



David Pilato
Developer | Evangelist
@dadoonet

Un moteur de recherche NoSQL

pour chercher...





David Pilato
Developer | Evangelist
@dadoonet

Un moteur de recherche NoSQL

pour ~~chercher~~ trouver...



Feb 7, 2010 – Sep 5, 2016

Contributions to master, excluding merge commits

Contributions: Commits ▾



kimchy

4,737 commits / 1,401,534 ++ / 1,064,899 --

#1



s1monw

2,216 commits / 1,219,296 ++ / 1,217,559 --

#2



dadoonet

1,171 commits / 128,081 ++ / 84,741 --

#3



javanna

1,101 commits / 142,713 ++ / 119,744 --

#4



martijnvg

1,093 commits / 212,940 ++ / 142,674 --

#5



clintongormley

854 commits / 232,442 ++ / 30,976 --

#6



rmuir

833 commits / 161,166 ++ / 147,023 --

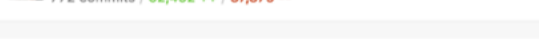
#7



jasontedor

772 commits / 62,452 ++ / 37,875 --

#8



jpountz

737 commits / 173,140 ++ / 204,220 --

#9



Elastic Stack

User Interface



Kibana

Store, Index,
& Analyze



Elasticsearch



X-Pack

Ingest



Logstash



Beats

Security

Alerting

Monitoring

Reporting

Graph



Elastic Cloud



infomercial

The only Elasticsearch as a Service offering powered by the creators of the Elastic Stack

- Always runs on the latest software
- One-click to scale/upgrade with no downtime
- Free Kibana and backups every 30 minutes
- Dedicated, SLA-based support
- Easily add X-Pack features: security (Shield), alerting (Watcher), and monitoring (Marvel)
- Pricing starts at \$45 a month

Cluster Size
Choose a cluster size. Cluster size can be changed later without downtime.

● Memory ● Storage (SSD)

1 GB 2 GB 4 GB 8 GB 16 GB 32 GB 64 GB 128 GB 256 GB 512 GB 1 TB 2 TB 3 TB 4 TB

Region
Choose a data center near you.

US West (N. California) US East (N. Virginia) Europe (Ireland) Asia Pacific (Singapore) Asia Pacific (Tokyo) South America East
Asia Pacific (Sydney)

High Availability (HA)
Protect your cluster with replication and automatic failover.

1 data center.
Great for testing and development.

2 data centers.
For production use.

3 data centers.
For mission critical environments.

Elastic Subscription Packages

Elastic Stack	BASIC	GOLD	PLATINUM
Elasticsearch, Kibana, Logstash, Beats	✓	✓	✓
X-Pack			
Marvel (Monitoring & Management)	✓	✓ Multicluster Support >7 days data retention	✓ Multicluster Support >7 days data retention
Shield (Security)		✓	✓ Field/document security Custom realms
Watcher (Alerting)		✓	✓
Reporting		✓	✓
Graph Analytics & Visualization			✓
Support			
Support coverage and response times provided by Elastic Support Engineers		Business Hours 4 hour L1 response times	24/7/365 1 hour L1 response times Emergency patches



Some data

```
CREATE TABLE user
(
  name VARCHAR(100),
  comments VARCHAR(1000)
);
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

Search on term

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name="David";  
Empty set (0,00 sec)
```

Search like

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
David Gageot	Engineer at Docker
David David	Who is that guy?

Search in two fields

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" OR
                                comments LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
Malloum Laya	Worked with David at french customs service
David Gageot	Engineer at Docker
David David	Who is that guy?

