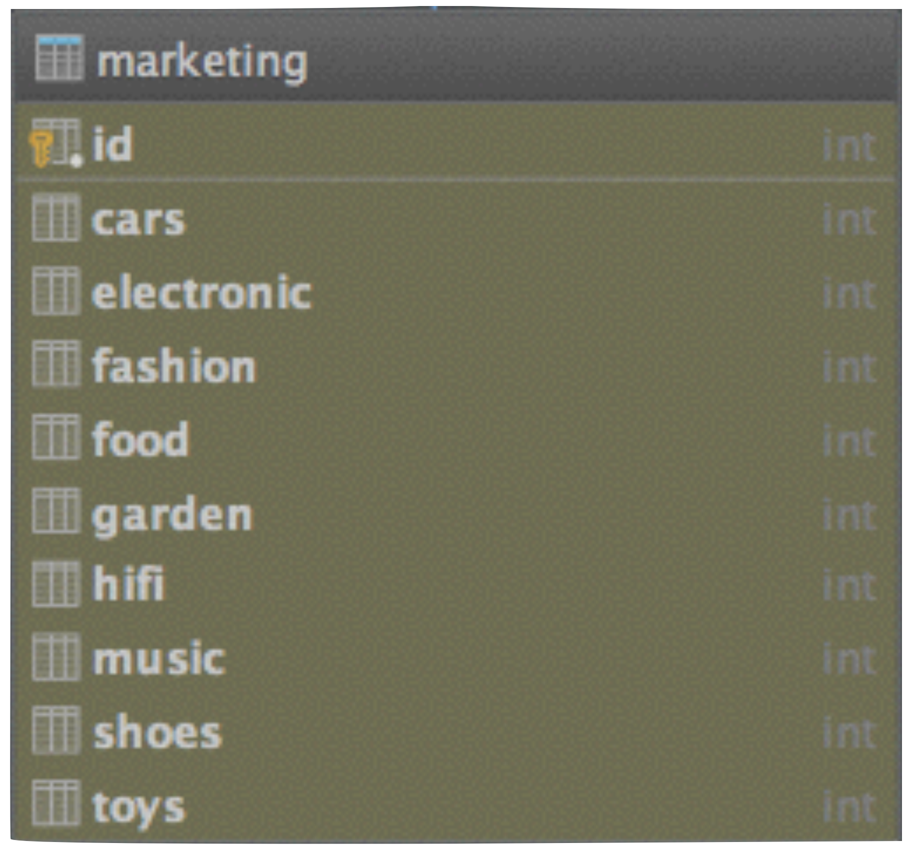
JSON document design



person	
id	int
children	int
dateofbirth	timestamp
gender	varchar(255)
name	varchar(255)
address_id	int
marketing_id	int



address	
id	int
city	varchar(255)
country	varchar(255)
countrycode	varchar(255)
lat	double precision
lon	double precision
zipcode	varchar(255)



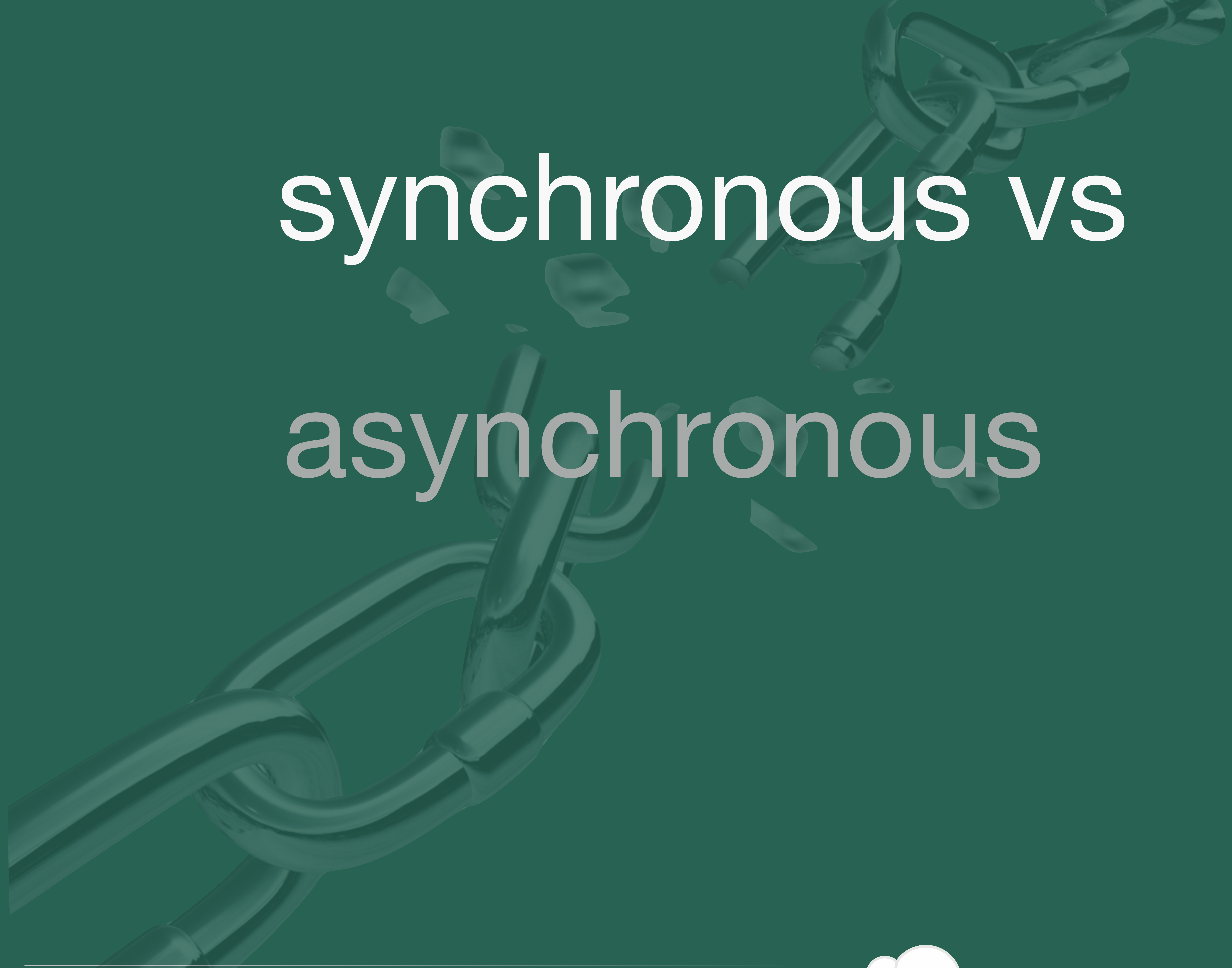
marketing	
id	int
cars	int
electronic	int
fashion	int
food	int
garden	int
hifi	int
music	int
shoes	int
toys	int

```
PUT /person/person/1
{
   "name":"Joe Pink",
   "dateOfBirth":"1971-12-26",
   "address":{
      "city":"Paris",
      "country":"France"
   },
   "marketing":{
      "cars":1000,
      "food":1500
   }
}
```