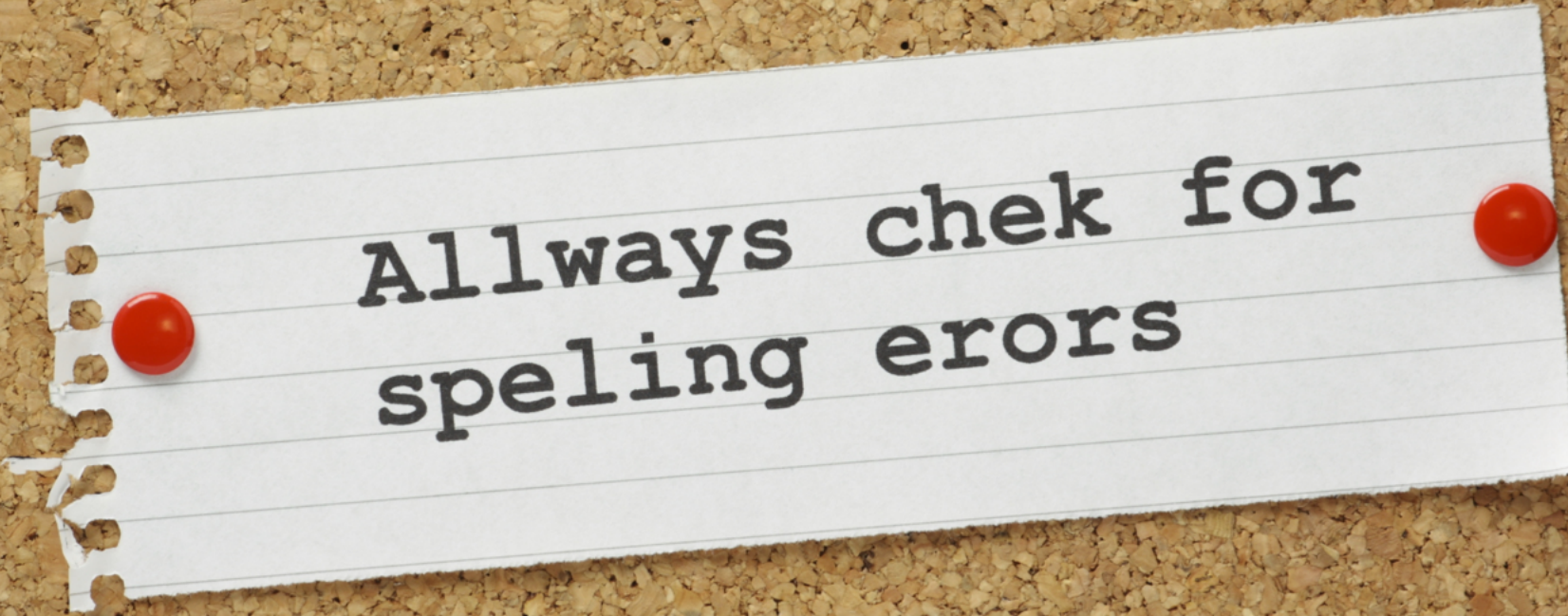


Search in two fields

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" OR
                                comments LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
Malloum Laya	Worked with David at french customs service
David Gageot	Engineer at Docker
David David	Who is that guy?