demo time

direct connection

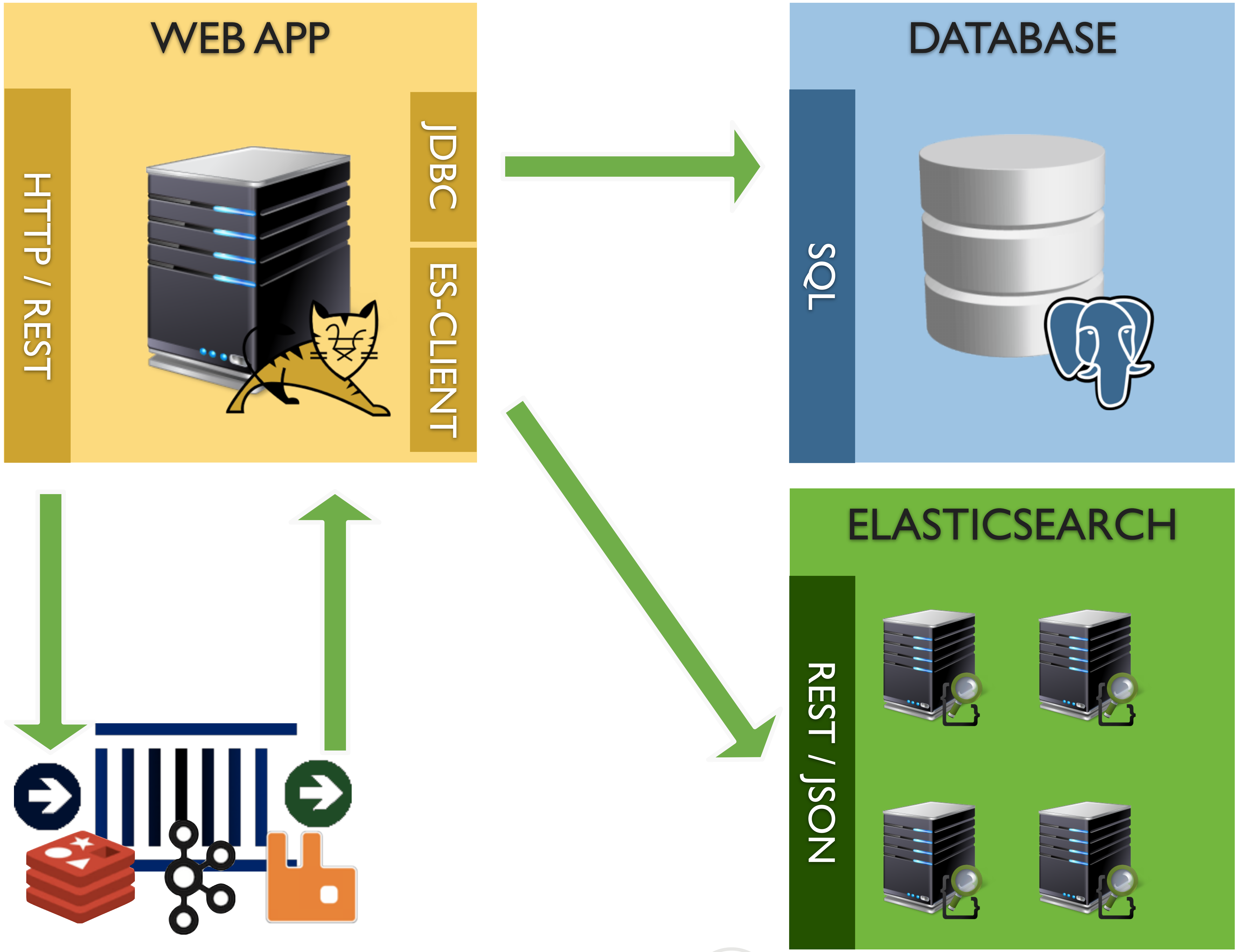
```
$ git checkout 01-direct
$ git checkout 02-bulk
$ git checkout 03-mapping
$ git checkout 04-aggs
$ git checkout 05-compute
$ mvn clean install jetty:run
$ cat README.markdown
```



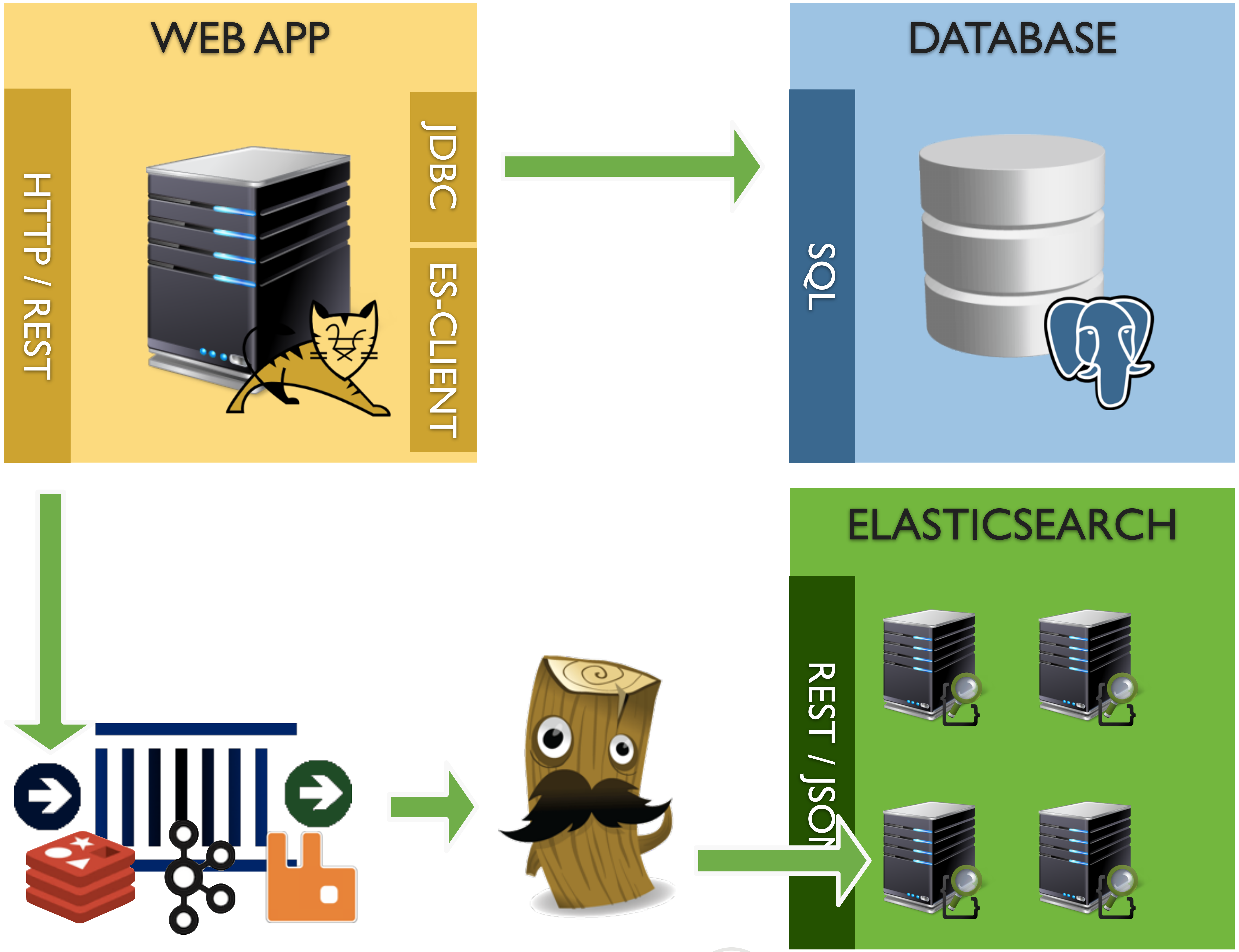
synchronous vs

asynchronous

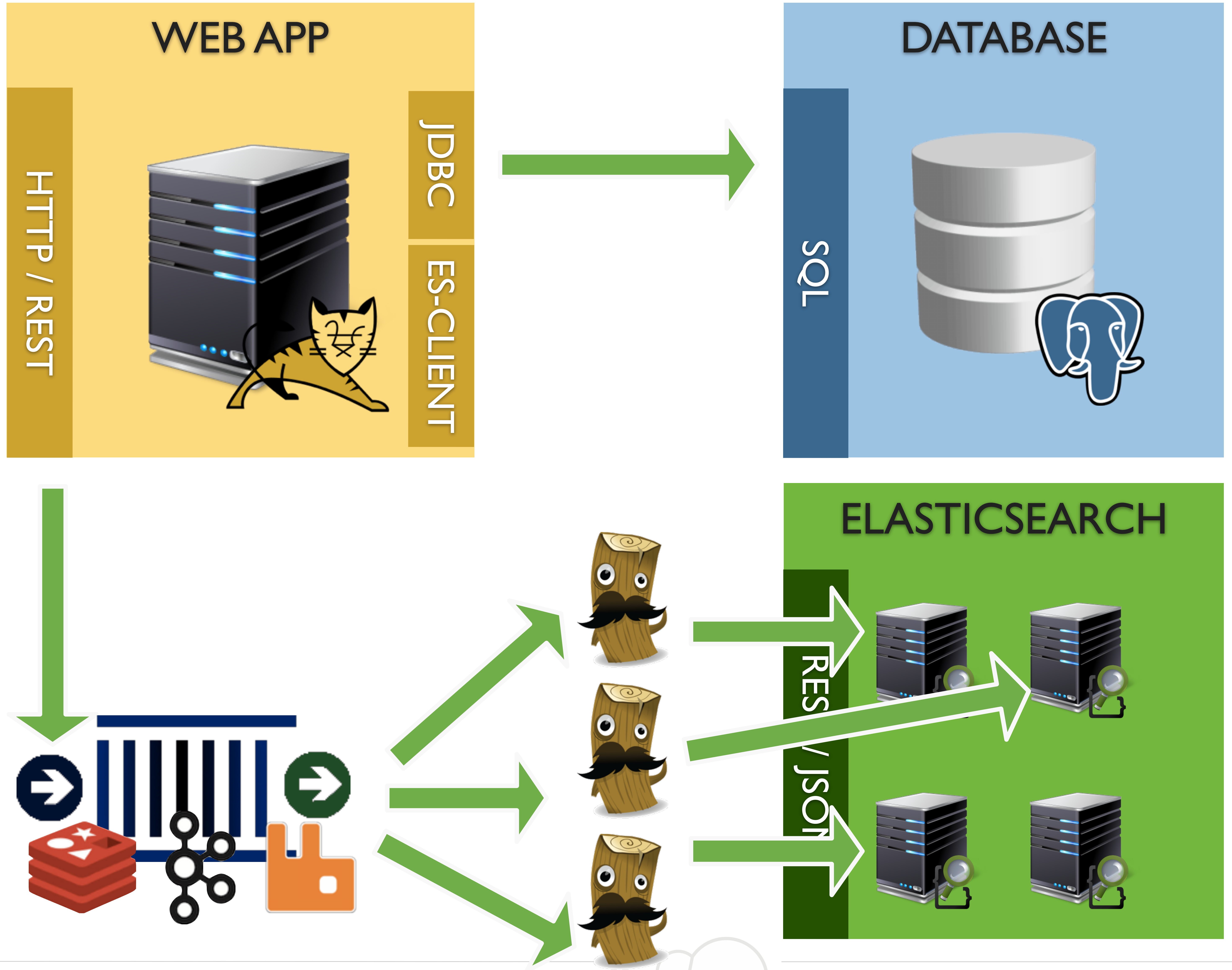
using brokers



using brokers



using brokers



COME TO THE DARK SIDE

WE HAVE COOKIES!

kibana
Discover
Visualize
Dashboard
Settings
January 1st 1940, 00:00:00.000 to January 1st 2010, 00:00:00
K4
*
Help
Per country and city
Legend
Italy
Germany
France
England
Turin
Ischia
Per gender
Legend
female
male
Children AVG
By year
3k
2k
1k
0
Count
1950
1960
1970
1980
1990
2000
dateOfBirth per year
Legend
Count
Stats per gender and city
Per country and gender
1.5k
1k
500
Top 5 gender: female
Legend
England
Germany
France
Italy
Localisation
Kristiansand
Inner Seas
Glasgow
North Sea
Denmark
København
Belfast
United Kingdom
Ireland
Hamburg
Berlin
Netherlands
Poland
Bristol Channel
Belgium
Germany
Dresden
Kraków
Czech
Lithuar

Marketing data demo

This demo shows marketing data generated randomly.

1.995

Average children

Top 2 gender: female

Top 5 address.city	Count	Average children
Turin	11839	1.986
Bonn	11822	2.012
Nantes	11770	1.998
Plymouth	11760	2.001
Ischia	6005	1.986

Export: Raw Formatted

Top 2 gender: male

Top 5 address.city	Count	Average children

{codemotion}

elastic

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Grazie mille

https://www.elastic.co/subscriptions