Allways chek for
speling erors

Search with typos

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%Dadid%";  
Empty set (0,00 sec)
```

Search with typos

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

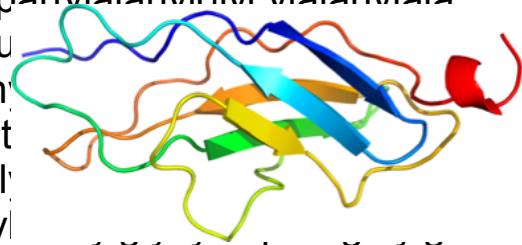
```
SELECT * FROM user WHERE name LIKE "%_adid%" OR
                                name LIKE "%D_did%" OR
                                name LIKE "%Da_id%" OR
                                name LIKE "%Dad_d%" OR
                                name LIKE "%Dadi_%";
```

David Pilato	Developer at elastic
David Gageot	Engineer at Docker
David David	Who is that guy?



Pneumonoultramicroscopicsilicovolcanokoniosis
(45 Letters)

Methionylthreonylthreonylglutaminylarginyltyrosylglutamylserylleucylphenylalanylalanylglutaminylleucyllysylglutamylarginyllysylglutamylglycylalanylphenylalanylvalylprolylphenylalanylvalylthreonylleucylglycylaspartylprolylglucylisoleucylglutamylglutaminylserylleucyllysylisoleucylaspartylthreonylleucylisoleucylglutamylalanylglucylalanylasparylalanylleucylglutamylleucylglycylisoleucylprolylphenylalanylserylasparylprolylleucylalanylasparylglucylprolylthreonylisoleucylglutaminylasparaginyalanylthreonylleucylarginylalanylphenylalanylalanylalanylglycylvalylthreonylprolylalanylglutaminylcysteinylphenylalanylglytamylmethionylleucylalanylleucylisoleucylarginylglutaminyllysylhistidylprolylthreonylisoleucylprolylisoleucylglycylleucylleucylmethionyltyrosylalanylasparginylleucylvalylphenylalanylasparginyllysylglycylisoleucylaspartylglutamylphenylalanyltyrosylalanylglutaminylcysteinylglutamyllysylvalylglycylvalylaspartylserylvalylleucylvalylalanylasparylvalylprolylvalylglutaminylglutamylserylalanylprolylphenylalanylarginylglutaminylalanylalanylleucylarginylhistidylasparginylvalylalanylprolylisoleucylphenylalanylisoleucylcysteinylprolylprolylasparylalanylasparylasparylasparylleucylleucylarginylglutaminylisoleucylalanylseryltyrosylglycylarginylglycyltyrosylthreonyltyrosylleucylleucylserylarginylalanylglycylvalylthreonylglucylalanylglutamylasparginylarginylalanylalanylleucylprolylleucylasparginylhistidylleucylvalylalanyllsyleucyllysylglutamyltyrosylasparginylalanylalanylprolylprolylleucylglutaminylglycylphenylalanylglycylisoleucylserylalanylprolylasparylglutaminylvalyllsyalalanylalanylisoleucylasparylalanylglycylalanylisoleucylserylglycylserylalanylisoleucylvalyllsyalisoleucylisoleucylidylasparginylisoleucylglutamylprolylglutamyllysylmethionylleucylalanylalanylvalylglutaminylprolylmethionyllsyalalanylalanylthreonylarginylacetylseryltyrosylserylprolylserylglutaminylphenylalanylvalylphenylalanylleucylserylserylvalylprolylisoleucylglutamylleucylleucylasparginylvalylcysteinylthreonylserylserylglutaminylphenylalanylglutaminylthreonylglutaminylglutaminylalanylarginylthreonylthreonylglutaminylvalylglutaminylglutaminylphenylalanylserylglutaminylvalyltryptophyllsylprolylphenylalanylprolylglutaminylserylthreonylvalylarginylphenylalanylprolylglucylasparylvalyltyrosyllsylvalyltyrosylarginyltyrosylasparginyl





Search for terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David Pilato%";
```

name	comments
David Pilato	Developer at elastic

Search with inverted terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%Pilato David%";  
Empty set (0,00 sec)  
SELECT * FROM user WHERE name LIKE "%Pilato%David%";  
Empty set (0,00 sec)
```

Search for terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" AND
                                name LIKE "%Pilato%";
```

name	comments
David Pilato	Developer at elastic

Synonyms



Synonyms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at
french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE comments LIKE "%Engineer%";
```

name	comments
David Gageot	Engineer at Docker

Synonyms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE comments LIKE "%Developer%" OR
                                comments LIKE "%Engineer%";
```

name	comments
David Pilato	Developer at elastic
David Gageot	Engineer at Docker

Search like within 1 000 000 000 records...

```
SELECT * FROM user WHERE name LIKE "%David%";
```







**We need a search engine.
Not a database with some
search capabilities.**

David Pilato, Matinale Zenika, 15/12/2016

- 1: Winter is coming.
2: Ours is the fury.
3: The choice is yours.



<u>term</u>	<u>freq</u>	<u>documents</u>
choice	1	3
coming	1	1
fury	1	2
is	3	1, 2, 3
ours	1	2
the	2	2, 3
winter	1	1
yours	1	3
Dictionary		Postings





David Pilato
Developer | Evangelist
@dadoonet

Un moteur de recherche NoSQL

pour trouver...

